

TCM-17

SERVICE MANUAL



*US Model
Canadian Model
AEP Model
UK Model
E Model*

SPECIFICATIONS

Tape Transport Mechanism Type	MT-6-06
-------------------------------	---------

Recording system	2-track 1-channel monaural
Fast winding time	Approx. 2 min. with Sony C-60 Cassette (Speed control in center position)
Frequency response	90–8,000 Hz
Tape speed	4.8 cm/sec. (1 $\frac{7}{8}$ ips) $\pm 3\%$ adjustable in playback
Speaker	Approx. 4.5 cm (1 $\frac{3}{16}$ inches) dia.
Power output	350 mW (at 10% harmonic distortion) at DC operation
Input	Microphone input jack (minijack) sensitivity 0.2 mV (–72 dB) for low impedance microphone
Output	Earphone jack (minijack) for 8–300 ohm earphone or load impedance 10 kilohms or higher
Power requirements	3V DC two size AA batteries (IEC designation R6) DC IN 3V jack accepts; • Sony EBP-500 battery case (optional) for use on two size D (IEC designation R20) batteries • Sony AC power adaptor (supplied with the USA model) or AC-D2 (optional for Canada model) for use on 120V AC, 60 Hz • Sony DCC-70 car battery cord (optional) for use on 12V car battery

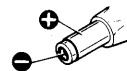
Battery life (hours)

Battery	Recording
Sony New Super SUM-3 (NS) or Eveready No. 1215	Approx. 3
Sony AM3 Alkaline or Eveready No. E91	Approx. 5

For maximum performance we recommend the use of alkaline batteries.

Dimensions	Approx. 84.7×132×31.4 mm (w/h/d) (3 $\frac{3}{8}$ ×5 $\frac{1}{4}$ ×1 $\frac{1}{4}$ inches) not incl. projecting parts and controls
	Approx. 91×134×35.8 mm (w/h/d) (3 $\frac{5}{8}$ ×5 $\frac{3}{8}$ ×1 $\frac{7}{16}$ inches) incl. projecting parts and controls
Weight	Approx. 290 g (10.3 oz) incl. batteries not incl. other accessories

Note: Use only the recommended AC power adaptor or car battery cord manufactured by Sony. Polarity of the plugs of other manufacturers may be different.



Polarity of the Sony plug

CASSETTE CORDER
SONY®

TC



1. SERVICING NOTE

Replacing chip components

All chip components should be connected and disconnected, using a tapered soldering iron [temperature of the iron tip: less than 280°C (536°F)], a pair of tweezers and braided wire.

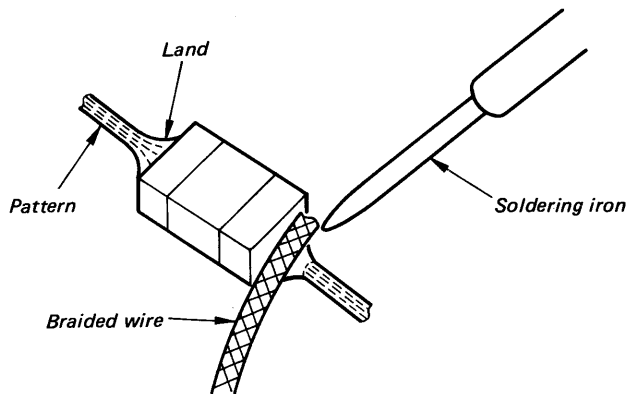
Precautions for replacement

1. Do not disconnect the chip component forcefully. Otherwise, the pattern may peel off.
2. Never re-use a disconnected chip component. Dispose of all old chip components.
3. To protect the chip component, heating time for attaching the component should be within 3 seconds.

○ Removing chip components

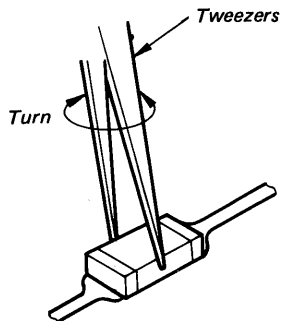
(1) Removing solder at electrode

Remove the solder at the electrode, using a thin braided wire. Do not remove the solder of the part (chip component) attached adjacent to the electrode.



(2) Disconnecting chip components

Turn the tweezers with the soldering iron alternately applied to both electrodes, and the chip component will be disconnected. Take careful precautions while disconnecting, because if the chip component is forcefully removed the land may peel off. Never re-use a disconnected chip component.



(3) Smoothing the soldered surface

After disconnecting the chip component, remove the solder by using a braided wire to smooth the land surface.

○ Connecting chip components

The value of chip components is not displayed on the main body. Take due precautions to avoid mixing new chip components with other ones.

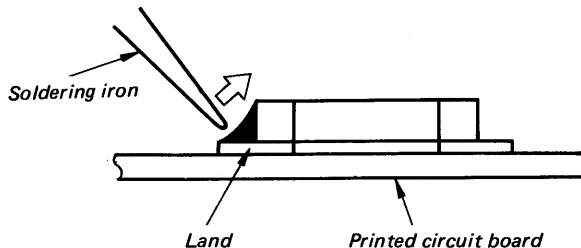
(1) Applying solder to land on one side

Apply a thin layer of solder to the land on one side where the chip component is to be connected. Too much solder may cause bridging.



(2) Speedy soldering

Hold the chip component at the desired position, using tweezers, and apply the soldering iron in the arrow-marked direction. To protect the chip component, heating time should be within 3 seconds.



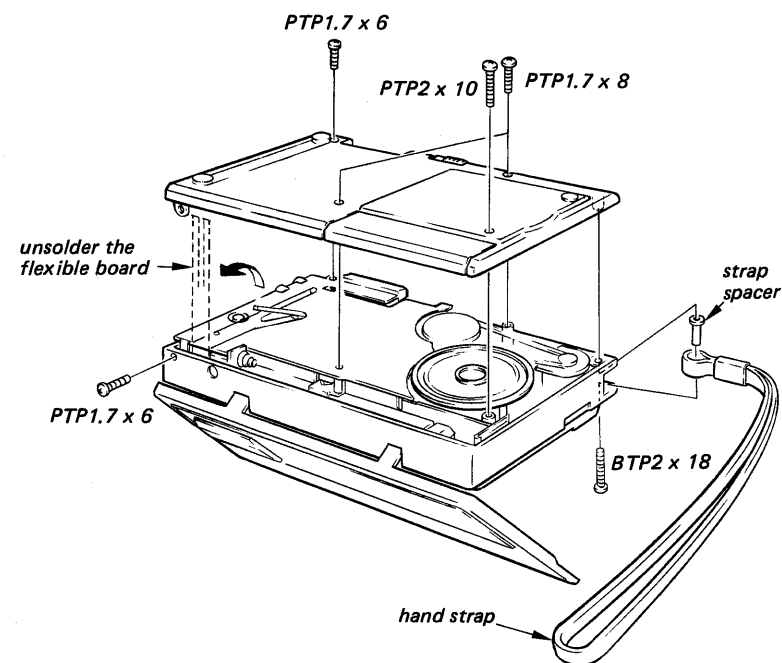
(3) Speedy soldering of electrode on the other side

Solder the electrode on the other side in the same way as in (2) above.

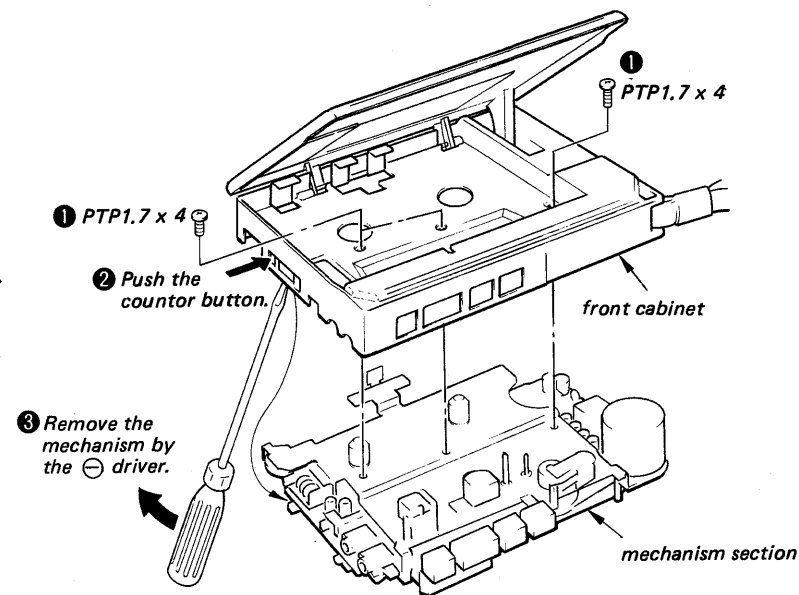
2. DISASSEMBLY

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

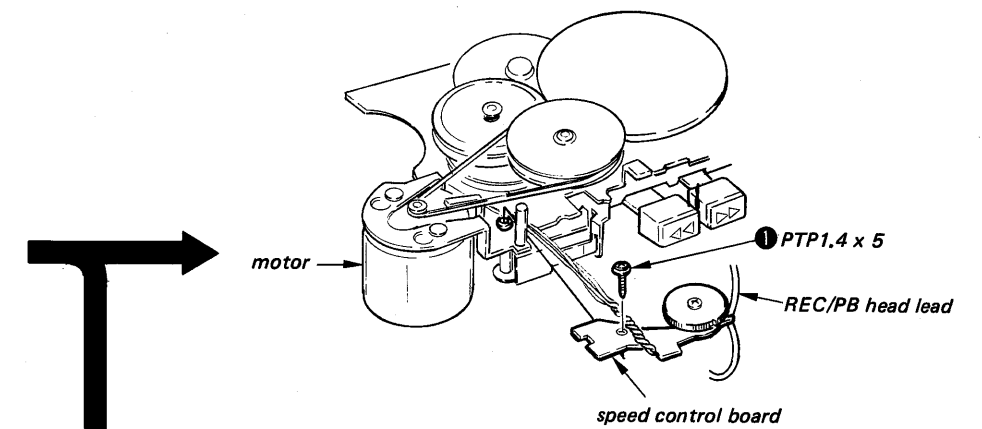
REAR CABINET/HAND STRAP



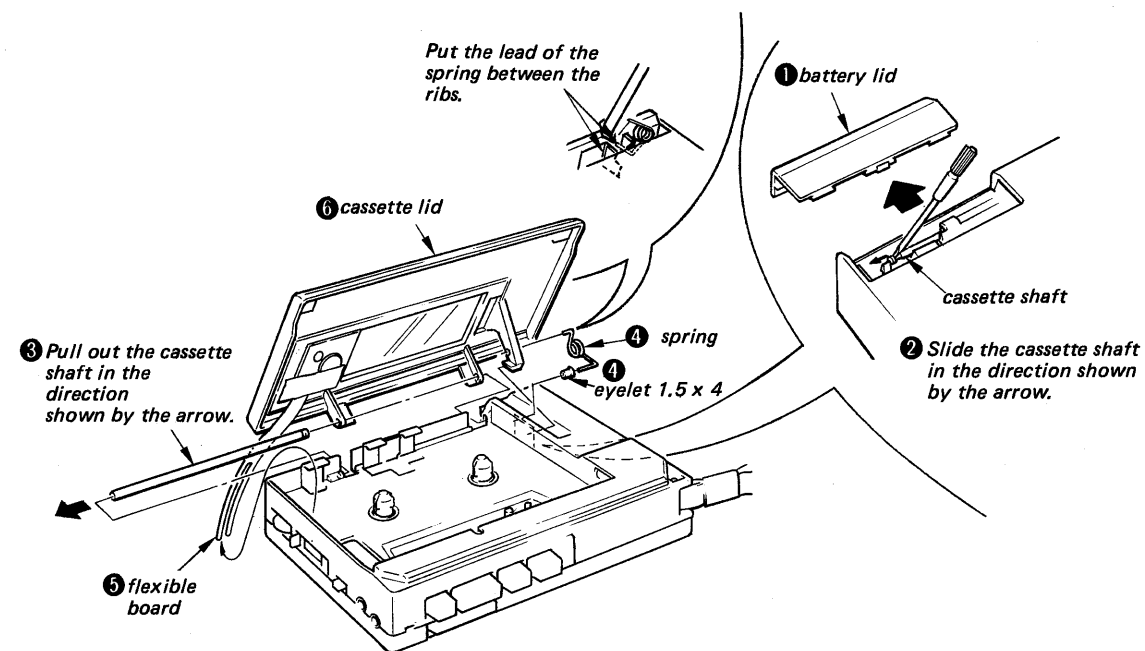
FRONT CABINET/MECHANISM SECTION



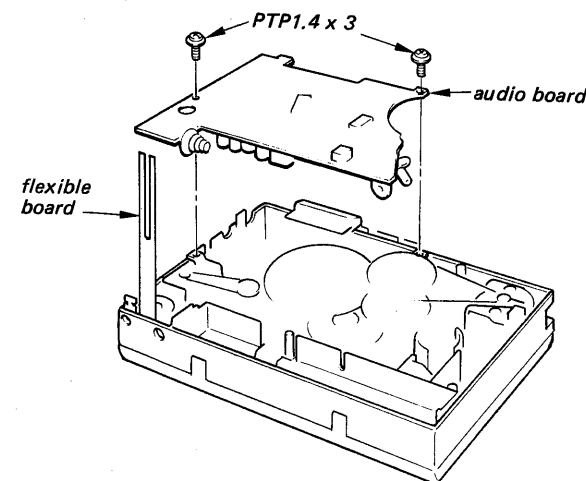
SPEED CONTROL BOARD



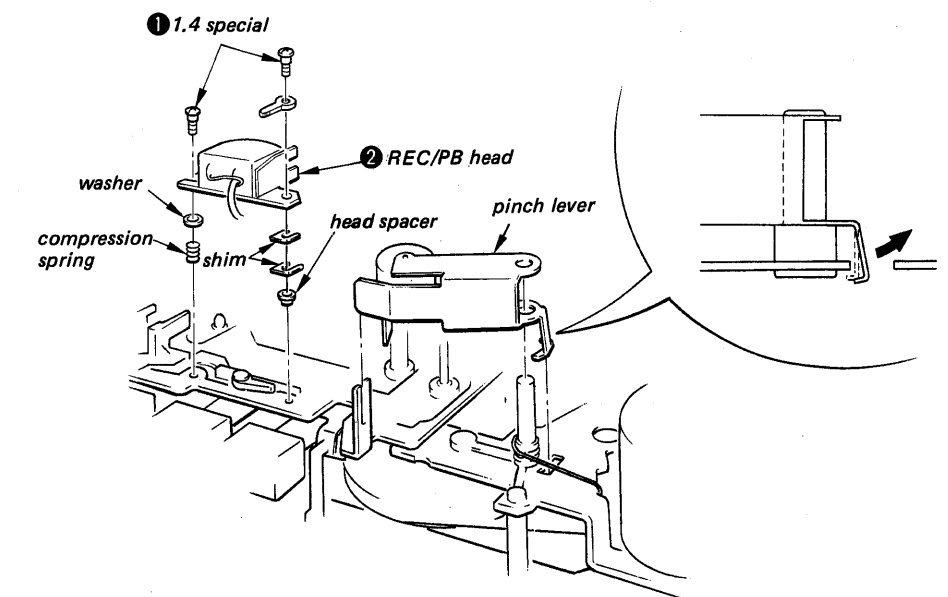
CASSETTE LID



AUDIO BOARD



REC/PB HEAD/PINCH LEVER



3. MECHANICAL ADJUSTMENT

PRECAUTION

- Clean the following parts with a denatured-alcohol-moistened swab:

record/playback head	pinch roller
erase head	rubber belts
capstan	idlers
- Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

power supply voltage : 3 V dc
SPEED CONTROL knob : center click

Torque Measurement

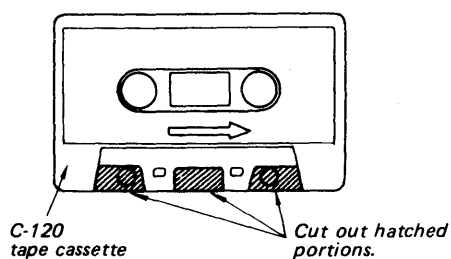
Torque	Meter Reading	Torque Meter
Forward	20 – 45 g·cm (0.28 – 0.62 oz·inch)	CQ-102C
Fast Forward and Rewind	65 – 95 g·cm (0.90 – 1.32 oz·inch)	CQ-201B
Back Tension	1.5 – 3.5 g·cm (0.02 – 0.05 oz·inch)	CQ-102C

Tape Tension Measurement

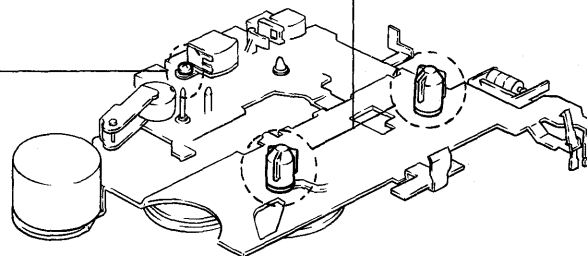
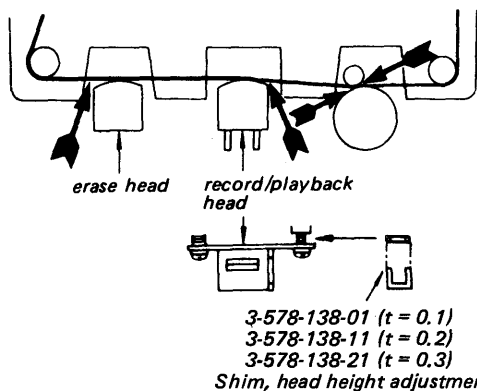
Meter	Meter Reading
CQ-403A	More than 110 g (3.53 oz)

Head Height Adjustment

- Prepare an adjustment cassette as shown below.



- In record mode and viewing from the front, adjust the head heights to eliminate tape curl and tape twist at arrowed portions.



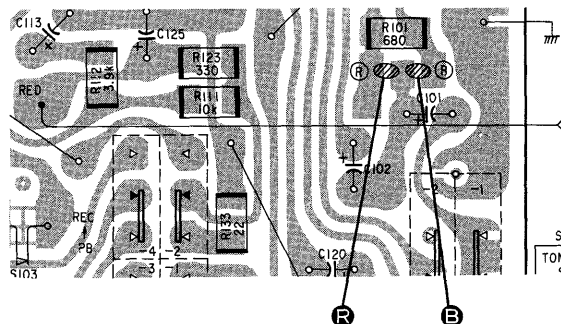
4. ELECTRICAL ADJUSTMENT

Microphone Sensitivity Adjustment

When replacing the microphone, perform this adjustment.

Mark of Microphone	Pattern Connection
BLACK	Ⓑ
RED	Ⓐ

Adjustment Location: Audio Board

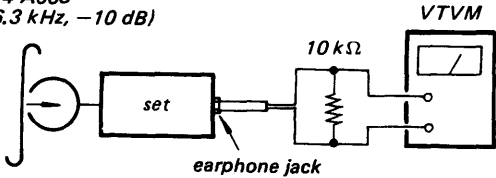


Record/playback Head Azimuth Adjustment

Setting:
SPEED CONTROL knob: center click

Procedure:
1. Mode: playback

test tape
P-4-A063
(6.3 kHz, -10 dB)

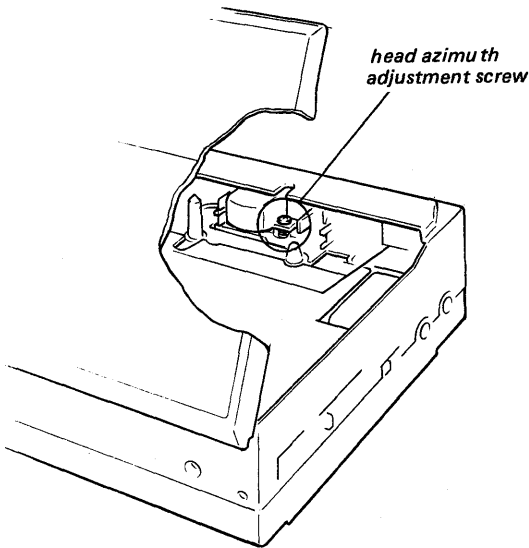


2. Turn the adjustment screw to obtain the maximum reading on VTVM.

Note: Several peaks may appear, but take the maximum.

3 After the adjustment, lock the adjustment screw with suitable locking compound.

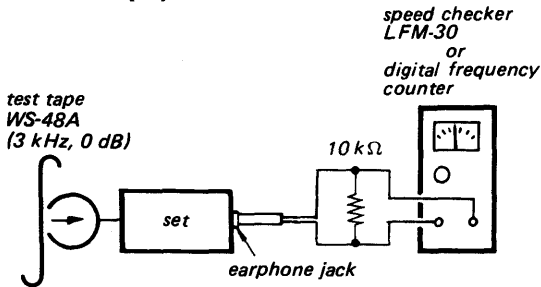
Adjustment Location:



Tape Speed Adjustment

Setting:
SPEED CONTROL knob: center click

Procedure:
Mode: playback

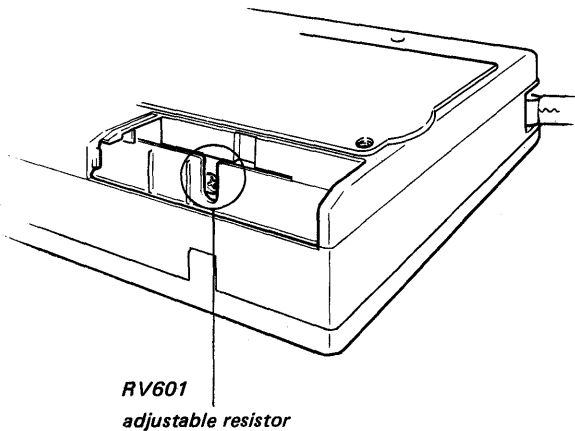


Specification:

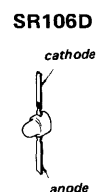
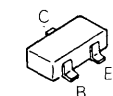
Speed checker	Digital frequency counter
±2%	2,940 – 3,060 Hz

Frequency difference between the beginning and the end of the tape should be within 1 % (30 Hz).

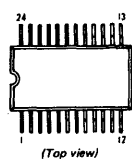
Adjustment Location:



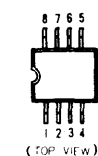
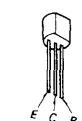
- **Semiconductor Lead Layouts**

**SR106D**

2SC1623-L7



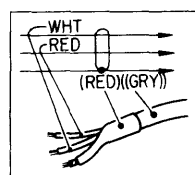
CX20107

**AN6612S**

2SB739

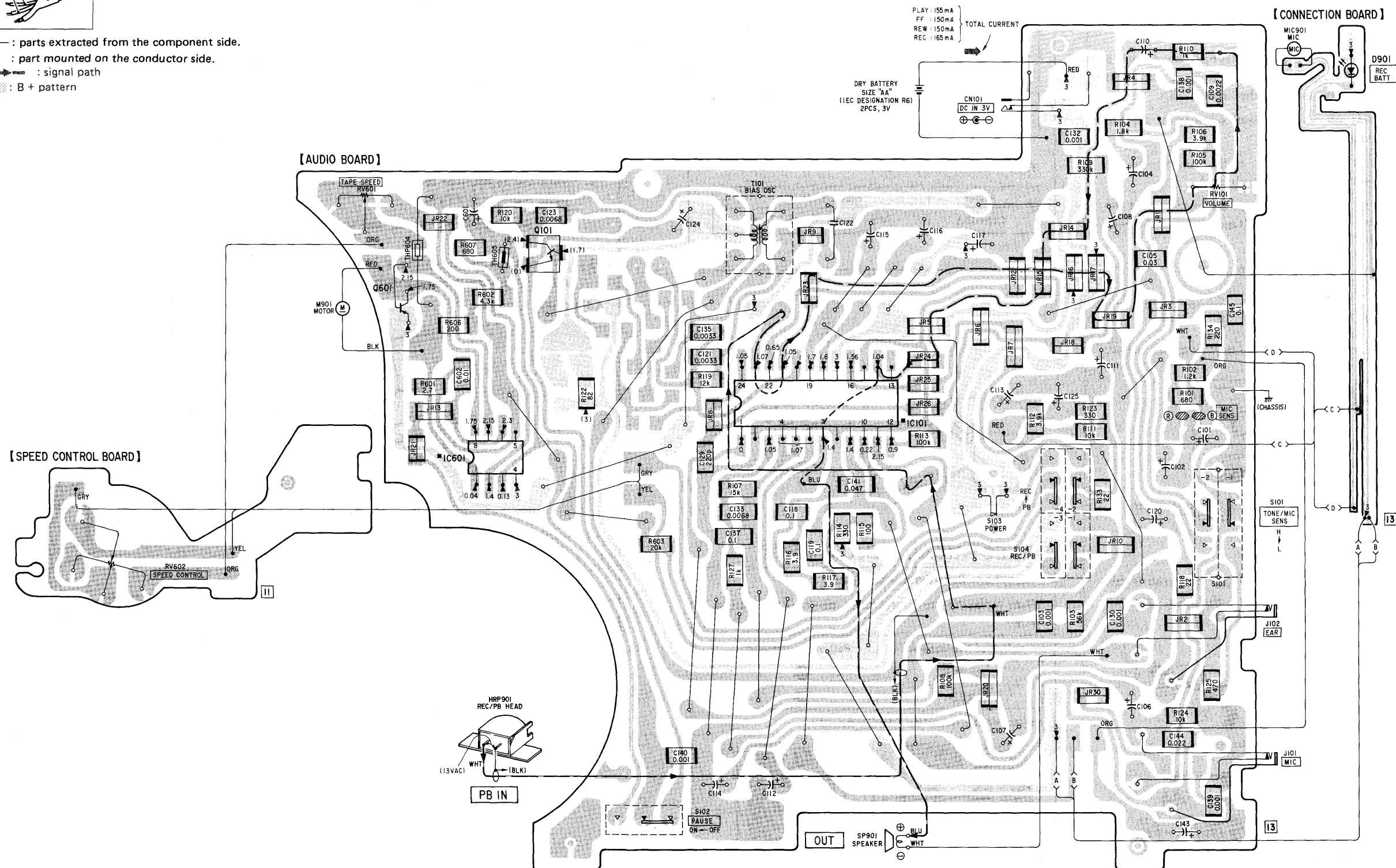
Note:

- Color code of sleeving over the end of the jacket.



- ○ — : parts extracted from the component side.
- ■ : part mounted on the conductor side.
-  : signal path
-  : B + pattern

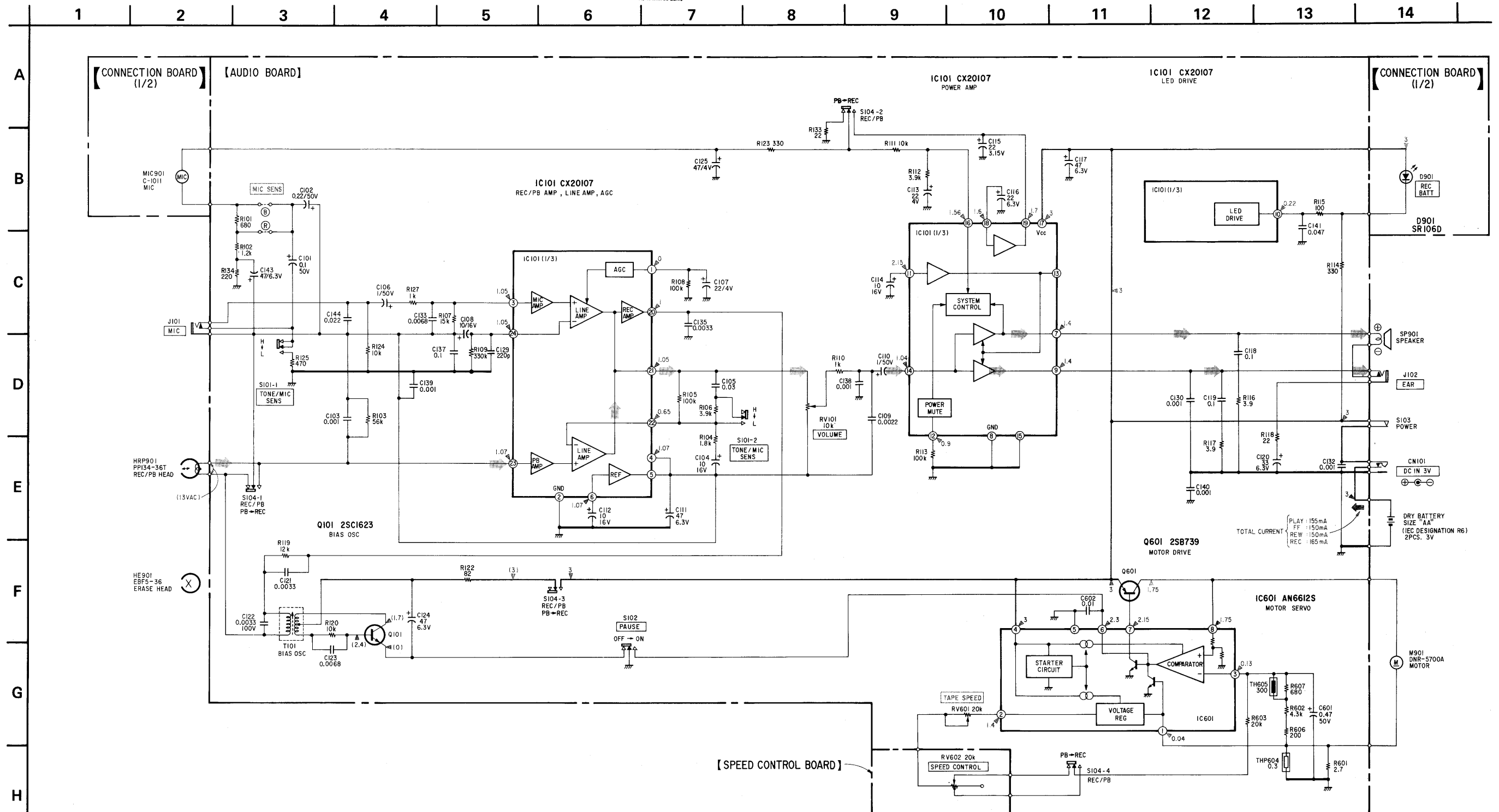
IC Q	601	101	IC101	IC Q
D		IC601		901
				D



6. SCHEMATIC DIAGRAM

TCM-17 TCM-17

SEE ADDITIONAL INFORMATION



- Note:**
- All capacitors are in μF unless otherwise noted. pF: μF 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
 - : signal path.
 - Switch

Ref. No.	Switch	Position
S101	TONE/MIC SENS	H
S102	PAUSE	OFF
S103	POWER	OFF
S104	REC/PB	PB

- : adjustment for repair.
- : B+ bus.
- AC voltage readings in the bias oscillator with a VTVM.
- Total current is measured with no cassette installed.
- Readings are taken under no-signal (detuned) conditions with a VOM (50 $\text{k}\Omega/\text{V}$).
- () : REC
- no mark: PB
- Power voltage is DC 3 V and fed with from DC IN 3 V (external power) jack.

7. EXPLODED VIEWS AND PARTS LIST

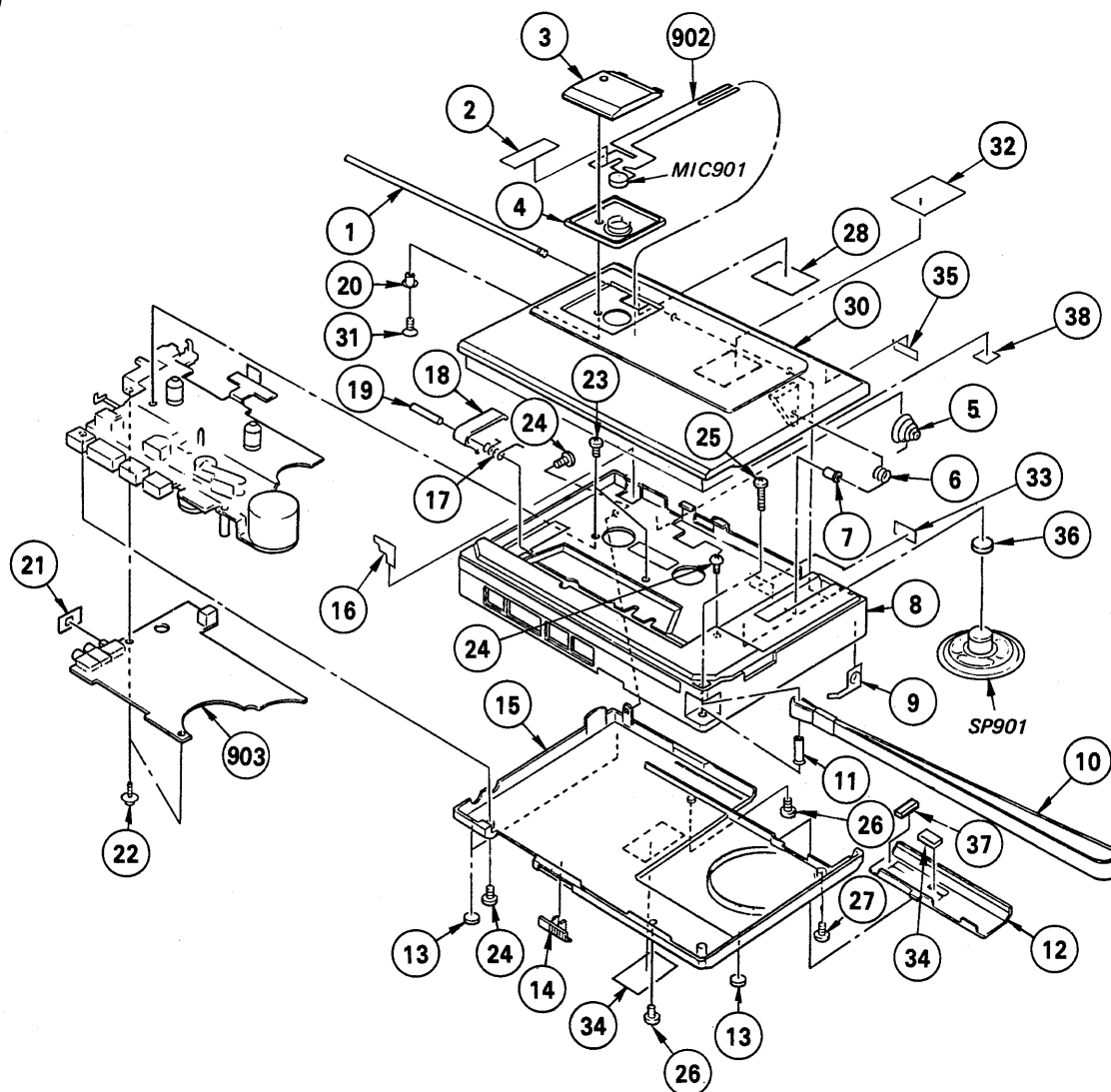
NOTE:

The mechanical parts with no reference number in the exploded views are not supplied.

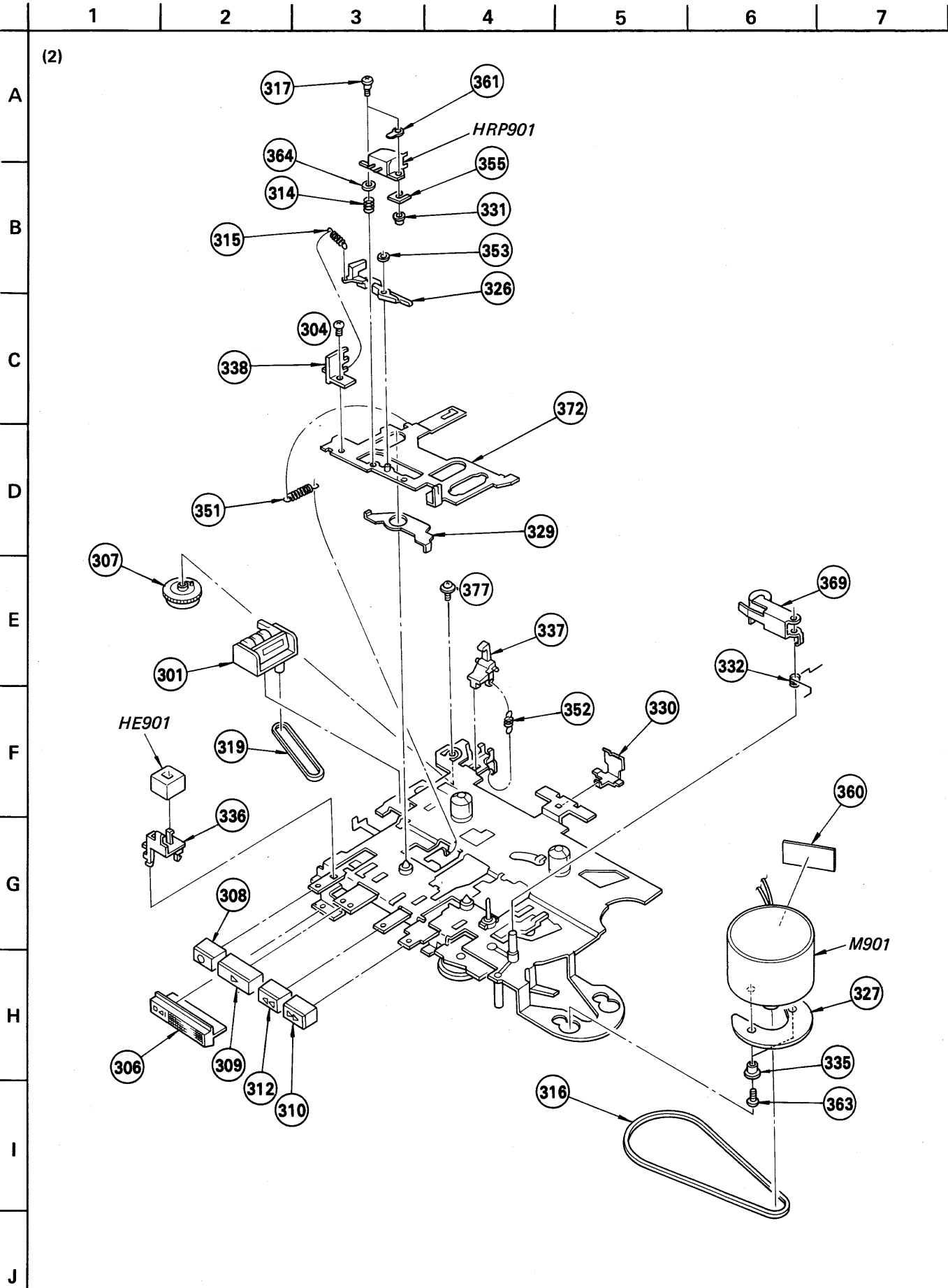
Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

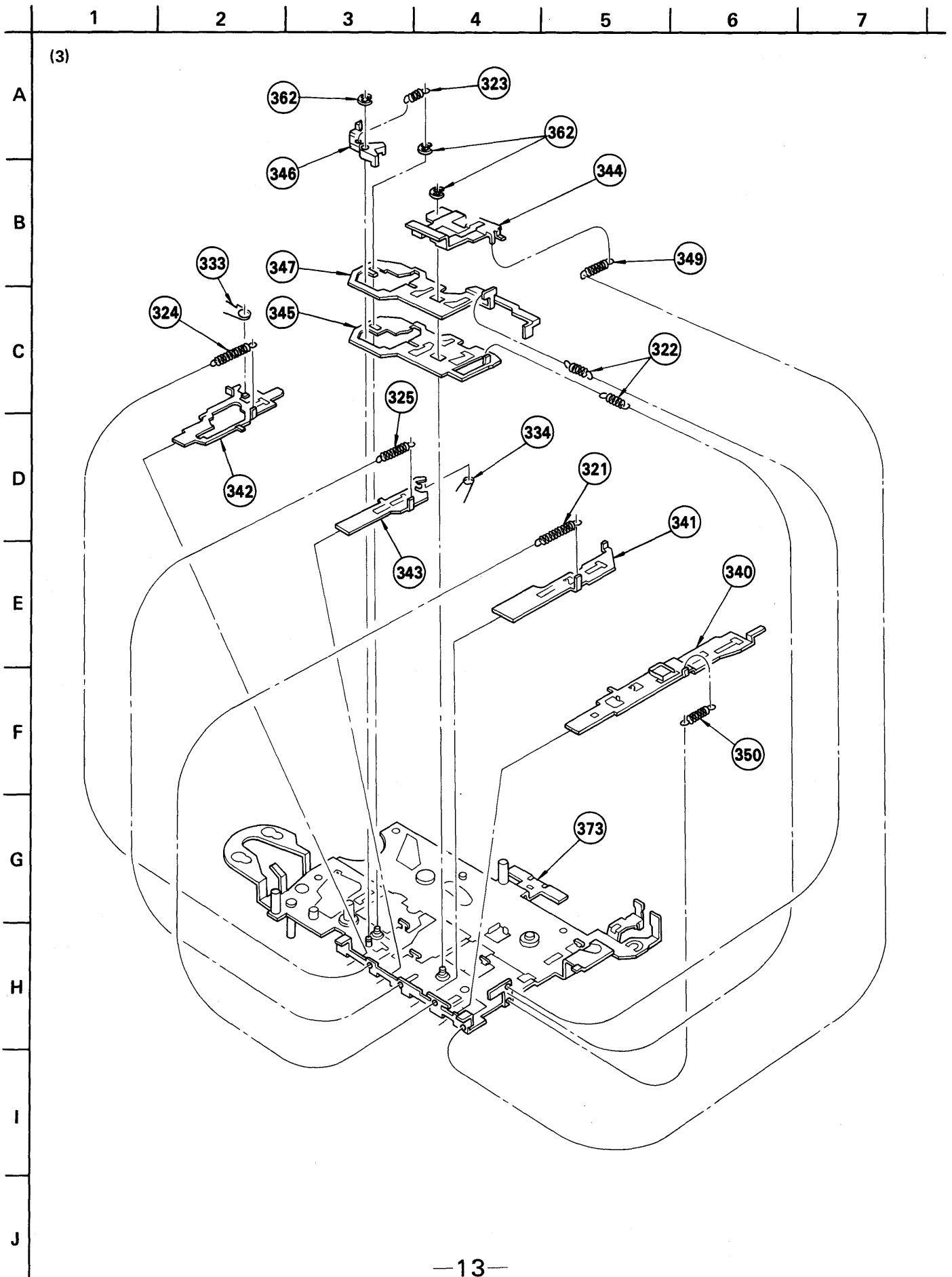
The construction parts of an assembled part are indicated with a collation number in the remark column.

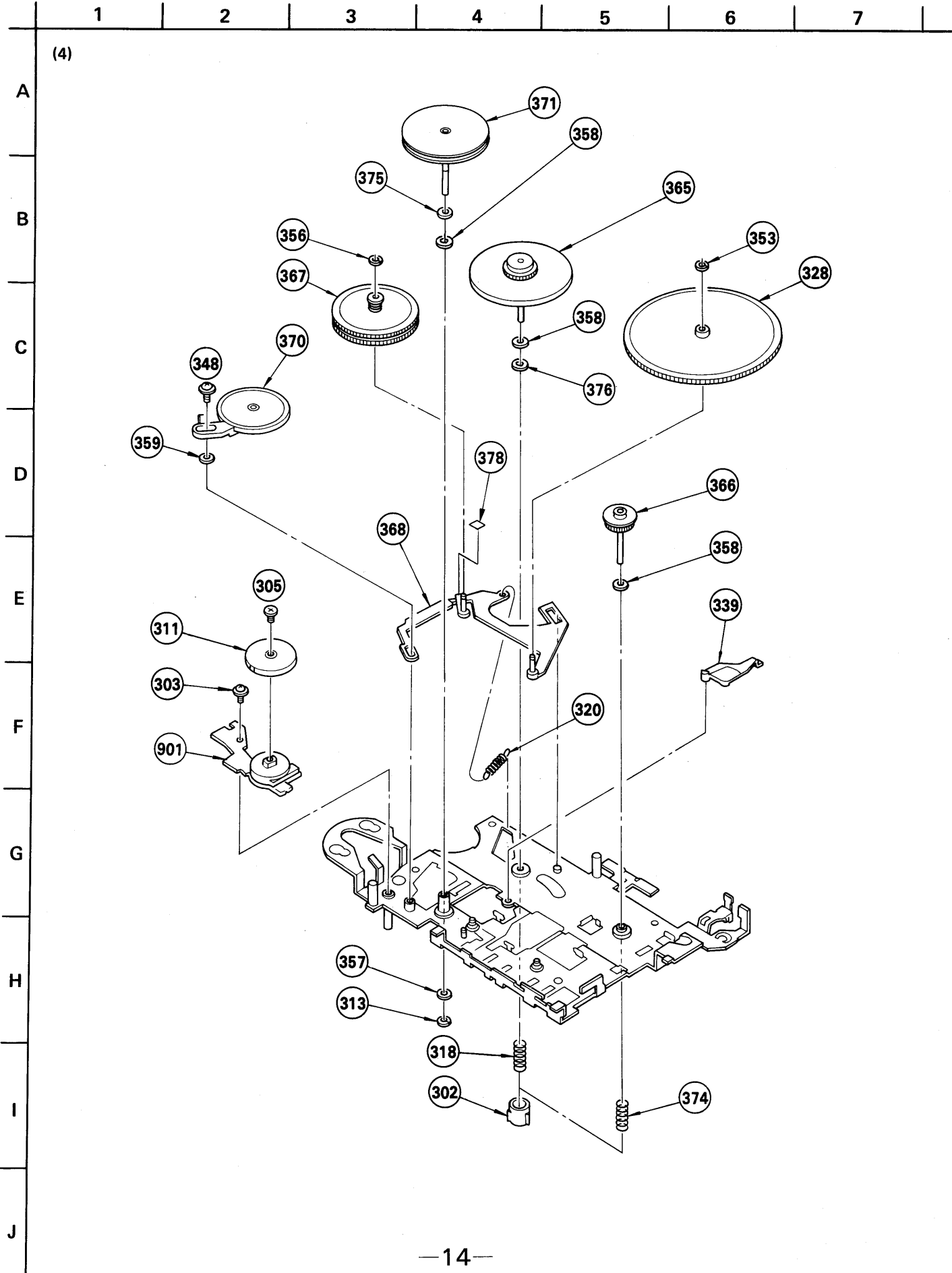
(1)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	3-320-901-01	SHAFT, CASSETTE		20	3-318-383-01	SPACER, MICROPHONE	
3	X-3318-229-1	ORNAMENT ASSY, MICROPHONE		21	9-911-863-XX	PLATE, BLIND	
4	3-318-386-01	CUSHION, MICROPHONE		22	3-318-201-01	SCREW (B) (1.4X3), TAPPING	
5	3-318-210-01	SPRING		23	3-318-204-91	SCREW (M1.7X4), TAPPING	
6	3-321-002-01	SPRING		24	3-318-204-31	SCREW (M1.7X6), TAPPING	
7	7-623-612-01	EYELET, 1.5X4		25	3-320-919-01	SCREW (2X18)	
8	X-3334-332-1	CABINET, FRONT ASSY	16, 36	26	3-318-203-31	SCREW (B1.7X8), TAPPING	
9	3-318-209-01	TERMINAL BOARD, PLUS		27	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	
10	3-320-908-01	STRAP, HAND		28	3-831-441-11	SHEET, INSULATING, LED	
11	3-320-918-01	SPACER, STRAP		30	X-3334-333-1	CASSETTE LID ASSY	35, 38
12	X-3318-230-2	BATTERY LID ASSY	34	31	3-318-382-11	SCREW (1.7X4.5), TAPPING	
13	3-318-374-01	FOOT, RUBBER		32	3-703-710-01	STICKER, SONY SYMBOL (12)	
14	3-320-913-11	KNOB, PAUSE		33	3-527-213-00	LABEL, SERIAL NUMBER	
15	X-3318-233-2	CABINET, REAR ASSY		34	9-911-815-01	CUSHION	
16	3-320-945-01	CHEET, CONDUCTIVE		35	9-911-839-XX	CUSHION	
17	3-318-215-01	SPRING		36	9-911-844-XX	CUSHION, SPEAKER	
18	3-321-022-01	LEVER, EJECT		37	3-831-441-XX	SPACER	
19	3-703-357-06	PIN, PARALLEL (DIA. 1.6X14)		38	3-152-590-00	FELT, STOPPER	







MECHANICAL PARTS LIST

No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
301	1-548-541-31	COUNTER		341	*3-318-290-01	LEVER, PLAY	
302	3-306-836-02	CAP, REEL, T		342	3-318-291-01	LEVER, FR	
303	3-318-201-21	SCREW (B) (1.4X5), TAPPING		343	3-318-292-01	LEVER, REW	
304	7-627-552-07	SCREW, PRECISION +P 1.7X2.5		344	*3-318-293-01	LEVER, STOP	
305	3-892-318-00	SCREW, SMALL		345	*3-318-294-01	PLATE, LOCK	
306	3-321-006-01	BUTTON, STOP		346	3-318-296-01	LEVER, SHUT-OFF	
307	3-320-912-01	KNOB, CONTROL		347	3-318-300-01	LEVER, SWITCH	
308	3-318-221-21	BUTTON, REC		348	3-318-324-01	BUSHING, IDLER LEVER	
309	3-318-222-01	BUTTON, PLAY		349	3-547-669-00	SPRING, TENSION	
310	3-318-223-01	BUTTON, FF		350	3-318-247-01	SPRING, TENSION	
311	3-318-379-01	KNOB, SPEED CONTROL		356	3-578-265-11	WASHER, STOPPER	
312	3-318-228-01	BUTTON, REW		357	3-701-437-01	WASHER	
313	3-318-236-01	WASHER, POLY, SLIT		358	3-701-437-11	WASHER (t=0.25)	
314	3-318-237-01	SPRING, COMPRESSION		359	3-827-323-11	WASHER (DIA. 3.1)	
315	3-318-238-01	SPRING, TENSION		360	3-831-441-XX	CUSHION (B)	
316	3-480-136-00	BELT (CAPSTAN)		361	7-623-505-01	LUG, 2	
317	3-318-240-01	SCREW (1.4), SPECIAL		362	7-624-101-01	RING, RETAINING E-1.2	
318	3-318-241-01	SPRING, COMPRESSION		363	7-627-552-67	SCREW, PRECISION +P 1.7X4.5	
319	3-318-239-01	BELT (TAPE COUNTER)		364	7-688-001-01	W 2, SMALL	
320	3-318-243-01	SPRING, TENSION		351	3-565-927-00	SPRING, TENSION	
321	3-318-246-01	SPRING, TENSION		352	3-318-336-01	SPRING, TENSION	
322	3-318-248-01	SPRING, TENSION		353	3-570-615-00	POLY-WASHER (DIA.1.2)	
323	3-318-351-01	SPRING, TENSION		355	3-578-138-01	SEAM	
324	3-318-250-01	SPRING, TENSION		357	3-578-138-11	SEAM	
325	3-325-683-01	SPRING, TENSION		358	3-578-138-21	SEAM	
326	3-318-252-01	ARM, DETECTION		365	X-3325-619-1	CLUTCH ASSY	
327	3-318-254-01	CUSHION, MOTOR		366	X-3318-204-1	GEAR ASSY, REW	
328	3-318-265-01	GEAR (B), FR		367	X-3318-207-1	GEAR (A) ASSY, FR	
329	*3-318-267-01	LEVER, CR		368	X-3318-208-1	LEVER ASSY, FR	
330	3-318-269-01	SPRING		369	A-3110-010-A	PINCH LEVER ASSY	
331	3-318-309-01	SPACER, HEAD		370	X-3318-210-1	LEVER ASSY, FWD IDLER	
332	3-318-275-01	SPRING		371	X-3318-211-1	FLYWHEEL ASSY	
333	3-318-276-01	SPRING		372	X-3318-222-1	CHASSIS ASSY, HEAD	
334	3-318-277-01	SPRING, REW		373	*X-3318-214-1	CHASSIS ASSY, MECHANICAL	
335	*3-318-310-01	COLLAR, MOTOR		374	3-318-334-01	SPRING, COMPRESSION	
336	3-318-285-01	BRACKET, ERASE HEAD		375	3-545-715-00	WASHER	
337	3-318-286-01	LEVER, ERASING PROTECTION		376	3-701-437-21	WASHER	
338	3-318-287-01	GUIDE, TAPE		377	3-701-437-41	WASHER	
339	3-318-288-01	ARM, FF		377	3-318-201-21	SCREW (B)(1.4X4), TAPPING	
340	A-3041-583-A	REVER ASSY, REC		378	3-831-441-11	CUSHION	

ELECTRICAL PARTS LIST

NOTE:

Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

MF:μF, PF:μF.

RESISTORS

All resistors are in ohms.

F : nonflammable

COILS

MMH : mH, UH : μH

SEMICONDUCTORS

In each case, U : μ, for example:

UA....: μA..., UPA....: μPA..., UPC....: μPC, UPD....: μPD...

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
901	*1-615-516-11	PC BOARD, SPEED CONTROL			
902	1-616-216-11	PC BOARD, CONNECTION			
903	*A-3015-372-A	PC BOARD ASSY, AUDIO			
C101	1-123-607-00	ELECT 0.1MF	20%	50V	
C102	1-123-608-00	ELECT 0.22MF	20%	50V	
C103	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C104	1-123-617-00	ELECT 10MF	20%	16V	
C105	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V	
C106	1-124-438-00	ELECT 1MF	20%	50V	
C107	1-124-430-00	ELECT 22MF	20%	4V	
C108	1-123-617-00	ELECT 10MF	20%	16V	
C109	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V	

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C110	1-123-611-00	ELECT 1MF	20%	50V	
C111	1-124-224-00	ELECT 47MF	20%	6.3V	
C112	1-124-233-00	ELECT 10MF	20%	16V	
C113	1-124-222-00	ELECT 22MF	20%	4V	
C114	1-124-233-00	ELECT 10MF	20%	16V	
C115	1-131-391-00	TANTALUM 22MF	20%	3.15V	
C116	1-123-618-00	ELECT 22MF	20%	6.3V	
C117	1-123-647-00	ELECT 47MF	20%	6.3V	
C118	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C119	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C120	1-123-646-00	ELECT 33MF	20%	6.3V	
C121	1-163-015-00	CERAMIC CHIP 0.0033MF	10%	50V	

SEE ADDITIONAL
SEE INFORMATION

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C122	1-106-184-00	MYLAR	0.0033MF	10%	100V
C123	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C124	1-123-647-00	ELECT	47MF	20%	6.3V
C125	1-124-432-00	ELECT	47MF	20%	4V
C129	1-163-125-00	CERAMIC CHIP	220PF	10%	50V
C130	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V
C132	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V
C133	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C135	1-163-015-00	CERAMIC CHIP	0.0033MF	10%	50V
C137	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C138	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V
C139	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V
C140	1-163-205-00	CERAMIC CHIP	0.001MF	10%	50V
C141	1-163-075-00	CERAMIC CHIP	0.047MF	10%	25V
C143	1-123-647-00	ELECT	47MF	20%	6.3V
C144	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C145	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C601	1-124-465-00	ELECT	0.47MF	20%	50V
C602	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
CN101	1-507-723-00	JACK, EXTENTION POWER			
D901	8-719-101-06	DIODE SR106D (REC/BATT)			
HE901	8-658-096-02	HEAD, ERASE EBF5-36			
HRP901	8-829-336-35	HEAD (PP134-36T)			
IC101	8-752-010-71	IC CX20107			
IC601	8-759-400-12	IC AN6612S			
J101	1-507-921-00	JACK (MIC)			
J102	1-507-921-00	JACK (EAR)			
M901	8-835-104-01	MOTOR, DC (DNR-5700A)			
MIC901	8-814-184-00	MICROPHONE UNIT (C-1011)			
Q101	8-729-100-67	TRANSISTOR 2SC1623-L7			
Q601	8-729-373-92	TRANSISTOR 2SB739			
R101	1-216-045-00	METAL CHIP	680	5%	1/10W
R102	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R103	1-216-091-00	METAL CHIP	56K	5%	1/10W
R104	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R105	1-216-097-00	METAL CHIP	100K	5%	1/10W
R106	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R107	1-216-077-00	METAL CHIP	15K	5%	1/10W
R108	1-216-097-00	METAL CHIP	100K	5%	1/10W
R109	1-216-258-00	METAL CHIP	330K	5%	1/8W
R110	1-216-049-00	METAL CHIP	1K	5%	1/10W
R111	1-216-073-00	METAL CHIP	10K	5%	1/10W
R112	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R113	1-216-097-00	METAL CHIP	100K	5%	1/10W
R114	1-216-037-00	METAL CHIP	330	5%	1/10W
R115	1-216-025-00	METAL CHIP	100	5%	1/10W
R116	1-216-306-11	METAL CHIP	3.9	5%	1/10W
R117	1-216-306-11	METAL CHIP	3.9	5%	1/10W
R118	1-216-009-00	METAL CHIP	22	5%	1/10W
R119	1-216-075-00	METAL CHIP	12K	5%	1/10W
R120	1-216-073-00	METAL CHIP	10K	5%	1/10W
R122	1-216-023-00	METAL CHIP	82	5%	1/10W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R123	1-216-037-00	METAL CHIP	330	5%	1/10W
R124	1-216-073-00	METAL CHIP	10K	5%	1/10W
R125	1-216-041-00	METAL CHIP	470	5%	1/10W
R127	1-216-049-00	METAL CHIP	1K	5%	1/10W
R133	1-216-009-00	METAL CHIP	22	5%	1/10W
R134	1-216-033-00	METAL CHIP	220	5%	1/10W
R601	1-216-302-00	METAL CHIP	2.7	5%	1/10W
R602	1-216-213-00	METAL CHIP	4.3K	5%	1/8W
R603	1-216-080-00	METAL CHIP	20K	5%	1/10W
R606	1-216-181-00	METAL CHIP	200	5%	1/8W
R607	1-216-045-00	METAL CHIP	680	5%	1/10W
RV101	1-228-121-00	RES, VAR, CARBON 10K			
RV601	1-230-895-11	RES, ADJ, CARBON 20K			
RV602	1-230-888-11	RES, VAR, CARBON 20K			
S101	1-554-123-00	SWITCH, SLIDE (TONE/MIC SENSE)			
S102	1-553-510-00	SWITCH, SLIDE (PAUSE)			
S103	1-554-297-00	SWITCH, LEAF (POWER)			
S104	1-554-745-11	SWITCH, SLIDE (REC/PB)			
SP901	1-503-322-11	SPEAKER			
T101	1-433-251-00	TRANSFORMER, BIAS OSCILLATOR			
TH605	1-806-716-00	THERMISTOR			
THP604	1-806-800-11	THERMISTOR (POSITIVE)			

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-463-713-11	(US)...ADAPTOR, AC (AC-320)
1-557-053-00	(US)...CORD (WITH SMALL TYPE DC PLUG)
3-318-397-01	(UK)...CASE, CARRYING
3-318-399-00	SHEET, PROTECTION, ADAPTOR
3-320-902-01	CUSHION, 4 GANG
3-320-946-01	(US)...SPACER (B)
3-334-556-01	(US,Canadian)...INDIVIDUAL CARTON
3-334-557-01	(E,UK;AEP).....INDIVIDUAL CARTON
3-334-555-01	SLEEVE, ADAPTOR
3-334-563-01	SPACER
3-527-213-00	(US)...LABEL, MODEL NUMBER
3-701-622-00	BAG, POLYETHYLENE
3-703-710-01	STICKER, SONY SYM
4-354-114-01	BAG, PROTECTION
3-765-316-11	(AEP,E,UK).....MANUAL, INSTRUCTION
3-765-316-21	(US,Canadian)...MANUAL, INSTRUCTION
3-765-316-31	(Canadian).....MANUAL, INSTRUCTION
3-765-316-41	(AEP).....MANUAL, INSTRUCTION

SERVICE MANUAL

*US Model
Canadian Model
AEP Model
UK Model
E Model*

SUPPLEMENT

File this supplement with the service manual.

No. 1

January, 1987

- The audio PC board has been changed.
New PC board partially uses printed-resistors.

1. CHANGE PARTS LIST

Ref. No.	New Parts	New Parts No.	Remarks	Former Parts
C137	CERAMIC CHIP 220PF 10% 50V	1-163-125-00		CERAMIC CHIP 0.1MF
C139	CERAMIC CHIP 0.1MF 25V	1-163-038-00		CERAMIC CHIP 0.001MF
C140	CERAMIC CHIP 220PF 10% 50V	1-163-125-00		CERAMIC CHIP 0.001MF
C601	ELECT 0.1MF 20% 50V	1-123-611-00		ELECT 0.47MF
C602	_____	_____		CERAMIC CHIP 0.01MF
IC601	LA5523	8-759-801-12		AN6612S
R101	680Ω 10% 1/32W	1-249-415-11	RES, PRINTED	METAL CHIP 680Ω
R102	1.2kΩ 10% 1/32W	1-247-833-00	RES, PRINTED	METAL CHIP 1.2kΩ
R103	56kΩ 5% 1/32W	1-247-873-00	RES, PRINTED	METAL CHIP 56kΩ
R104	1.8kΩ 5% 1/32W	1-249-420-11	RES, PRINTED	METAL CHIP 1.8kΩ
R105	100kΩ 5% 1/32W	1-249-441-11	RES, PRINTED	METAL CHIP 100kΩ
R106	3.9kΩ 5% 1/32W	1-247-845-00	RES, PRINTED	METAL CHIP 3.9kΩ
R108	100kΩ 10% 1/32W	1-249-411-11	RES, PRINTED	METAL CHIP 100kΩ
R109	330kΩ 5% 1/32W	1-247-891-00	RES, PRINTED	METAL CHIP 330kΩ
R110	1kΩ 10% 1/32W	1-249-417-11	RES, PRINTED	METAL CHIP 1kΩ
R111	10kΩ 10% 1/32W	1-249-429-11	RES, PRINTED	METAL CHIP 10kΩ
R112	3.9kΩ 10% 1/32W	1-247-845-00	RES, PRINTED	METAL CHIP 3.9kΩ
R113	100kΩ 10% 1/32W	1-249-441-11	RES, PRINTED	METAL CHIP 100kΩ
R114	330Ω 10% 1/32W	1-247-819-00	RES, PRINTED	METAL CHIP 330Ω
R115	100Ω 10% 1/32W	1-249-405-11	RES, PRINTED	METAL CHIP 100Ω
R119	12kΩ 5% 1/32W	1-247-857-00	RES, PRINTED	METAL CHIP 12kΩ
R120	METAL CHIP 10kΩ 5% 1/6W	1-216-073-00		CARBON 10kΩ

CASSETTE CORDER
SONY®

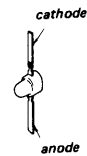
Ref. No.	New Parts			New Parts No.	Remarks	Former Parts
R123	330Ω	10%	1/32W	1-247-819-00	RES, PRINTED	METAL CHIP 330Ω
R124	10kΩ	10%	1/32W	1-249-429-11	RES, PRINTED	METAL CHIP 10kΩ
R125	470Ω	10%	1/32W	1-247-823-00	RES, PRINTED	METAL CHIP 470Ω
R134	220Ω	10%	1/32W	1-247-815-00	RES, PRINTED	METAL CHIP 220Ω
R601	3.9kΩ	5%	1/32W	1-247-845-00	RES, PRINTED	METAL CHIP 2.7Ω
R602						METAL CHIP 4.3kΩ
R603	8.2kΩ	10%	1/32W	1-247-853-00	RES, PRINTED	METAL CHIP 20kΩ
R604	27kΩ	10%	1/32W	1-249-434-11	RES, PRINTED	
R605	680Ω	10%	1/32W	1-249-415-11	RES, PRINTED	
R606						METAL CHIP 200Ω
R607	18kΩ	10%	1/32W	1-249-432-11	RES, PRINTED	METAL CHIP 680Ω
R608	18kΩ	10%	1/32W	1-249-432-11	RES, PRINTED	
R609	18kΩ	10%	1/32W	1-249-432-11	RES, PRINTED	
RV601	RES, ADJ. CARBON	10kΩ		1-230-510-11		RES, ADJ. 20kΩ
TH602	THERMISTOR	3kΩ		1-806-717-00		
TH605						THERMISTOR 300Ω
THP601	THERMISTOR (POSITIVE)	180Ω		1-806-881-11		
THP604						THERMISTOR 180Ω
901	PC BOARD, SPEED CONTROL (PRC)			*1-620-753-11	RES, PRINTED	PC BOARD, SPEED CONTROL
903	PC BOARD, AUDIO (PRC)			*1-620-752-11	RES, PRINTED	PC BOARD ASSY, AUDIO

2. MOUNTING DIAGRAM

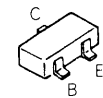
TCM-17 TCM-17

● Semiconductor
Lead Layouts

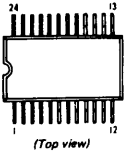
SR106D



2SC1623-L7



CX20107



LA5523

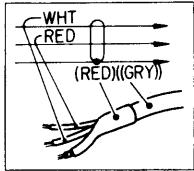


2SB739



Note:

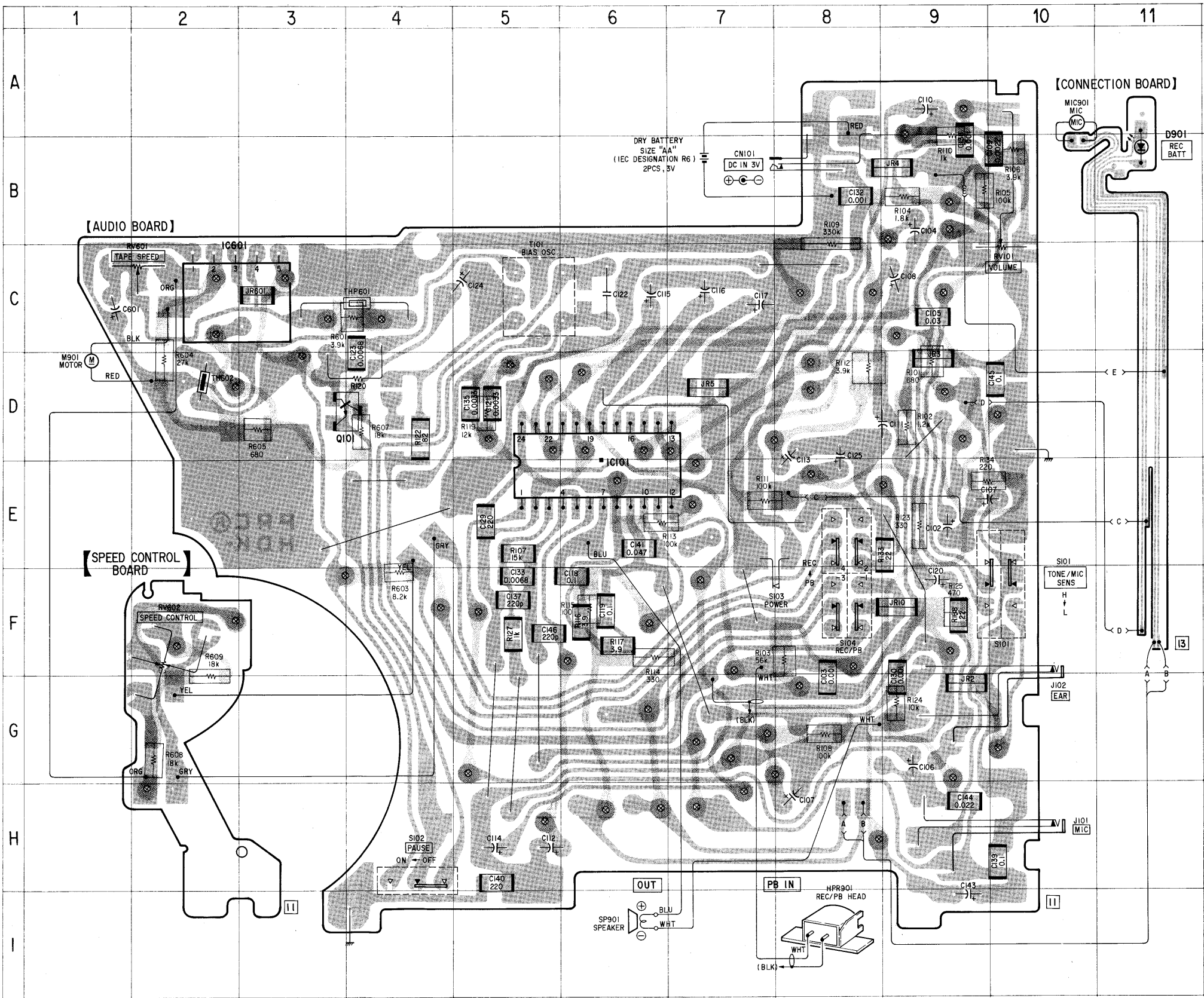
- Color code of sleeving over the end of the jacket.



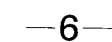
- : parts extracted from the component side.
- : part mounted on the conductor side.

● SEMICONDUCTOR
LOCATION

Ref. No.	Location
D901	B-11
IC101	E-6
IC601	C-2
Q101	D-4



TCM-17 **TCM-17**



MEMO

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

