

# TCM-828/838

## SERVICE MANUAL

TCM-828/838:  
US Model  
Canadian Model

TCM-828:  
AEP Model  
UK Model  
E Model

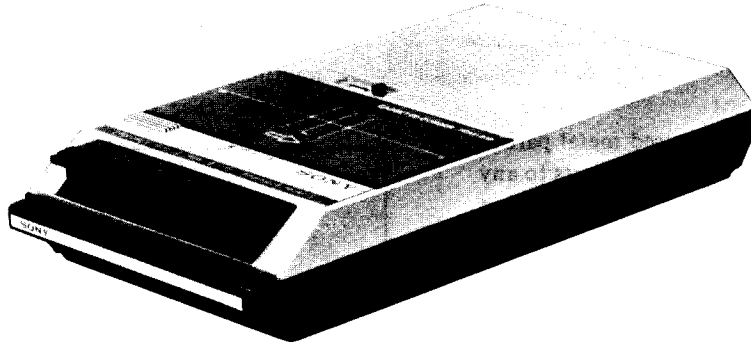


PHOTO: TCM-838

### SPECIFICATIONS

**Recording system:** 2-track 1-channel monaural  
**Speaker:** Approx. 7.7 cm (3<sup>1</sup>/<sub>8</sub> inches) dia.  
**Fast winding time:** Approx. 2 min. with Sony C-60 cassette  
**Frequency response:** 50–8,000 Hz  
**Input:** Microphone input (minijack)  
 sensitivity 0.2mV (–72 dB)  
 for low impedance microphone  
**Output:** Earphone jack (minijack)  
 for 8 to 300-ohm earphone or load  
 impedance 10 kilohms or higher  
**Other jack:** Remote control jack  
**Power output:** 450 mW (at 10% harmonic distortion)  
**Power requirements:** 6 V dc  
 4 batteries IEC designation R14 (size C)  
 240 V ac, 50 Hz (UK model)  
 120 V ac, 60 Hz (US, Canadian model)  
 220 V ac, 50 Hz (AEP model)  
 120-220 V ac, 50 Hz (E model)

#### Battery life


Batteries	Recording	Playback
Sony New Super SUM-2 (NS) batteries or Eveready No. 1235 Heavy Duty batteries	4	4
Sony Eveready AM2 or Eveready No. E93 Alkaline batteries	10	10

(hours)


**Dimensions:** Approx. 142 x 49 x 264 mm (w/h/d)  
 (5<sup>5</sup>/<sub>8</sub> x 1<sup>15</sup>/<sub>16</sub> x 10<sup>5</sup>/<sub>8</sub> inches)  
 incl. projecting parts and controls  
**Weight:** Approx. 800 g (1 lb 12 oz) incl. batteries

Tape Transport Mechanism Type	MT-828
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#### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND 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 TRAME ET UNE MARQUE  SUR LES DIAGRAMMES SCHEMATIQUES 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.

# CASSETTE-CORDER SONY®

## SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

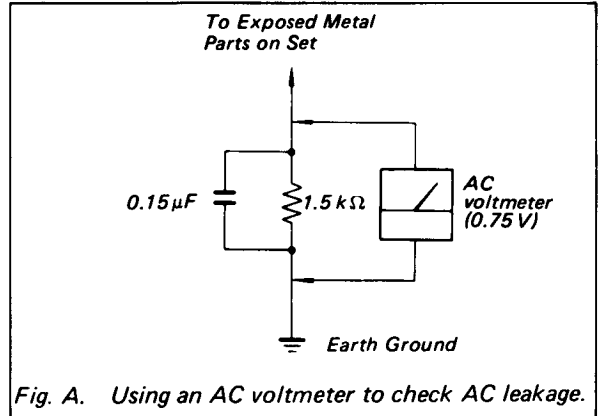
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE TEST

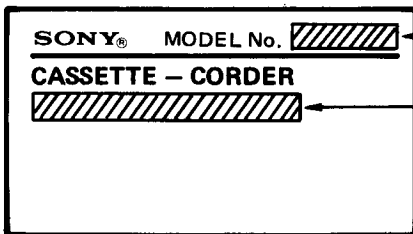
The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)



### MODEL IDENTIFICATION

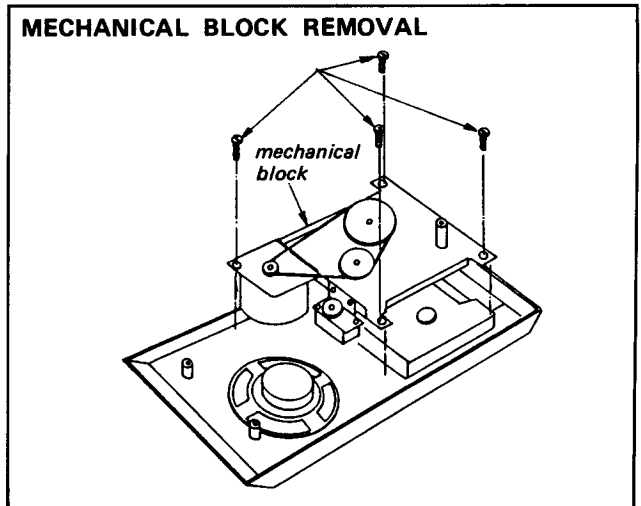
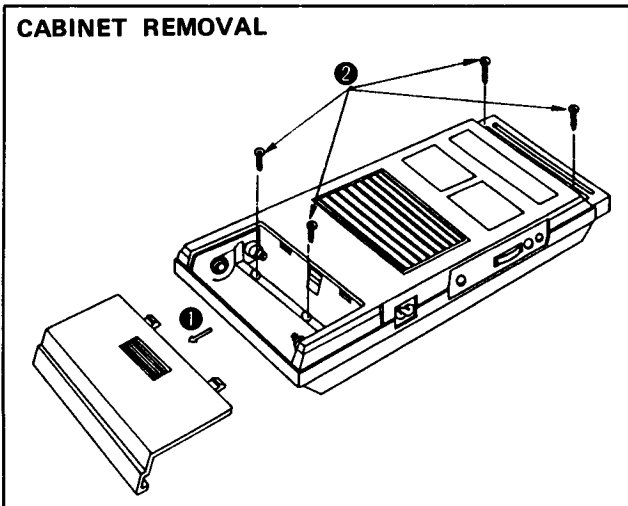


TCM-828  
TCM-838

US, Canadian model: AC: 120 V 60 Hz 4 W  
AEP model: AC: 220 V 50 Hz 4 W  
UK model: AC: 240 V 50 Hz 4 W  
E model: AC: 120/220 V 50 Hz 4 W

## SECTION 1 DISASSEMBLY

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



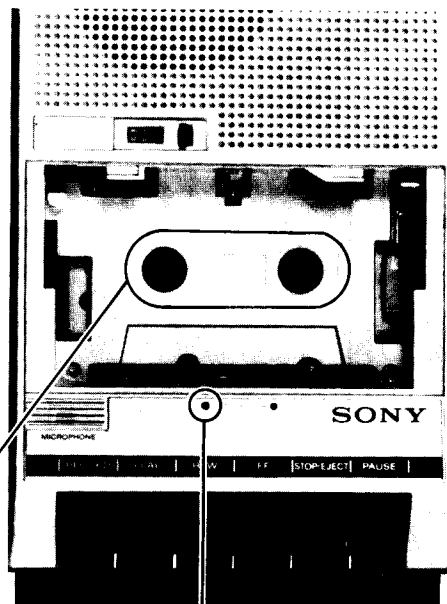
# SECTION 2 ADJUSTMENTS

## 2. ADJUSTMENTS

### PRECAUTION

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

record/playback head	pinch roller
erase head	rubber belts
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 unless otherwise noted.



### Torque Measurement

Power supply voltage: 6 V dc

Mode	SONY torque meter	Torque
forward	CQ-102C	40 – 70 g·cm (0.56 – 0.97 oz·inch)
fast forward. rewind	CQ-201B	55 g·cm or more (0.76 oz·inch)

### Record/playback Head Azimuth Adjustment

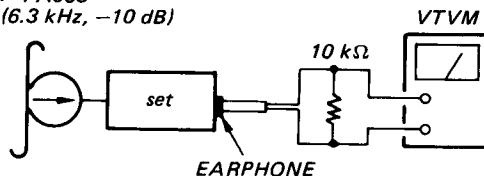
#### Setting:

VOLUME control: mechanical mid

#### Procedure:

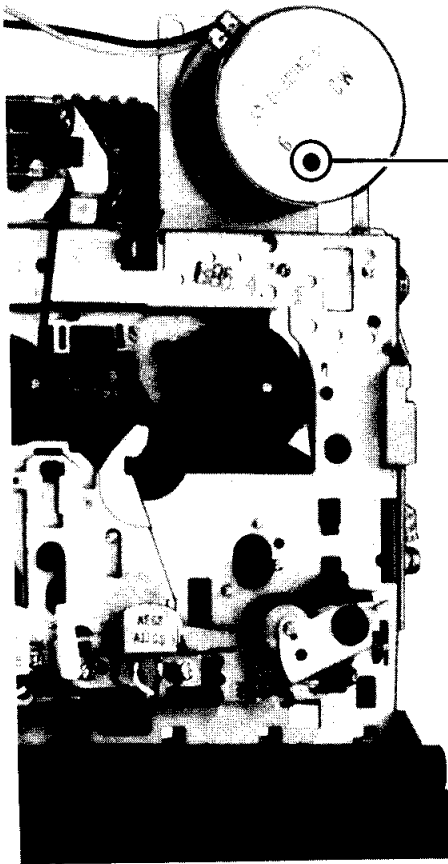
1. Mode: playback

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



2. Turn the adjustment screw for the highest VTVM reading.

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



### Tape Speed Adjustment

#### Setting:

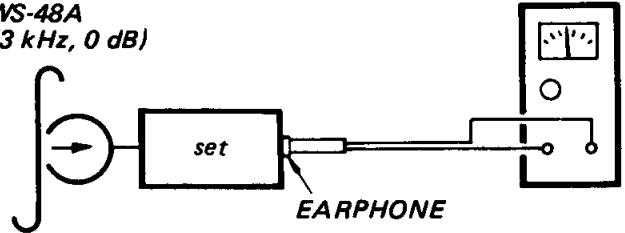
VOLUME control: mechanical mid

#### Procedure:

Mode: playback

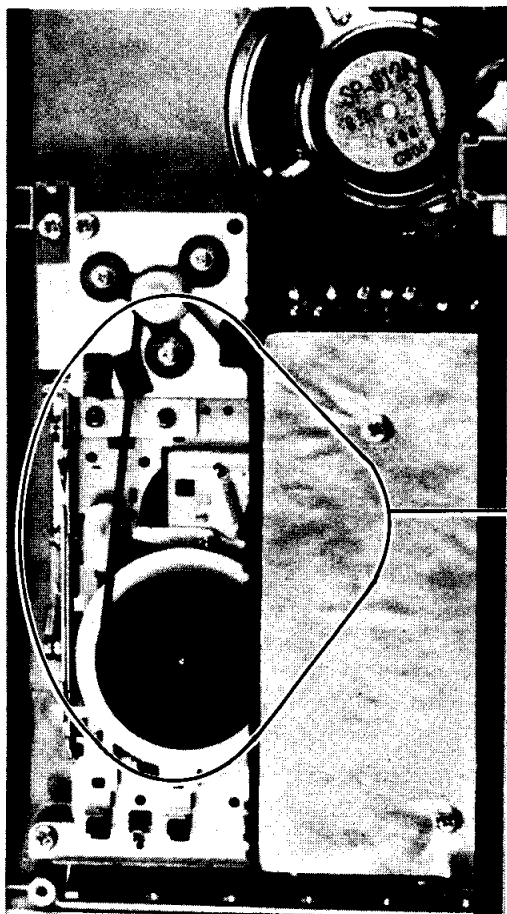
test tape  
WS-48A  
(3 kHz, 0 dB)

speed checker  
LFM-30  
or  
digital frequency  
counter



#### Specification:

Speed checker	Digital frequency counter
-2 to +2%	2,940 – 3,060 Hz

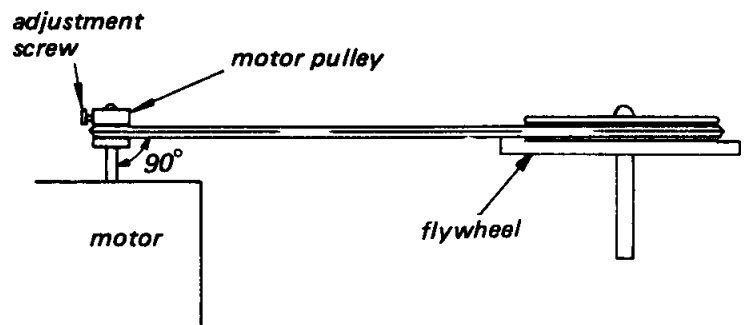


### Motor Pulley Height Adjustment

Perform this adjustment, after replacing the motor pulley or the flywheel.

#### Procedure:

1. Keep the set horizontal.
2. Adjust the motor pulley height so that the drive belt is straight without a twist.

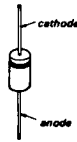


# SECTION 3 DIAGRAMS

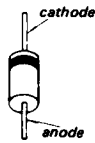
## 3-1. MOUNTING DIAGRAM

### Semiconductor Lead Layouts

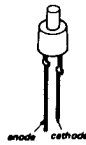
10E-2



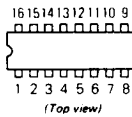
1S1555



TLR-206



TA7628P

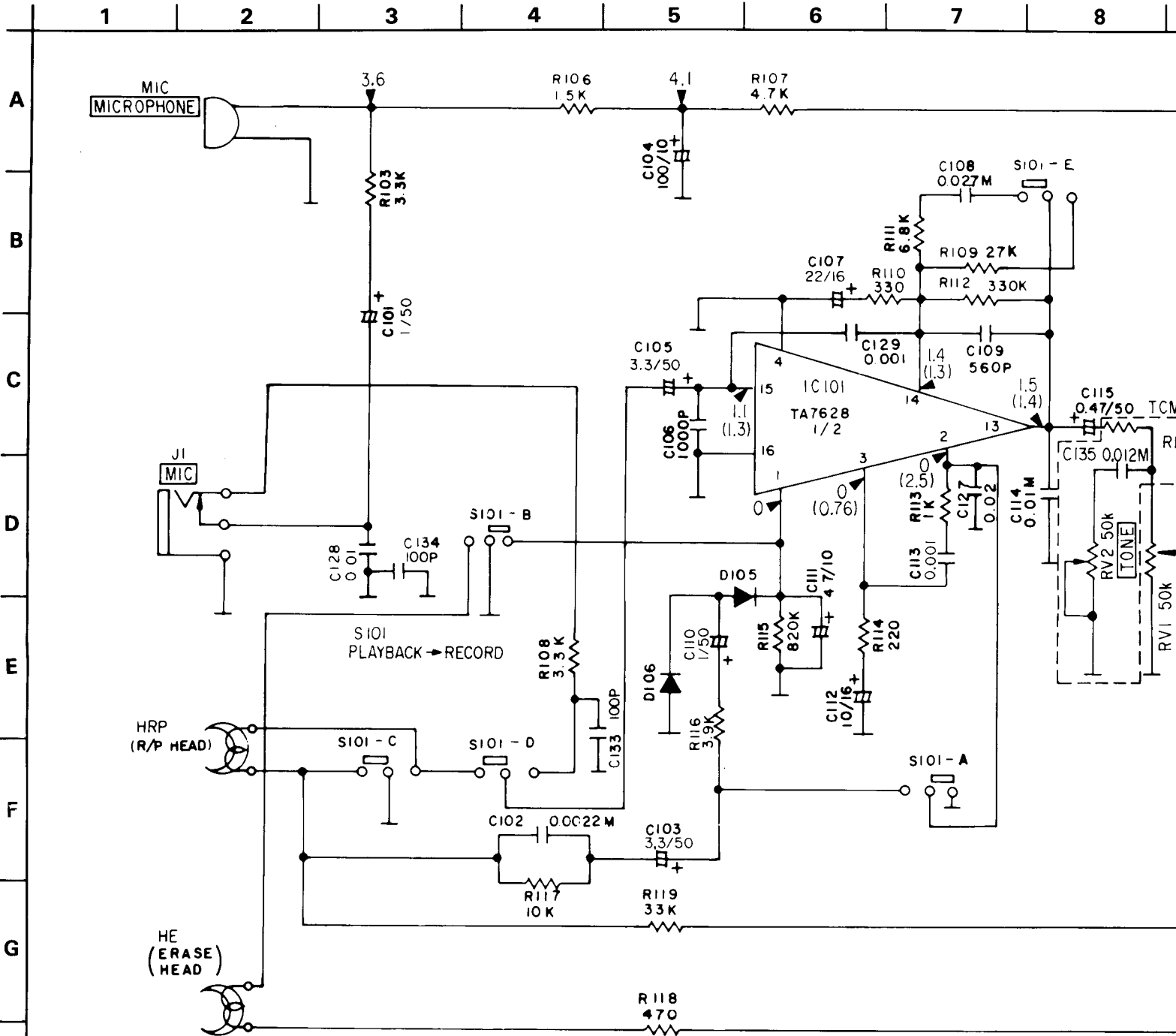


**Notes:**

- ○ — : parts extracted from the component side.
- ● — : parts extracted from the conductor side.



3-2. SCHEMATIC DIAGRAM



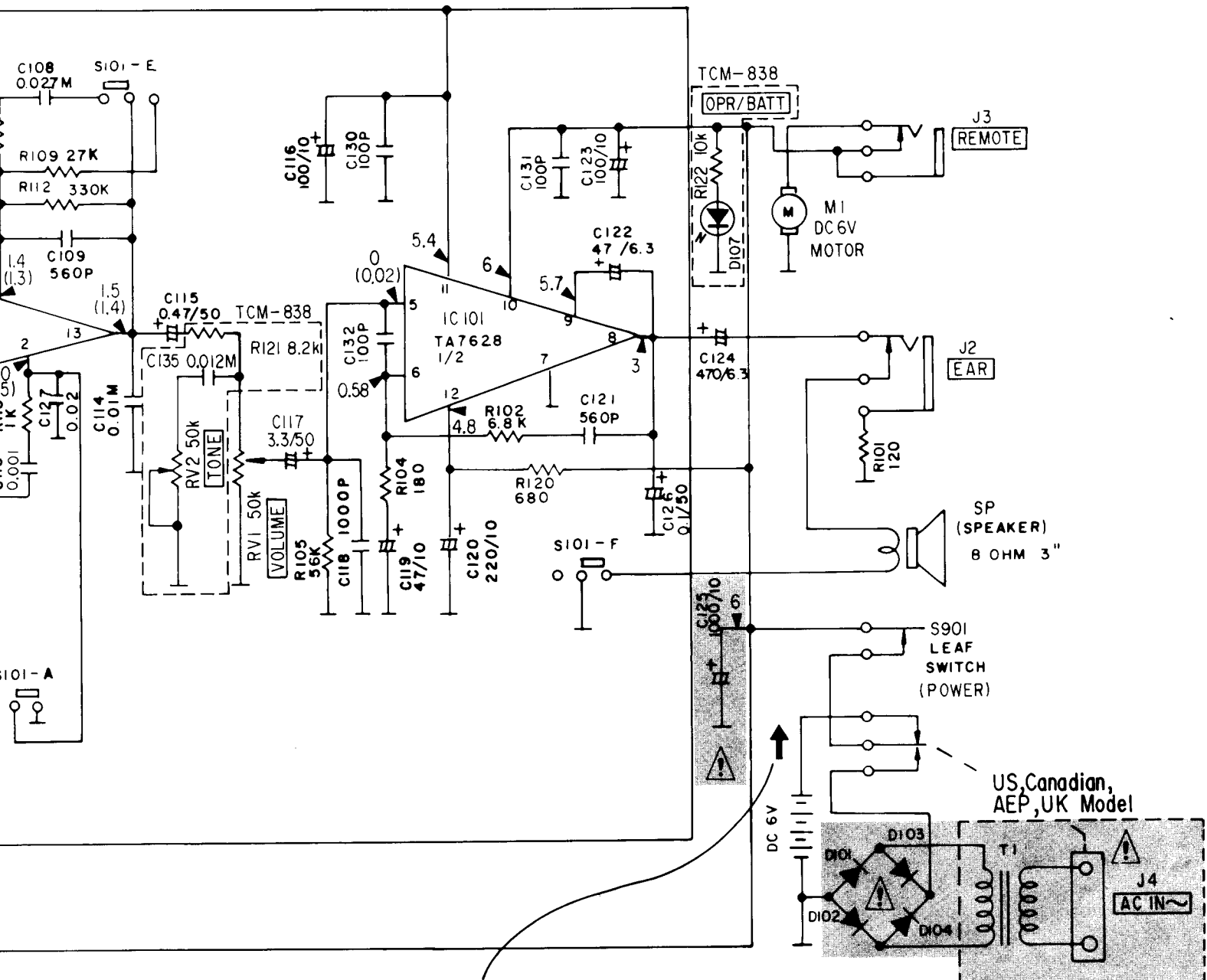
Note:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF} = \mu\mu\text{F}$ . 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}\text{W}$  or less unless otherwise specified.
- Switch

- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal (detuned) conditions with a VOM (50  $\text{k}\Omega/\text{V}$ ).  
( ) : RECORD MODE

Ref. No.	Switch	Position
S101	PLAYBACK → RECORD	PLAYBACK

Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

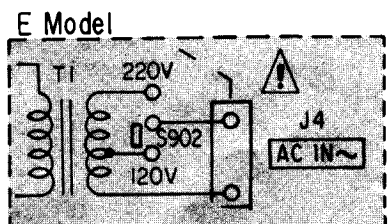
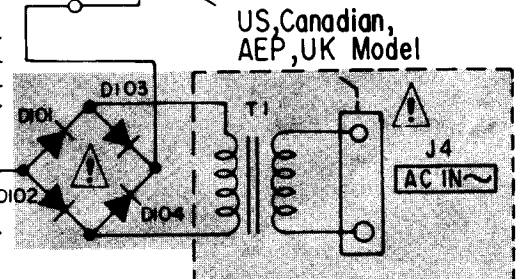


TOTAL CURRENT  
 PLAY : 105mA  
 REC : 110mA  
 FF : 87mA  
 REW : 97mA

and unless otherwise  
 (detuned) conditions

by shading and mark  
 Replace only with

Note: Les composants identifiés par une trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.





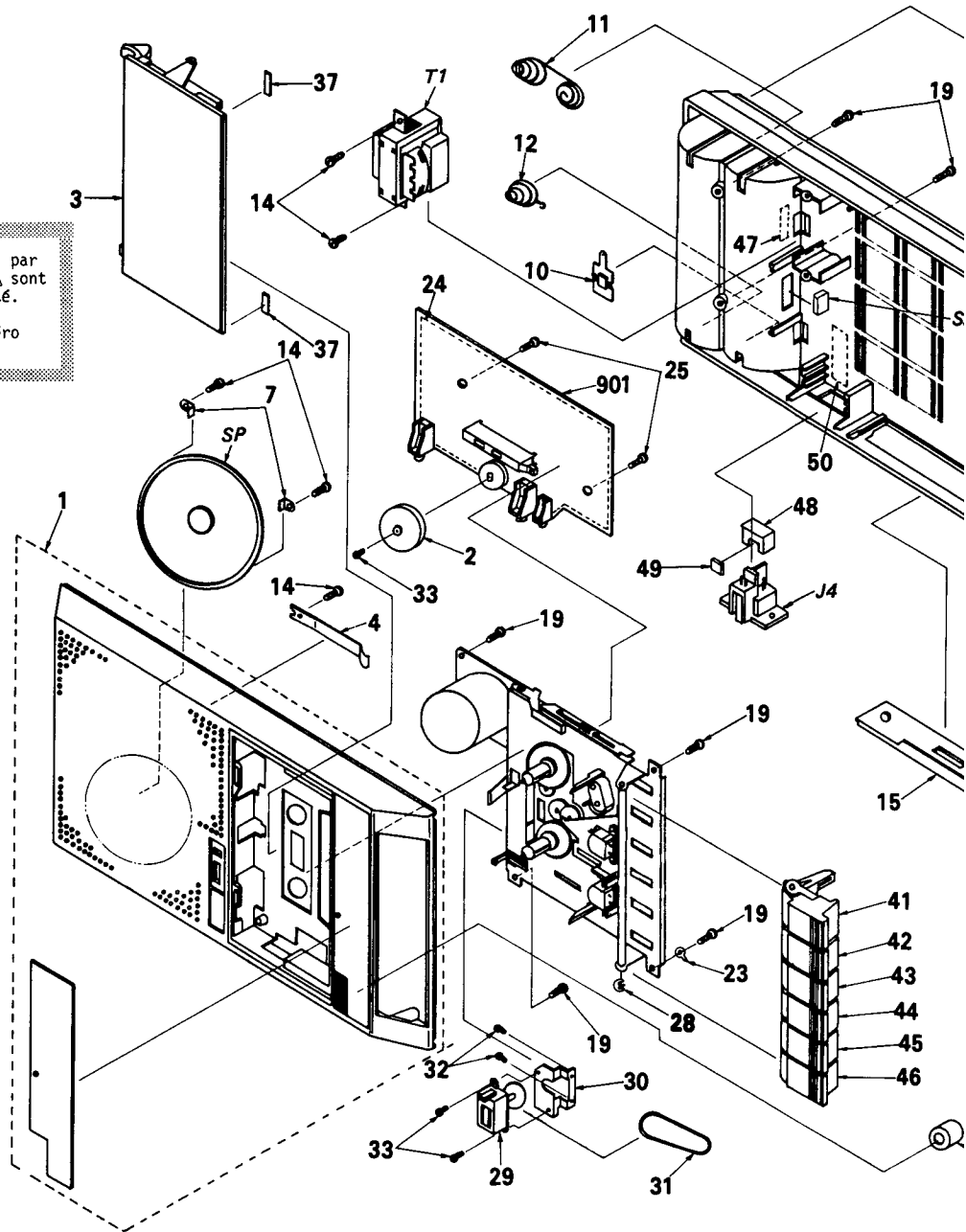
## SECTION 4 EXPLODED VIEWS AND PARTS LIST

**NOTE:**

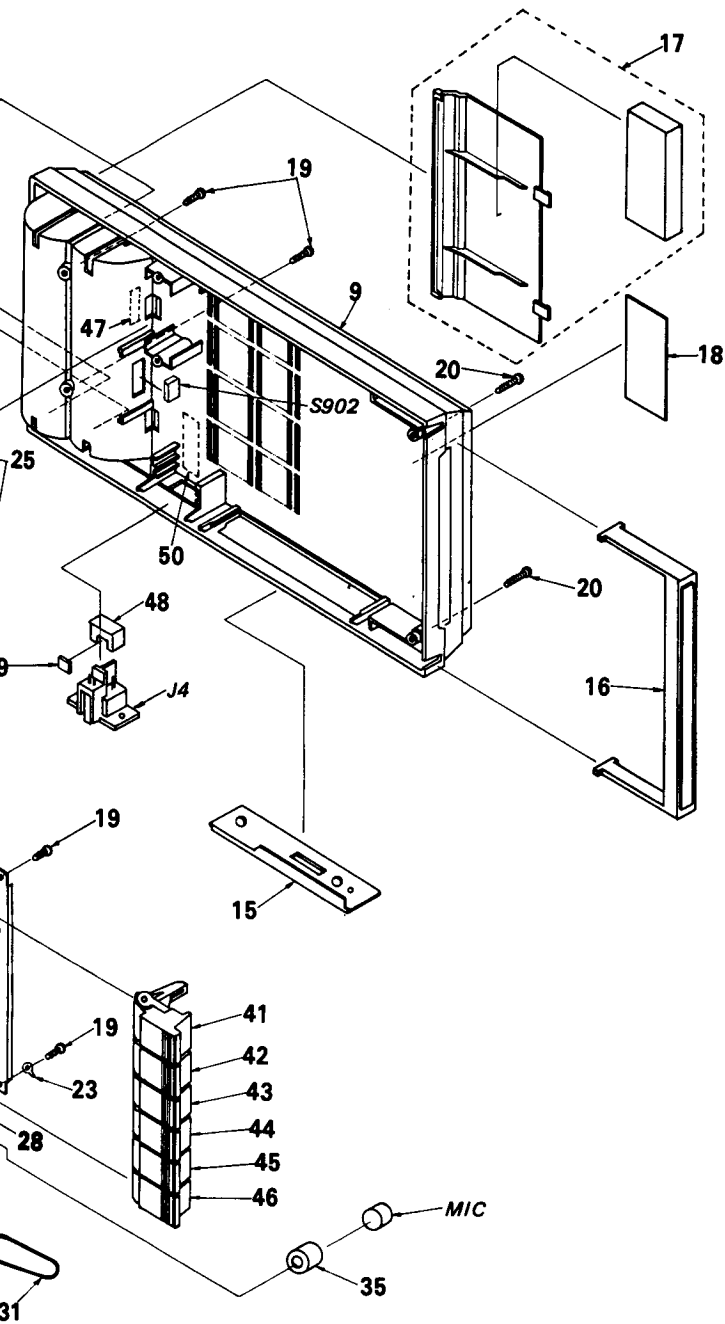
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

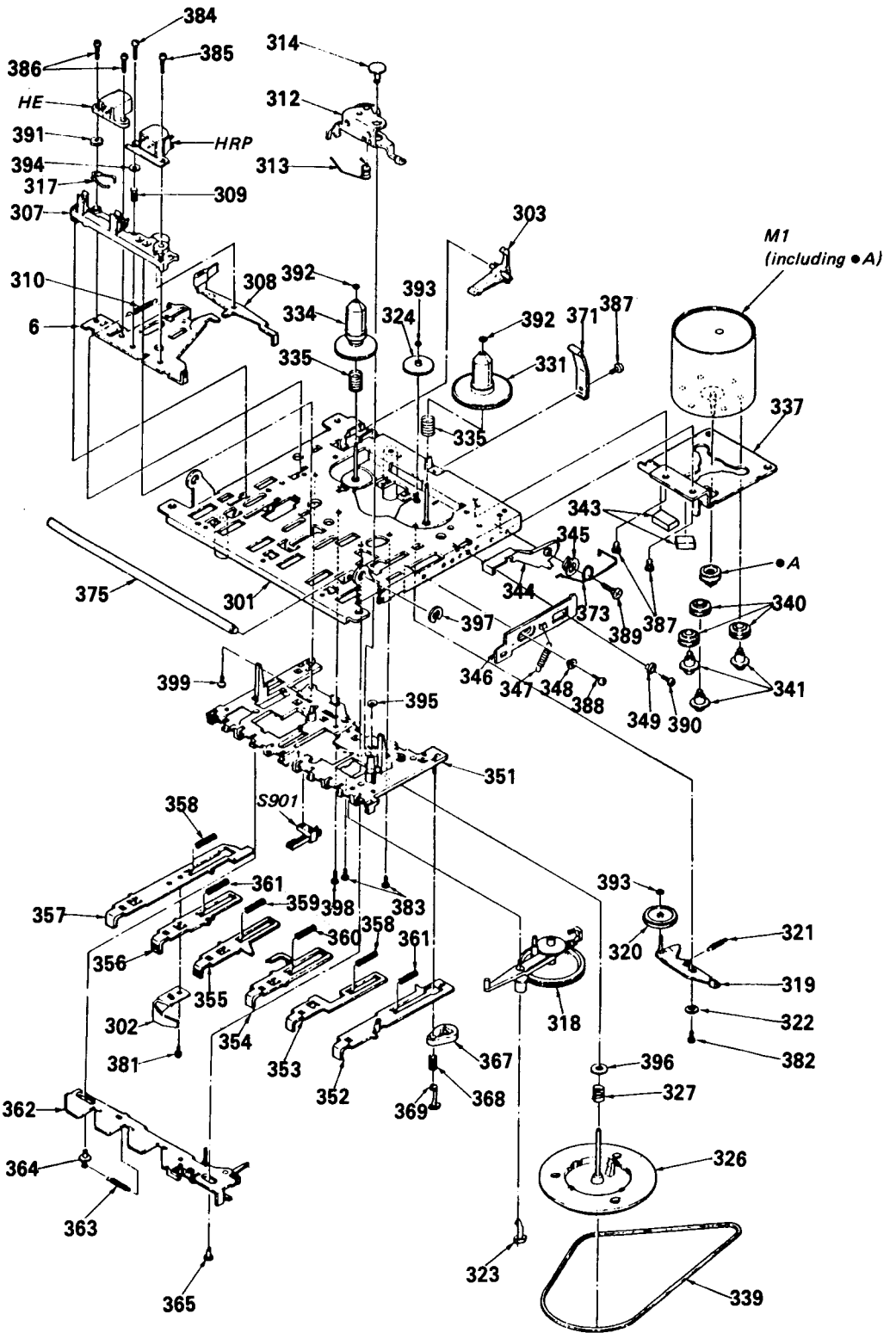


No.	Part No.	Description	Remarks	No.	Part No.	Description
1	X-3597-213-1	(TCM-828)...CABINET ASSY, FRONT		16	3-597-210-01	(TCM-828)...HANDLE
	X-3597-216-1	(TCM-838)...CABINET ASSY, FRONT		17	3-597-210-11	(TCM-838)...HANDLE
2	3-597-248-01	KNOB, VOLUME		18	X-3597-212-1	LID ASSY, BATTERY CASE
3	3-597-207-01	(TCM-828)...DOOR CASSETTE			3-597-223-01	(TCM-828:US).....LABEL,
	3-597-207-11	(TCM-838)...DOOR CASSETTE			3-597-223-51	(TCM-838:US).....LABEL,
4	3-597-214-01	SPRING DOOR			3-597-223-61	(TCM-838:Canadian)...LABEL,
7	*3-597-215-01	HOLDER SPEAKER			3-597-223-11	(TCM-828:Canadian)...LABEL,
9	3-597-217-01	CABI BOTTOM			3-597-223-21	(AEP)...LABEL, MODEL NUMBER
10	3-597-218-01	TERMINAL BATT			3-597-223-31	(UK)...LABEL, MODEL NUMBER
11	3-597-219-01	SPRING BATT A			3-597-223-41	(E).....LABEL, MODEL NUMBER
12	3-597-220-01	SPRING BATT B		19	7-682-548-09	SCREW +B 3X8
14	7-682-549-09	SCREW +B 3X10		20	*7-682-551-09	SCREW +B 3X14
15	3-597-209-01	(TCM-828)...BOARD JACK		23	7-623-508-01	LUG, 3
	3-597-209-11	(TCM-838)...BOARD JACK		24	*3-597-211-01	PLATE, SHIELD
				25	7-682-547-04	SCREW +P 3X6
				28	7-624-106-04	STOP RING 3.0, TYPE -E
				29	1-548-592-11	COUNTER, TAPE (SMALL TYPE)



No.	Part No.	Description	Remarks
901	*A-3060-027-A	(TCM-828).....PC BOARD ASSY, AUDIO	
	*A-3060-028-A	(TCM-838).....PC BOARD ASSY, AUDIO	
MIC	1-542-076-11	MICROPHONE, ELECTRET CONDENSER	
SP	1-503-558-11	SPEAKER	

Description	Remarks	No.	Part No.	Description	Remarks
01 (TCM-828)...HANDLE		30	*3-597-238-01	BRACKET COUNTER	
11 (TCM-838)...HANDLE		31	3-597-237-01	BELT COUNTER	
-1 LID ASSY, BATTERY CASE		32	7-621-775-20	SCREW +B 2.6X5	
01 (TCM-828:US).....LABEL, MODEL NUMBER		33	7-621-255-25	SCREW +P 2X4	
51 (TCM-838:US).....LABEL, MODEL NUMBER		35	3-597-216-01	BUSHING C-MIC	
61 (TCM-838:Canadian)...LABEL, MODEL NUMBER		37	3-831-441-11	HIMERON	
11 (TCM-828:Canadian)...LABEL, MODEL NUMBER		41	3-597-230-11	BUTTON, PAUSE	
21 (AEP)...LABEL, MODEL NUMBER		42	3-597-230-01	KNOB, DECK, STOP EJECT	
31 (UK)...LABEL, MODEL NUMBER		43	3-597-230-51	BUTTON, FF	
41 (E)...LABEL, MODEL NUMBER		44	3-597-230-41	BUTTON, REW	
09 SCREW +B 3X8		45	3-597-230-31	BUTTON, PLAY	
09 SCREW +B 3X14		46	3-597-230-21	BUTTON, REC	
01 LUG, 3		47	3-527-213-00	LABEL, SERIAL NUMBER	
01 PLATE, SHIELD		48	3-597-229-01	(UK)...BACK, COVER	
04 SCREW +P 3X6		49	3-597-602-01	(UK)...PLATE, AC JACK	
04 STOP RING 3.0, TYPE -E		50	3-703-043-21	(UK)...LABEL, CAUTION, MAIN	
11 COUNTER, TAPE (SMALL TYPE)					



## MECHANISM SECTION

No.	Part No.	Description	Remarks
301	X-3597-201-1	CHASSIS ASSY	
302	3-597-249-01	RECORD SPRING	
303	3-597-250-01	RECORD SAFETY LEVER	
306	*3-597-251-01	HEAD PANEL	
307	3-597-252-01	HEAD BASE	
308	*X-3597-202-1	SENSING PLATE ASSY	
309	3-597-253-01	HEAD SPRING	
310	3-597-254-01	HEAD PANEL SPRING B	
312	X-3597-203-1	PINCH ROLLER ASSY	
313	3-597-255-01	PINCH ROLLER SPRING	
314	3-597-256-01	PINCH ROLLER ARM STOPPER	
317	3-597-257-01	RC SPRING	
318	X-3597-204-1	RF PULLEY ARM ASSY	
319	*X-3597-205-1	TAKE-UP ROLLER ARM ASSY	
320	X-3597-206-1	TAKE-UP ROLLER ASSY	
321	3-597-258-01	T-ROLLER ARM SPRING	
322	3-597-259-01	T-ROLLER ARM COLLER	
323	3-597-260-01	RF PULLEY ARM STOPPER	
324	3-597-261-01	FF GEAR	
326	X-3597-207-1	FLYWHEEL ASSY	
327	3-597-262-01	FL THRUST SPRING	
331	X-3597-208-1	TAKE-UP REEL ASSY	
334	X-3597-209-1	SUPPLY REEL ASSY	
335	3-597-263-01	BACK TENSION SPRING	
337	*3-597-265-01	MOTOR BRACKET	
338	7-685-145-19	SCREW +BTP 3X6 TYPE2 N-S	
339	3-597-267-01	MAIN BELT	
340	3-597-268-01	MOTOR RUBBER	
341	3-597-269-01	SCREW, STEP	
343	9-911-837-XX	ANTI-VIBRATION FELT MAT	
344	3-597-271-01	EJECT KICK LEVER	
345	3-597-272-01	EJECT KICK LEVER COLLER	
346	*3-597-273-01	EJECT SIDE LEVER	
347	3-597-274-01	EJECT SLIDE LEVER SPRING	
348	3-597-275-01	EJECT COLLER	
349	3-597-276-01	EJECT COLLER	
350	3-597-277-01	PUSH BUTTON BASE (R)	
HE	1-543-276-11	HEAD, ERASE (E-721-AC)	
HRP	1-543-277-11	HEAD, REC/PB (RP-5121-AE-6210)	
MI	1-542-076-11	MICROPHONE, ELECTRET CONDENSER	

## MECHANISM SECTION

No.	Part No.	Description
351	3-597-278-01	PUSH BUTTON BASE (L)
352	*X-3597-210-1	PAUSE BUTTON LEVER ASSY
353	*3-597-279-01	STOP BUTTON LEVER
354	*3-597-280-01	FF BUTTON LEVER
355	*3-597-281-01	REW BUTTON LEVER
356	*3-597-282-01	PLAY BUTTON LEBER
357	3-597-283-01	REC BUTTON LEVER
358	3-597-284-01	BUTTON LEVER SPRING
359	3-597-285-01	BUTTON LEVER SPRING
360	3-597-286-01	BUTTON LEVER SPRING
361	*3-597-287-01	BUTTON LEVER SPRING
362	*X-3597-211-1	PUSH BUTTON ACTUATOR ASSY
363	3-597-288-01	SPRING
364	3-597-289-01	ACTUATOR SHAFT (B)
365	3-597-290-01	ACTUATOR SHAFT
367	*3-597-291-01	PAUSE LEVER
368	3-597-292-01	PAUSE LEVER SPRING
369	3-597-293-01	PAUSE LEVER STOPPER
371	3-597-294-01	PACK SPRING
373	3-597-295-01	EJECT KICK LEVER SPRING (H)
375	3-597-296-01	PUSH BUTTON LEVER SHAFT
376	3-597-297-01	BUTTON KNOB SPRING
381	7-627-553-38	SCREW, PRECISION +P 2X3
382	7-685-781-04	SCREW +BVTT 2X4 (S)
383	7-685-852-01	SCREW +BVTT 2X5 (S)
384	7-685-853-01	SCREW +BVTT 2X6 (S)
385	7-685-784-04	SCREW +BVTT 2X8 (S)
386	7-621-255-55	SCREW +P 2X8
387	7-685-531-19	SCREW +BTP 2.6X4 TYPE2 N-S
389	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S
390	7-685-132-19	SCREW +BTP 2.6X5 TYPE2 N-S
391	7-623-923-01	WASHER 2.6, NYLON
392	7-623-922-01	WASHER 2.0, NYLONE
393	3-570-615-00	POLY-WASHER (DIA.1.2)
394	7-623-922-11	WASHER 2.0, NYLONE
395	3-597-601-01	P WASHER CUT 1.55X5X0.6
396	3-307-948-11	WASHER, NYLON
397	7-624-106-04	STOP RING 3.0, TYPE -E
398	3-597-298-01	COLLER SCREW
399	3-597-299-01	COLLER SCREW Z

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:μμF.

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...

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
901	*A-3060-027-A	(TCM-828)...PC BOARD ASSY, AUDIO			
901	*A-3060-028-A	(TCM-838)...PC BOARD ASSY, AUDIO			
C101	1-123-380-00	ELECT	1MF	20%	50V
C102	1-106-180-00	MYLAR	0.0022MF	5%	50V
C103	1-123-382-00	ELECT	3.3MF	20%	50V
C104	1-123-307-00	ELECT	100MF	20%	10V
C105	1-123-382-00	ELECT	3.3MF	20%	50V
C106	1-102-074-00	CERAMIC	0.001MF	10%	50V
C107	1-123-330-00	ELECT	22MF	20%	16V
C108	1-108-809-61	MYLAR	0.027MF	5%	50V
C109	1-102-115-00	CERAMIC	560PF	10%	50V
C110	1-123-380-00	ELECT	1MF	20%	50V
C111	1-123-306-00	ELECT	47MF	20%	10V
C112	1-123-356-00	ELECT	10MF	20%	16V
C113	1-102-074-00	CERAMIC	0.001MF	10%	50V
C114	1-102-129-00	CERAMIC	0.01MF	10%	50V
C115	1-123-379-00	ELECT	0.47MF	20%	50V
C116	1-123-307-00	ELECT	100MF	20%	10V
C117	1-123-382-00	ELECT	3.3MF	20%	50V
C118	1-102-074-00	CERAMIC	0.001MF	10%	50V
C119	1-123-306-00	ELECT	47MF	20%	10V
C120	1-123-308-00	ELECT	220MF	20%	10V
C121	1-102-115-00	CERAMIC	560PF	10%	50V
C122	1-123-306-00	ELECT	47MF	20%	6.3V
C123	1-123-307-00	ELECT	100MF	20%	10V
C124	1-123-298-00	ELECT	470MF	20%	6.3V
C125	$\Delta$ 1-123-311-00	ELECT	1000MF	20%	10V
C126	1-123-607-00	ELECT	0.1MF	20%	50V
C128	1-102-129-00	CERAMIC	0.01MF	10%	50V
C129	1-102-074-00	CERAMIC	0.001MF	10%	50V
C130	1-102-106-00	CERAMIC	100PF	10%	50V
C131	1-102-106-00	CERAMIC	100PF	10%	50V
C132	1-102-106-00	CERAMIC	100PF	10%	50V
C133	1-102-106-00	CERAMIC	100PF	10%	50V
C134	1-102-106-00	CERAMIC	100PF	10%	50V
C135	1-161-052-00	(TCM-838)...CERAMIC	0.012MF	10%	25V
D101	$\Delta$ 8-719-200-02	DIODE 10E-2			
D102	$\Delta$ 8-719-200-02	DIODE 10E-2			
D103	$\Delta$ 8-719-200-02	DIODE 10E-2			
D104	$\Delta$ 8-719-200-02	DIODE 10E-2			
D105	8-719-815-55	DIODE 1S1555			
D106	8-719-815-55	DIODE 1S1555			
D107	8-719-802-06	(TCM-838)...DIODE TLR206			
HE	1-543-276-11	HEAD, ERASE (E-721-AC)			
HRP	1-543-277-11	HEAD, REC/PB (RP-5121-AE-6210)			

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
IC101	8-759-200-49	IC TA7628P			
J1	1-563-037-11	JACK (HSJ0707-01-020)(MIC)			
J2	1-563-037-11	JACK (HSJ0707-01-020)(EAR)			
J3	1-563-038-11	JACK (HSJ0465-01-020)(REMOTE)			
J4	$\Delta$ 1-526-844-11	(US,Canadian)...INLET, AC			
J4	$\Delta$ 1-526-845-11	(AEP,UK).....INLET, AC			
J4	$\Delta$ 1-526-846-11	(E).....INLET, AC			
M1	X-3597-214-1	MOTOR ASSY			
MIC	1-542-076-11	MICROPHONE, ELECTRET CONDENSER			
R101	1-246-451-00	CARBON	120	5%	1/4W
R102	1-247-151-00	CARBON	6.8K	5%	1/4W
R103	1-246-485-15	CARBON	3.3K	5%	1/4W
R104	1-246-455-00	CARBON	180	5%	1/4W
R105	1-246-515-15	CARBON	56K	5%	1/4W
R106	1-246-477-00	CARBON	1.5K	5%	1/4W
R107	1-247-721-11	CARBON	4.7K	5%	1/4W
R108	1-246-485-15	CARBON	3.3K	5%	1/4W
R109	1-246-507-00	CARBON	27K	5%	1/4W
R110	1-246-461-00	CARBON	330	5%	1/4W
R111	1-247-151-00	CARBON	6.8K	5%	1/4W
R112	1-246-533-00	CARBON	330K	5%	1/4W
R113	1-247-713-11	CARBON	1K	5%	1/4W
R114	1-246-457-00	CARBON	220	5%	1/4W
R115	1-246-543-00	CARBON	820K	5%	1/4W
R116	1-246-487-00	CARBON	3.9K	5%	1/4W
R117	1-247-725-11	CARBON	10K	5%	1/4W
R118	1-246-465-00	CARBON	470	5%	1/4W
R119	1-247-167-00	CARBON	33K	5%	1/4W
R120	1-247-127-00	CARBON	680	5%	1/4W
R121	1-247-153-00	(TCM-838)...CARBON	8.2K	5%	1/4W
R122	1-247-725-11	CARBON	10K	5%	1/4W
RV1	1-237-019-11	RES, VAR, CARBON 50K (VOLUME)			
RV2	1-237-079-11	(TCM-838)...RES, VAR, CARBON 50K (TONE)			
S101	1-570-428-11	SWITCH, SLIDE (PB/REC)			
S901	1-570-430-11	SWITCH, LEAF (POWER)			
S902	$\Delta$ 1-570-429-11	(E)...SWITCH, AC POWER CHANGE			
SP	1-503-558-11	SPEAKER			
T1	$\Delta$ 1-448-324-11	(E).....TRANSFORMER, POWER			
T1	$\Delta$ 1-448-325-11	(Canadian)...TRANSFORMER, POWER			
T1	$\Delta$ 1-448-326-11	(AEP).....TRANSFORMER, POWER			
T1	$\Delta$ 1-448-327-11	(UK).....TRANSFORMER, POWER			
T1	$\Delta$ 1-448-328-11	(US).....TRANSFORMER, POWER			

ACCESSORY & PACKING MATERIAL

<u>Part No.</u>	<u>Description</u>
1-506-409-00	(E)...ADAPTOR, CONVERSION
△ 1-558-237-11	(AEP,E).....CORD, POWER
△ 1-558-238-11	(UK).....CORD, POWER
△ 1-558-239-11	(US,Canadian)...CORD, POWER
3-597-241-01	CUSHION (RIGHT)
3-597-241-11	CUSHION (LEFT)
3-597-244-01	BAG (A), POLYETHYLENE, STANDARD
3-597-245-01	BAG (B), POLYETHYLENE, STANDARD
3-597-247-01	BAG (C), POLYETHYLENE, STANDARD
3-703-390-01	(US).....INSTRUCTION
3-703-710-01	STICKER, SONY SYMBOL (12)
3-760-635-11	(AEP).....MANUAL, INSTRUCTION
3-760-635-21	(US,Canadian)..MANUAL, INSTRUCTION
3-760-635-31	(Canadian).....MANUAL, INSTRUCTION
3-760-635-41	(UK).....MANUAL, INSTRUCTION
3-760-635-51	(E).....MANUAL, INSTRUCTION
3-831-441-11	CUSHION, SPEAKER GRILLE
3-597-204-01	(TCM-838:Canadian).....INDIVIDUAL CARTON
3-597-205-01	(TCM-828:Canadian,AEP,UK)..INDIVIDUAL CARTON
3-597-203-01	(TCM-838:US)...INDIVIDUAL CARTON
3-597-206-01	(TCM-828:US)...INDIVIDUAL CARTON
3-597-243-01	(E).....INDIVIDUAL CARTON