TPS-L2

US Model
Canadian Model
AEP Model
UK Model
E Model

REVISED

Discard TPS-L2 SERVICE MANUAL (No. 9-954-823-11) previously issued.

STEREO CASSETTE PLAYER

- **Model Identification**

former model

US:	Serial No. Up to 106000
Canadian:	Serial No. Up to 207500
AEP:	Serial No. Up to 108500
UK:	Serial No. Up to 117500
E:	Serial No. Up to 118500

new model

US:	Serial No. 106001 and later
Canadian:	Serial No. 207501 and later
AEP:	Serial No. 108501 and later
UK:	Serial No. 117501 and later
E:	Serial No. 118501 and later

SPECIFICATIONS

Tape Track:	4-track 2-channel stereo
Fast Winding Time:	Approx. 2 min. 30 sec. with Sony Cassette C-60
Frequency Response:	40 – 12,000 Hz
Power Output:	20 mW x 2 (max.) 15 mW x 2 (at 10 % harmonic distortion) with headphones having impedance of 35 Ω at dc operation
Outputs:	Two headphone jacks (stereo minijacks) rated output 0.04 V (–26 dB) at load impedance 8 Ω load impedance 8 Ω or higher, and 300 Ω or lower
Power Requirements:	3 V dc, two batteries, IEC designation R6 (size AA), or optional Sony BP-33 Rechargeable Battery Pack

– Continued on page 2 –

MICROFILM

SONY®

SERVICE MANUAL

country	ac power line voltage	optional ac power adaptor
U.S.A. and Canada	120 V ac, 60 Hz	AC-31 available in U.S.A. and Canada
the United Kingdom	220/240 V ac, 50 Hz	AC-35 available in the United Kingdom
European countries	220 V ac, 50 Hz	AC-35 available in European countries
other countries	120 V ac (110, 220 or 240 V ac, adjustable by Sony personnel), 50/60 Hz	AC-32 available in Japan
	110, 120, 220 or 240 V ac, adjustable, 50/60 Hz	AC-32 available in other countries

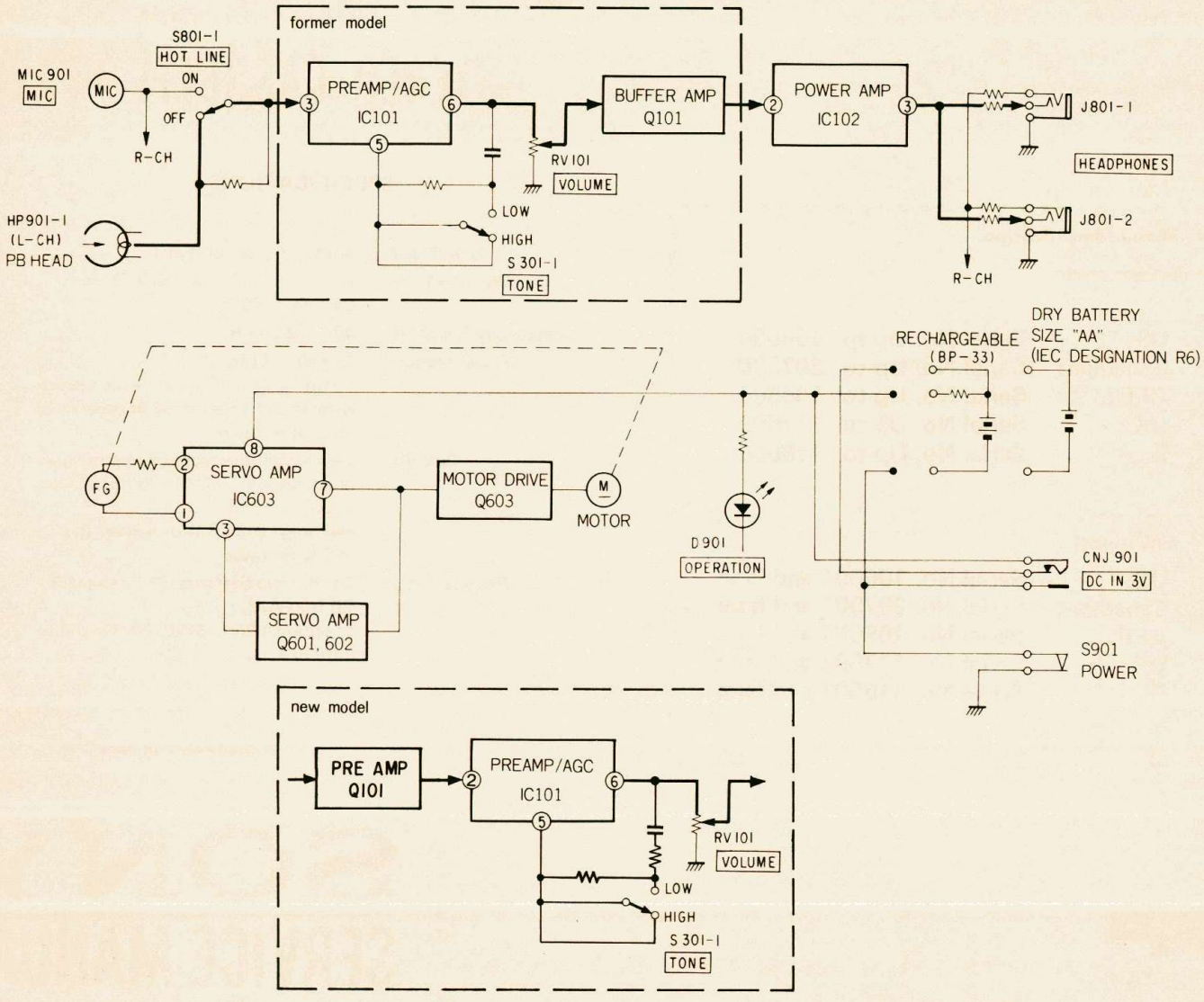
12 V car battery with optional Sony DCC-127A Car Battery Cord

Battery Life: Continuous playback hors:
Approx. 2.5 hours with Sony SUM-3 (S) Super Batteries
Approx. 3.5 hours with Eveready No. 1215 Heavy Duty Batteries
Approx. 8 hours with Eveready No. E91 Alkaline Batteries (Sony Eveready AM3 Alkaline Batteries).

Dimensions: Approx. 88 (w) x 133.5 (h) x 29 (d) mm ($3\frac{1}{2}$ (w) x $5\frac{5}{16}$ (h) x $1\frac{3}{16}$ inches) not including projecting parts and controls

Weight: Approx. 390 g ($13\frac{7}{8}$ oz) including batteries

SECTION 1
BLOCK DIAGRAM

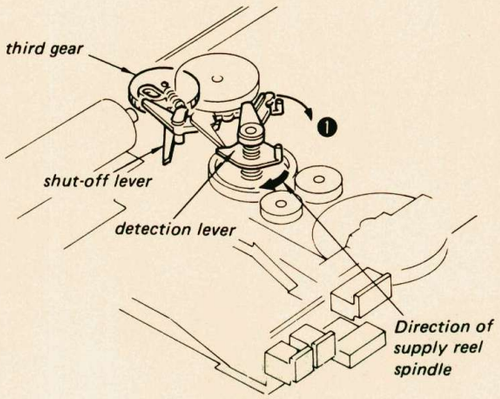


SECTION 2
OPERATION DESCRIPTION

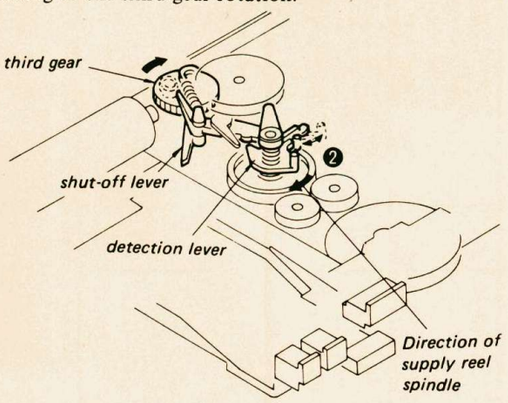
AUTOMATIC SHUT-OFF MECHANISM

- **During FWD (or RECORD) operation**

While the supply reel is rotating, the detection lever is always pulled in direction ❶



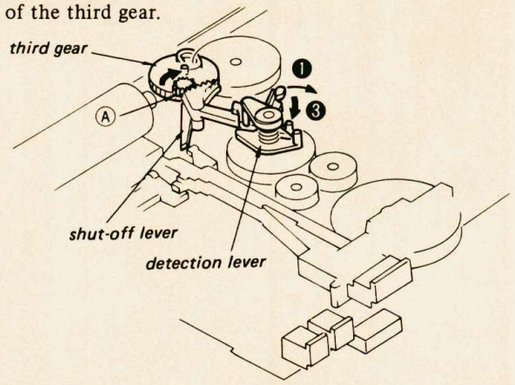
The shut-off lever is repeating the ❷ motion owing to the third gear rotation.



- **When the supply reel spindle stops: (end of the tape)**

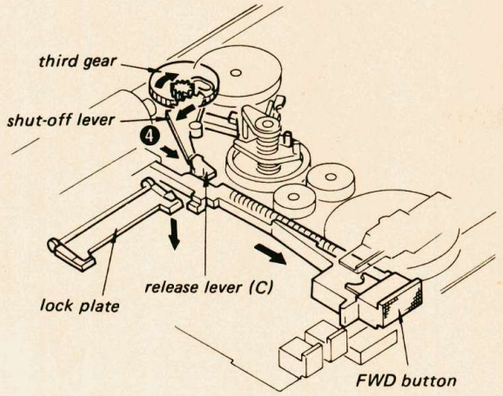
The detection lever is not pulled in direction ❶ but moves in direction ❸ owing to the third gear rotation.

The teeth of the shut-off lever mesh with the teeth of the third gear.

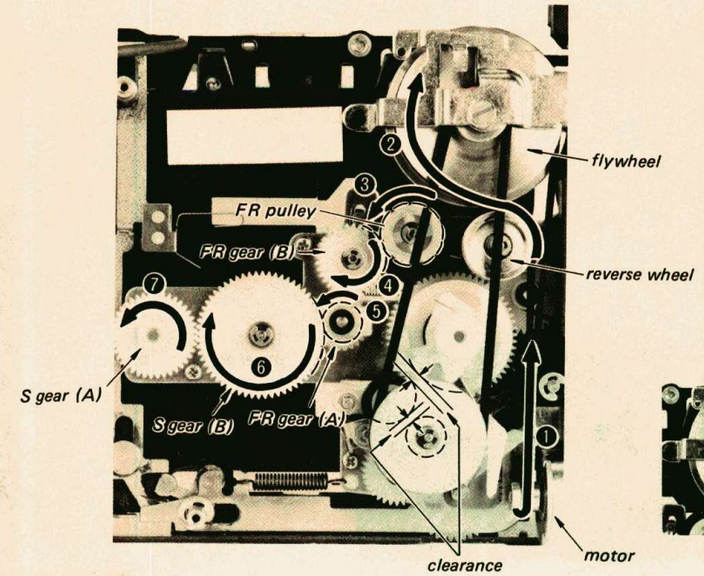


As the third gear turns further, the shut-off lever moves in direction ❹ , pushing the release lever (c) and releasing the FWD button.

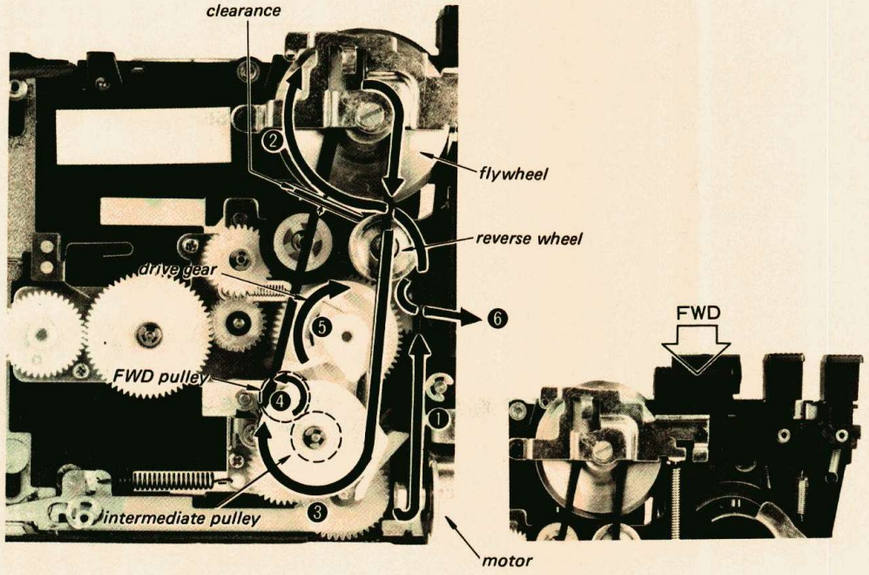
(RECORD button and FWD button are released in RECORD mode.)



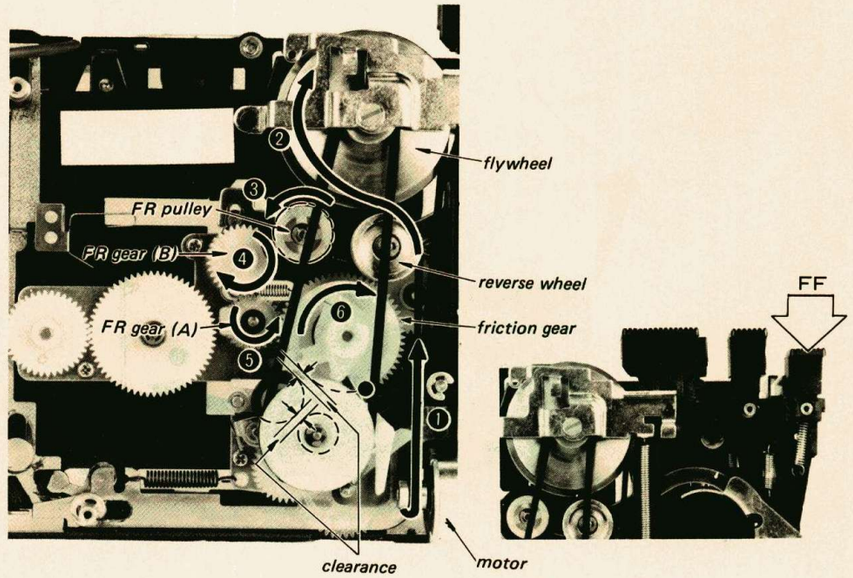
DIRECTION OF ROTATION



❶ Motor rotation → ❷ Flywheel rotation → ❸ FR pulley rotation → ❹ FR gear (B) rotation → ❺ FR gear (A) rotation → ❻ S gear (B) rotation → ❼ S gear (A) rotation followed by supply reel spindle rotation



❶ Motor rotation → ❷ Flywheel rotation → ❸ Intermediate pulley rotation → ❹ FWD pulley rotation → ❺ Drive gear rotation followed by take-up reel spindle rotation → ❻ Tape-counter rotation



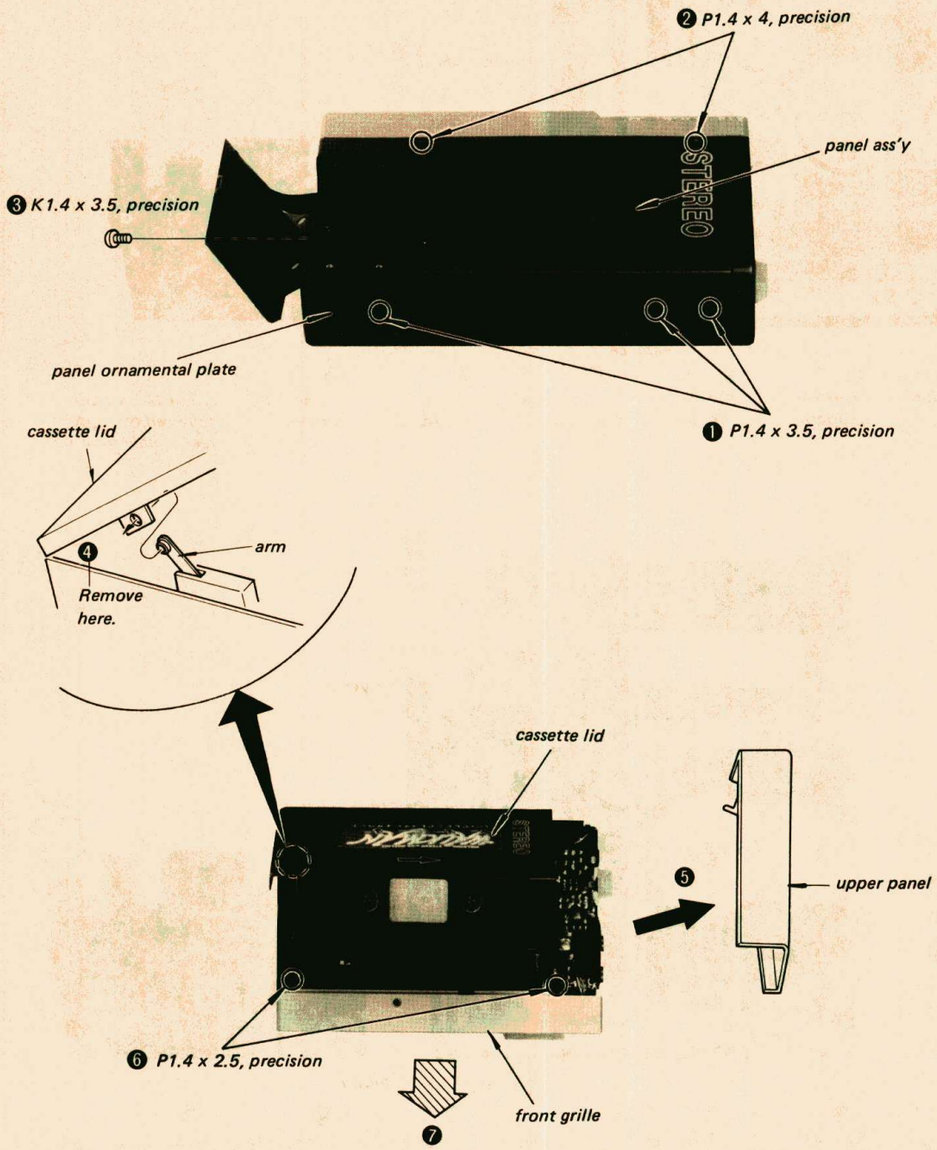
❶ Motor rotation → ❷ Flywheel rotation → ❸ FR pulley rotation → ❹ FR gear (B) rotation → ❺ FR gear (A) rotation → ❻ Friction gear rotation followed by take-up reel spindle rotation

SECTION 3
DISASSEMBLY

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

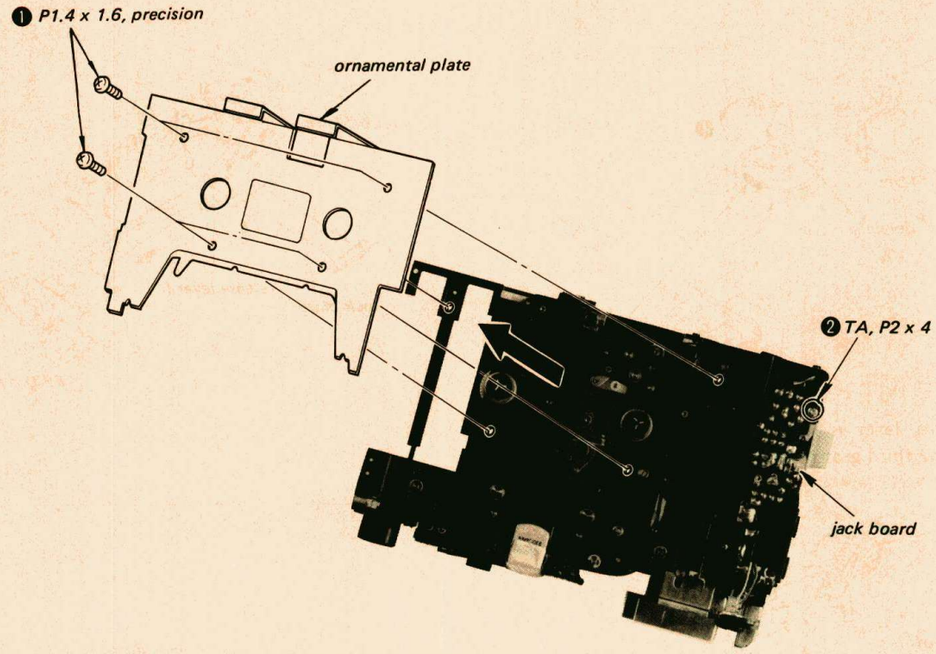
PANEL ORNAMENTAL PLATE/PANEL ASS'Y/UPPER PANEL/FRONT GRILLE ASS'Y

- Panel Ornamental Plate : ❶
- Panel Ass'y : ❷~❹
- Upper Panel : ❺
- Front Grille Ass'y : ❻, ❼



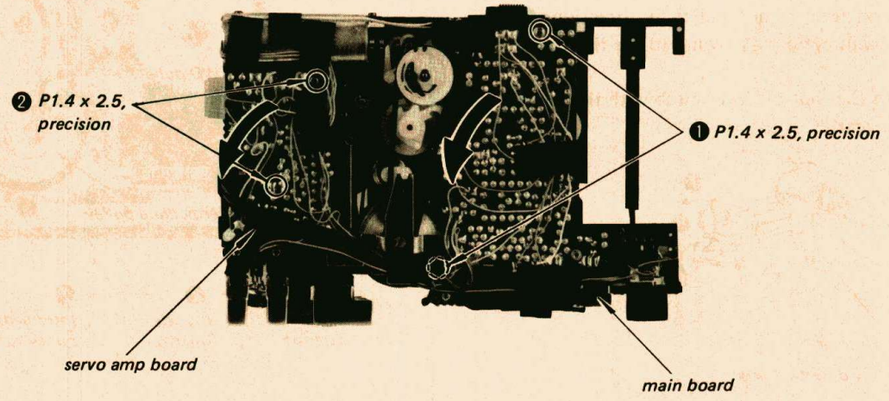
ORNAMENTAL PLATE/JACK BOARD

- Ornamental Plate : ❶
- Jack Board : ❷



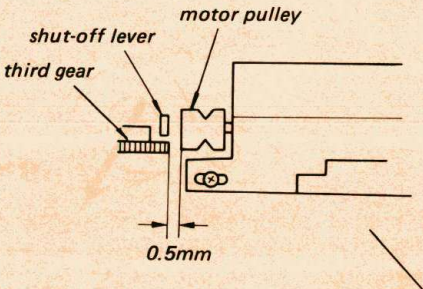
MAIN BOARD/SERVO AMP BOARD

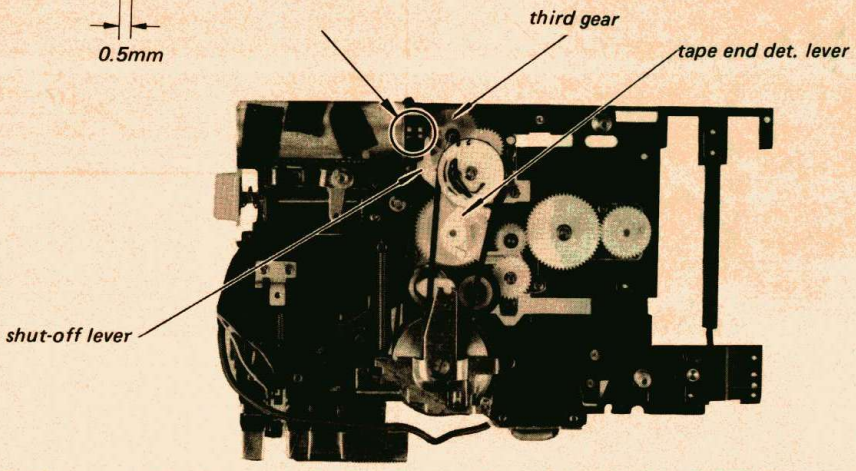
- Main Board : ❶
- Servo Amp Board : ❷



CAUTION WHEN INSTALLING MOTOR

Make sure part marked →|← is just 0.5mm long. Otherwise, auto-shut-off mechanism may operate before end of tape.





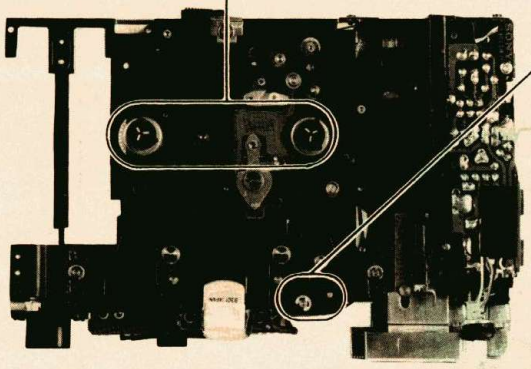
SECTION 4
ADJUSTMENTS

4-1. MECHANICAL ADJUSTMENTS

Torque Measurement

Power Supply Voltage: 2.5V dc

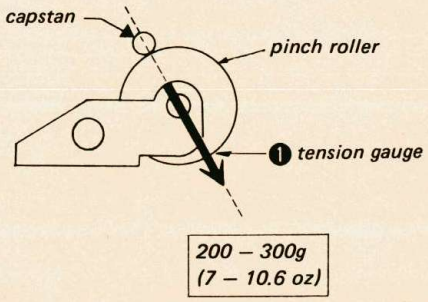
	SONY torque meter	Meter reading
FWD	CQ-102	22.5 – 45g·cm
FF, REW CUE, REV	CQ-201	55g·cm or more
Back tension	CQ-102	2 – 3.5g·cm



Pinch Roller Pressure Measurement

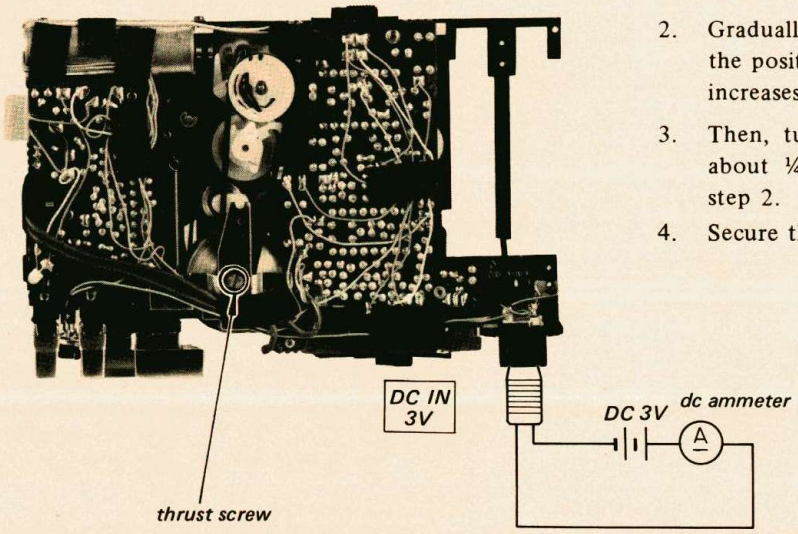
Mode: playback

❷ Slowly return the pinch roller and read the tension gauge just when the pinch roller starts rotating.



Flywheel Thrust Play Adjustment

– Playback Mode –



1. Turn the thrust screw counterclockwise until the screw tip leaves from the flywheel shaft.
2. Gradually turn the thrust screw clockwise to the position where the motor current suddenly increases.
3. Then, turn the thrust screw counterclockwise about ¼ turn from the position obtained in step 2.
4. Secure the thrust screw with locking compound.

4-2. ELECTRICAL ADJUSTMENTS

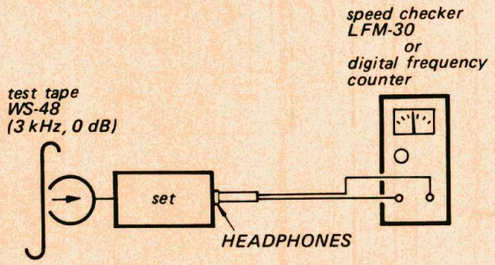
Tape Speed Adjustment

Setting:

VOLUME control: mechanical mid

Procedure:

Mode: playback

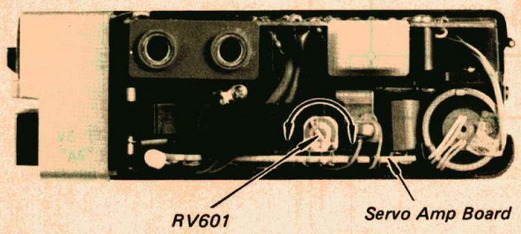


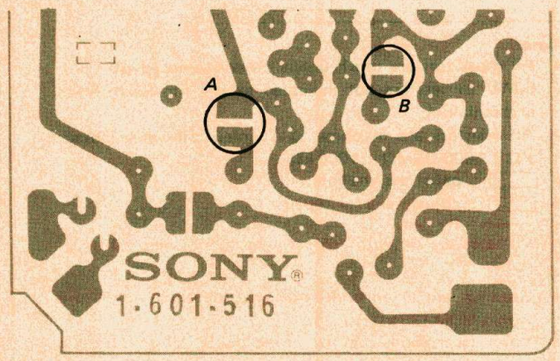
Specification:

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

1) Connect the patterns marked "A" before this adjustment.
2) When adjustment is impossible by turning RV601, connect the patterns marked "B".

Adjustment Location:



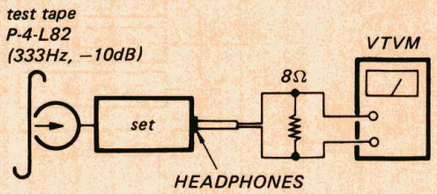


Playback Level Adjustment

Setting:

VOLUME: maximum

Procedure:



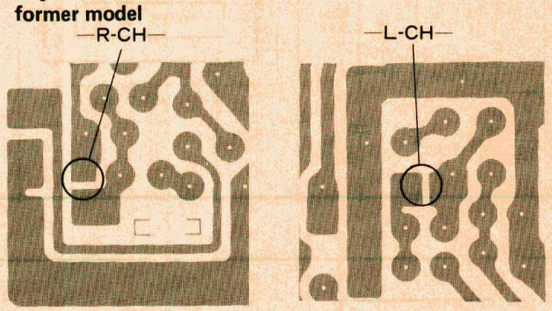
Specification:

Level difference between channels:
less than 3dB

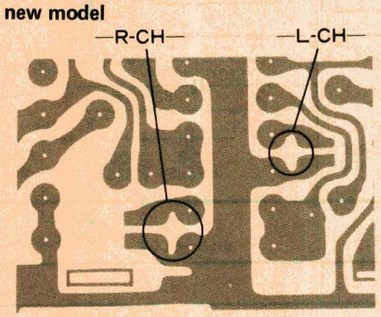
1) In case the specification is not met, connect the patterns of channel indicating higher level.
2) Check that the HEADPHONES levels do not change in playback mode while changing the mode from playback to stop several times.

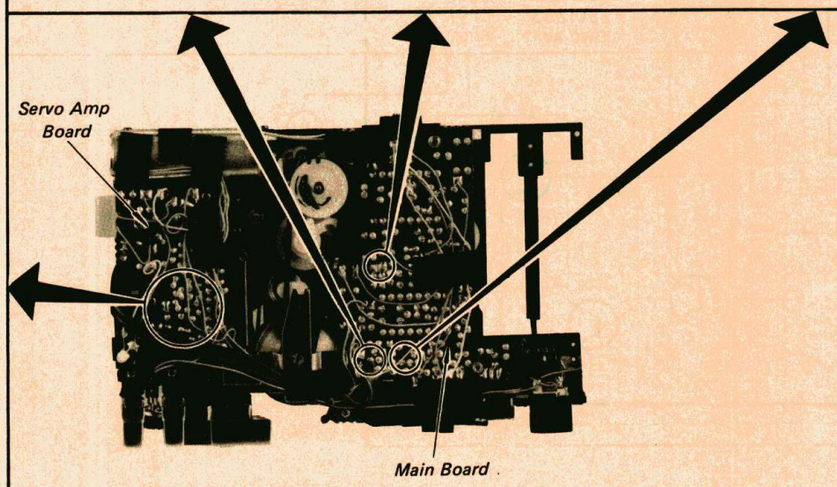
Adjustment Location:

former model



new model





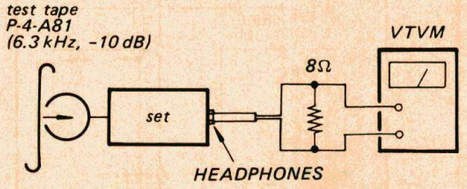
Playback Head Azimuth Adjustment

Setting:

VOLUME control: mechanical mid

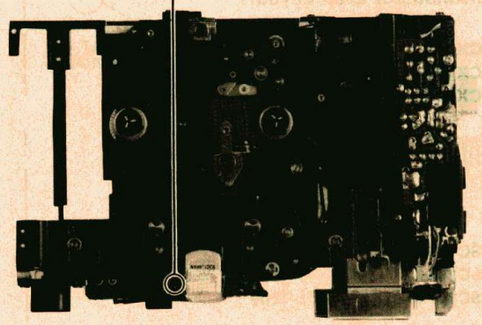
Procedure:

1. Mode: playback

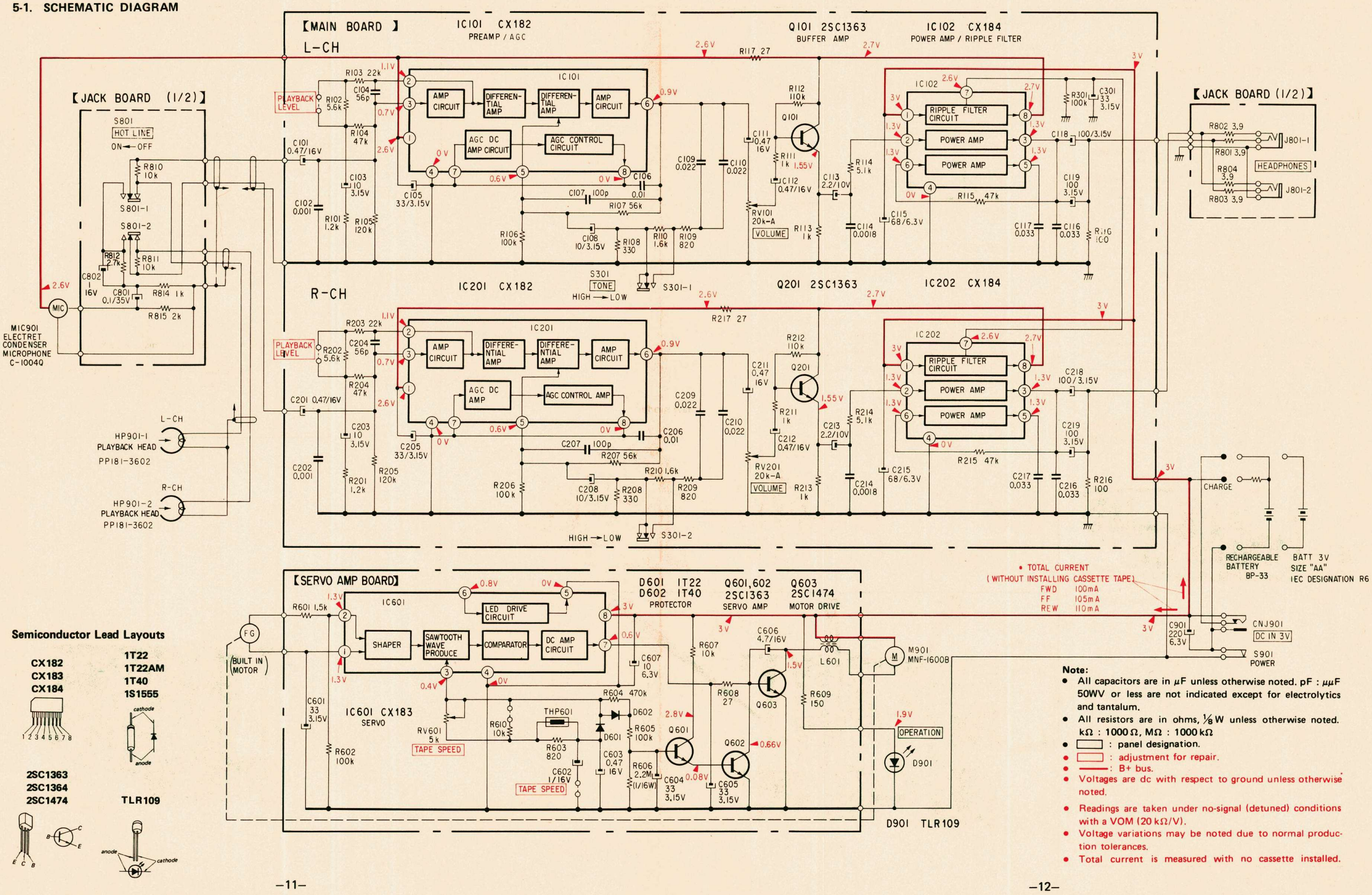


2. Turn the adjustment screw for maximum VTVM reading.

Note:
- Several peaks may appear, but take the maximum.
- Finish turning the adjustment screw clockwise direction.



5-1. SCHEMATIC DIAGRAM



Semiconductor Lead Layouts

CX182
CX183
CX184

1T22
1T22AM
1T40
1S1555

2SC1363
2SC1364
2SC1474

TLR109

Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalum.
- All resistors are in ohms, 1/8 W unless otherwise noted. kΩ : 1000 Ω, MΩ : 1000 kΩ
- ▭ : panel designation.
- ▭ : adjustment for repair.
- ——: B+ bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal (detuned) conditions with a VOM (20 kΩ/V).
- Voltage variations may be noted due to normal production tolerances.
- Total current is measured with no cassette installed.

5-2. MOUNTING DIAGRAM
– Conductor Side –

US: Serial No. Up to 106000 UK: Serial No. Up to 117500
Canadian: Serial No. Up to 207500 E: Serial No. Up to 118500
AEP: Serial No. Up to 108500

TPS-L2 **TPS-L2**

US: Serial No. Up to 106000 UK: Serial No. Up to 117500
Canadian: Serial No. Up to 207500 E: Serial No. Up to 118500
AEP: Serial No. Up to 108500

TPS-L2

A B C D E F G H I

1 2 3 4 5

D	Q, IC
901	
	603
602	601
601	602
	IC601
	IC201 IC101 IC102 IC202
	201 101
D	Q, IC

D901 OPERATION

【SERVO AMP BOARD】

SONY 1-601-516

TAPE SPEED

L601 ②③ : INPUT ①④ : OUTPUT

M901 MOTOR MNF-1600B

HP901 PLAYBACK HEAD PP181-3602

PLAYBACK INPUT

【JACK BOARD】

SONY 1 601 518

MIC 901 MIC ELECTRET CONDENSER MICROPHONE C-1004Q

PLAYBACK OUTPUT

J801-1 J801-2 J801 HEADPHONES

IC601 CX183

GROUND LED DRIVE CIRCUIT B+ SHAPER SAW TOOTH WAVE PRODUCE COMPARATOR DC AMP CIRCUIT

【AF AMP BOARD】

IC101, 201 CX182

B+ AMP CIRCUIT GROUND DIFFERENTIAL AMP DIFFERENTIAL AMP AMP CIRCUIT AGC DC AMP AGC CONTROL AMP

RV101 20k-A VOLUME L

RV201 20k-A VOLUME R

SONY 1-601-515

DIP IN

【MAIN BOARD】

PLAYBACK LEVEL (R)

IC102,202 CX184

B+ RIPPLE FILTER CIRCUIT POWER AMP GROUND POWER AMP B+

• TOTAL CURRENT (WITHOUT INSTALLING CASSETTE TAPE)
FWD 100mA
FF 105mA
REW 110mA

CNJ 901 DC IN 3V (RED,RED,RED) (BRN) (BLK,BLK)

S901 POWER OFF (FWD FF REW) ON

【BATTERY SECTION】
• BATT 3V SIZE "AA", IEC DESIGNATION R6
• RECHARGEABLE BATTERY

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

WHT RED (RED)(GRY)

• : B + pattern
• : signal path
• : L-CH signal path
• : R-CH signal path

TPS-L2 TPS-L2

US: Serial No. 106001 and later
Canadian: Serial No. 207501 and later
AEP: Serial No. 108501 and later
UK: Serial No. 117501 and later
E: Serial No. 118501 and later

D	Q, IC
901	
	603
602	601
601	602
	IC601
	IC201 IC202 201
	IC102 IC101 101
D	Q, IC

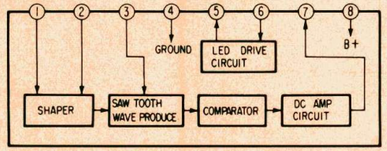
【SERVO AMP BOARD】

【JACK BOARD】

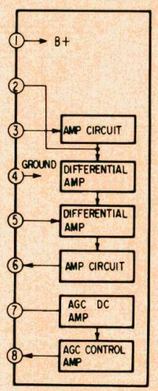
【AF AMP BOARD】

【MAIN BOARD】

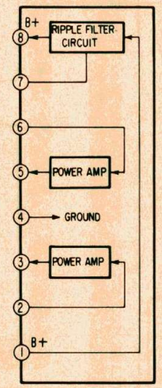
IC601 CX183



IC101, 201 CX182



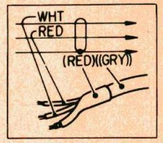
IC102, 202 CX184



- TOTAL CURRENT (WITHOUT INSTALLING CASSETTE TAPE)
  - FWD 100mA
  - FF 105mA
  - REW 110mA

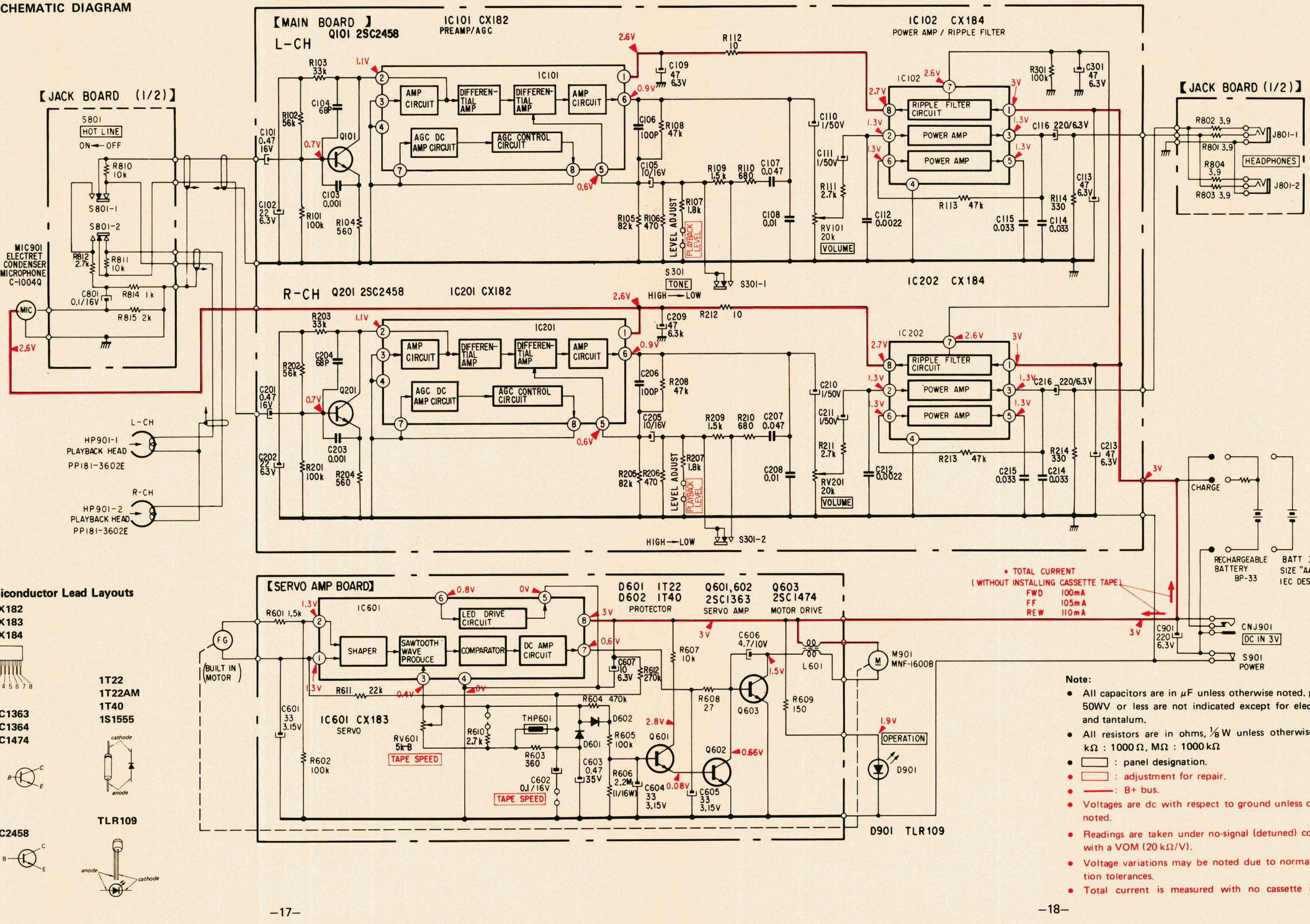
【BATTERY SECTION】
- BATT 3V SIZE "AA", IEC DESIGNATION R6
- RECHARGEABLE BATTERY

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



- : B + pattern
- : signal path
- : L-CH signal path
- : R-CH signal path

5-4. SCHEMATIC DIAGRAM

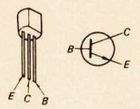


Semiconductor Lead Layouts

CX182
CX183
CX184

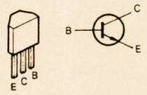
1T22
1T22AM
1T40
1S1555

2SC1363
2SC1364
2SC1474



TLR109

2SC2458



Note:

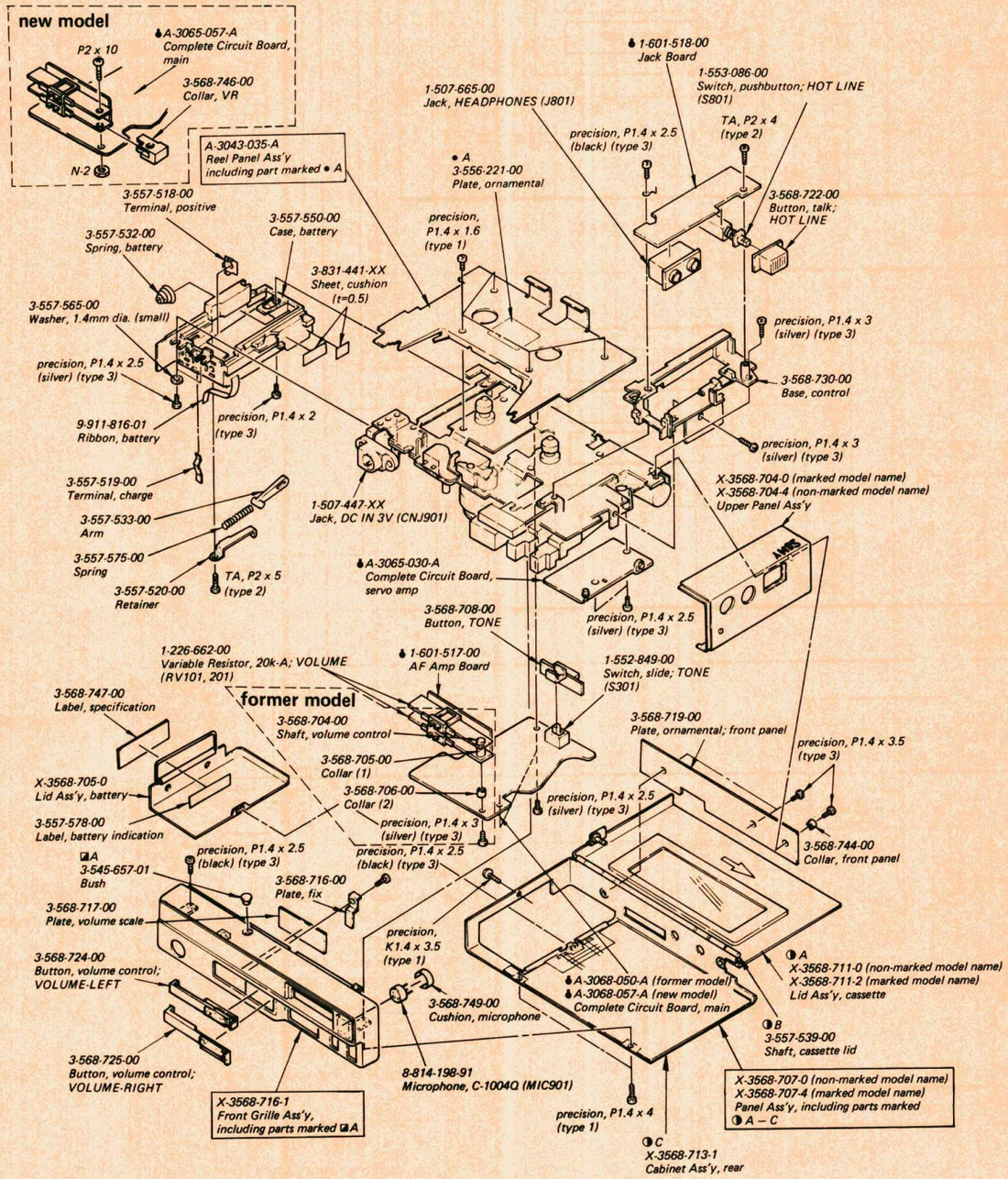
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalum.
- All resistors are in ohms, 1/8 W unless otherwise noted. kΩ : 1000 Ω, MΩ : 1000 kΩ
- ▭ : panel designation.
- ▭ : adjustment for repair.
- ——: B+ bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal (detuned) conditions with a VOM (20 kΩ/V).
- Voltage variations may be noted due to normal production tolerances.
- Total current is measured with no cassette installed.

SECTION 6
EXPLODED VIEWS

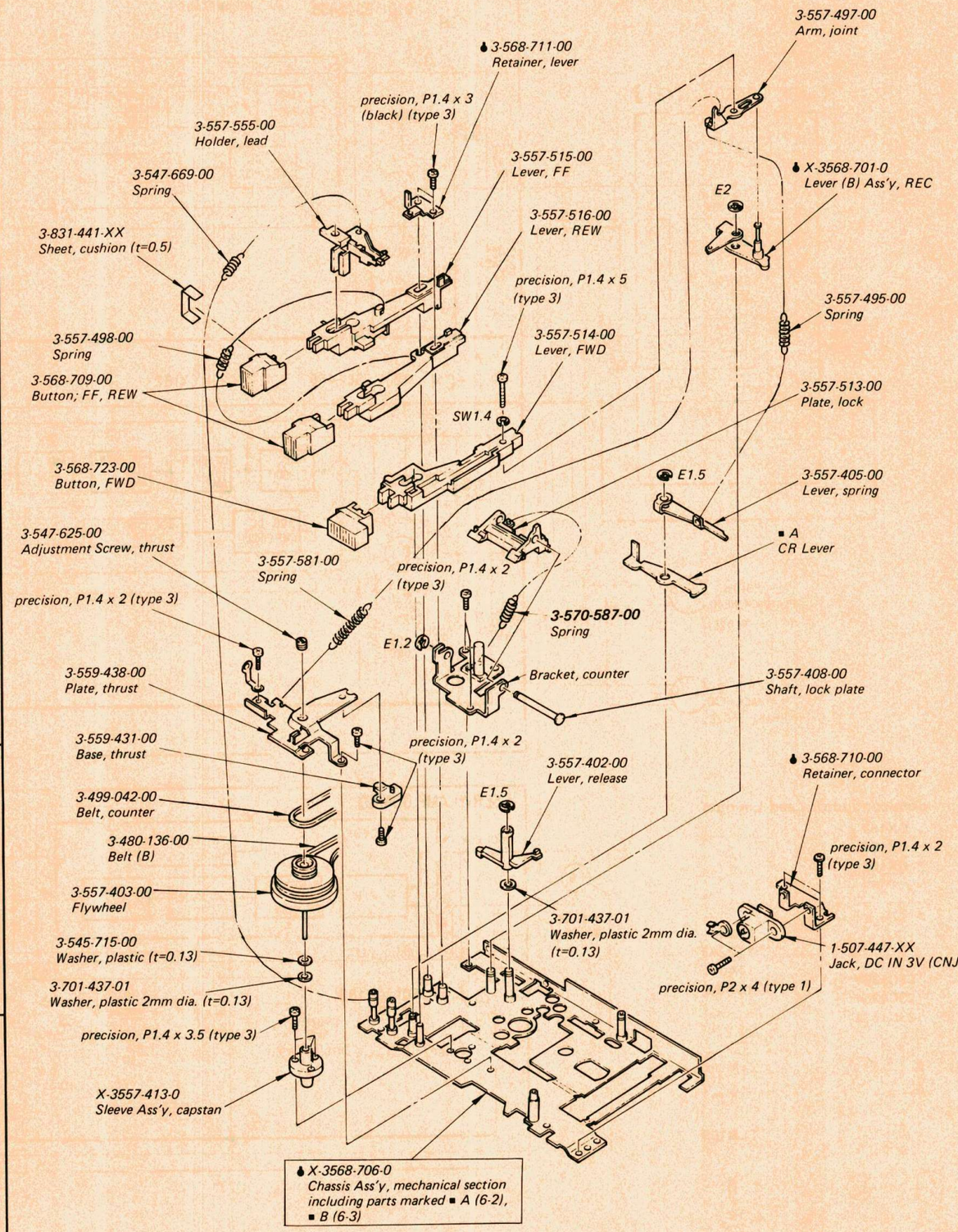
6-1.

Note:
- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head

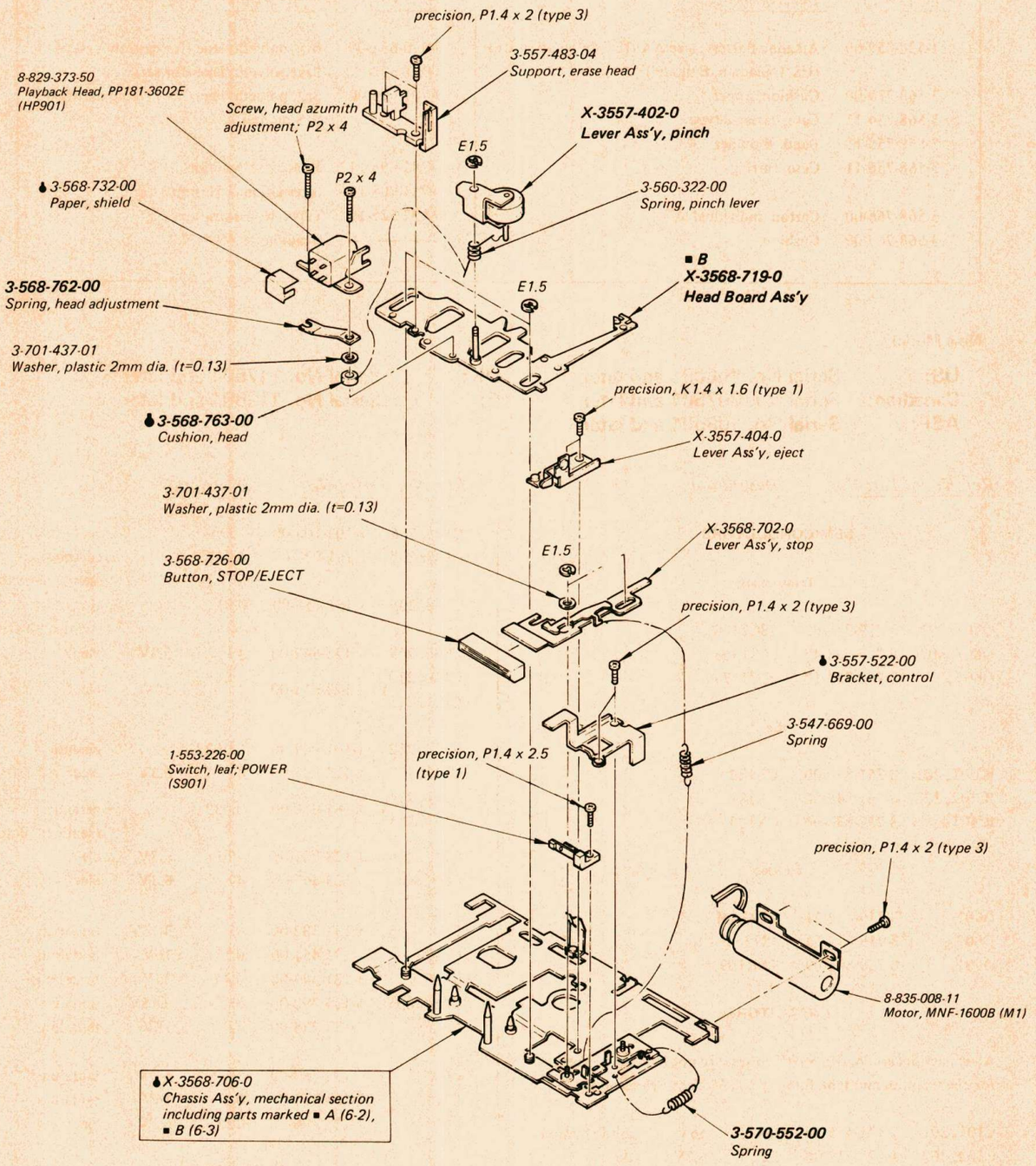
- Refer to page 26 for dimensions and part No. of precision screws.



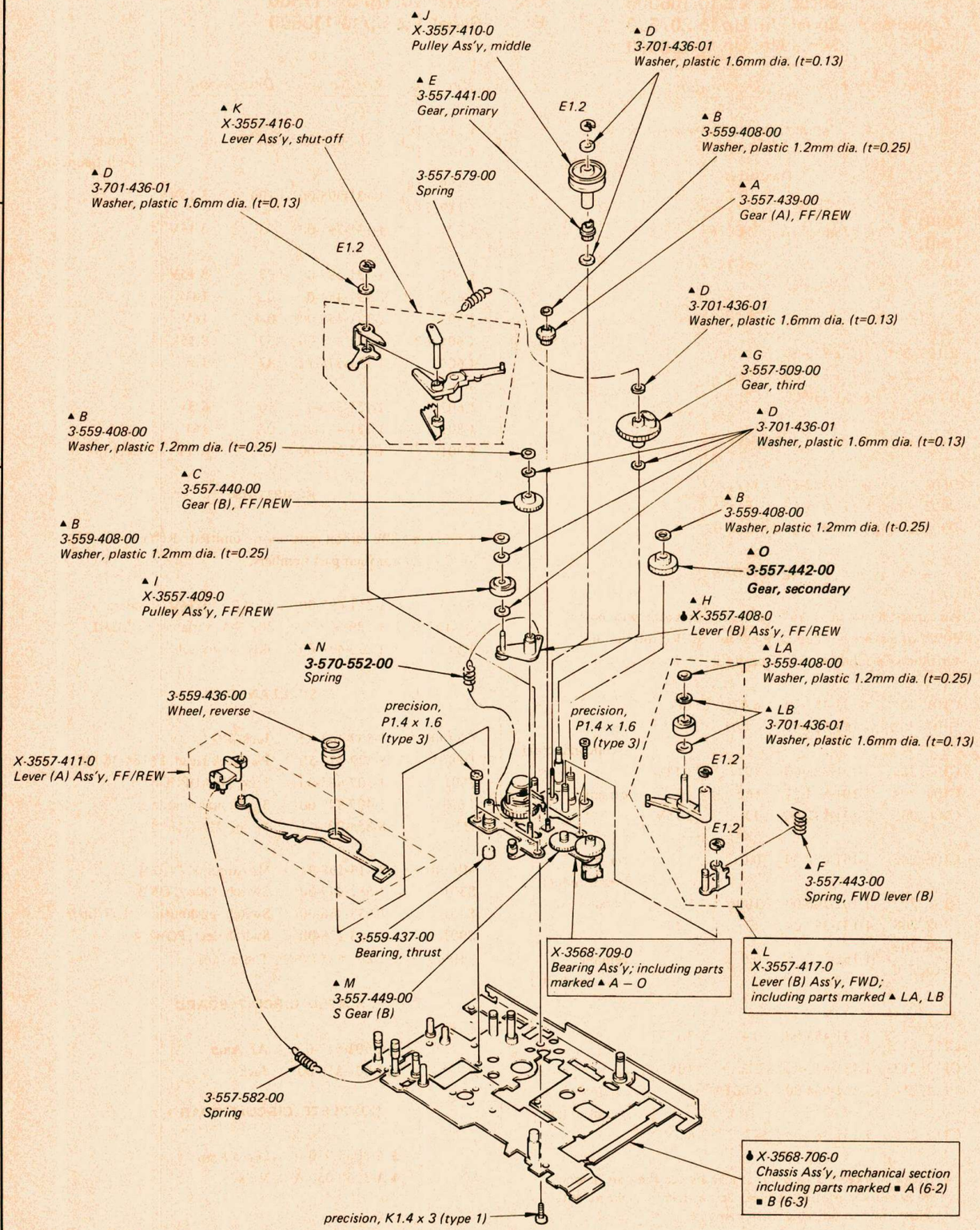
6-2.



6-3.



6-4.



SECTION 7
ELECTRICAL PARTS LIST

Former Model

US : Serial No. Up to 106000
Canadian : Serial No. Up to 207500
AEP : Serial No. Up to 108500
UK : Serial No. Up to 117500
E : Serial No. Up to 118500

Ref. No.	*Part No.*	*Description*		
		SEMICONDUCTORS		
		Transistors		
Q101, 201 Q601, 602)	8-729-663-47	2SC1364		
Q603	8-760-335-10	2SC1474		
		ICs		
IC101, 201	8-751-820-00	CX182		
IC102, 202	8-751-840-00	CX184		
IC601	8-751-830-02	CX183		
		Diodes		
D601	8-719-422-21	1T22AM		
D602	8-719-815-55	1S1555		
D901	8-719-801-09	TLR109		
		CAPACITORS		
		All capacitors are in μF and tantalum unless otherwise noted. 50WV or less are not indicated except for electrolytics or tantalums. p : μμF, elect : electrolytic		
C101, 201	1-131-455-00	0.47	16V	
C102, 202	1-161-026-00	0.001		ceramic (semiconductor)
C103, 203	1-131-389-00	10	3.15V	
C104, 204	1-101-884-21	56p		ceramic
C105, 205	1-131-392-00	33	3.15V	
C106, 206	1-161-032-00	0.01		ceramic (semiconductor)
C107, 207	1-102-106-00	100p	50V	ceramic
C108, 208	1-131-389-00	10	3.15V	
C109, 209 C110, 210)	1-161-017-11	0.022		ceramic (semiconductor)
C111, 211 C112, 212)	1-131-455-00	0.47	3.15V	
C113, 213	1-131-419-00	2.2	10V	
C114, 214	1-161-004-00	0.0018		ceramic (semiconductor)
C115, 215	1-131-387-00	47	6.3V	

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

Ref. No.	*Part No.*	*Description*		
C116, 216 C117, 217)	1-161-035-00	0.033		ceramic (semiconductor)
C118, 218 C119, 219)	1-131-395-00	100	3.15V	
C301	1-131-392-00	33	3.15V	
C601	1-131-392-00	33	3.15V	
C602	1-131-451-00	0.1	16V	
C603	1-131-455-00	0.47	16V	
C604, 605	1-131-392-00	33	3.15V	
C606	1-131-375-11	47	10V	
C607	1-131-383-00	10	6.3V	
C801	1-131-451-00	0.1	16V	
C901	1-123-296-00	220	6.3V	elect
		RESISTORS		
		Common 1/8W carbon resistors are omitted. Refer to the list on 25 page for their part numbers.		
R606	1-211-697-00	2.2MΩ	1/16W	micro
RV101, 201	1-226-662-00	20kΩ-A, variable; VOLUME		
RV601	1-226-488-00	5kΩ, adjustable		
		MISCELLANEOUS		
CNJ901	1-507-447-XX	Jack, DC IN 3V		
HP901	8-829-373-50	**Playback Head, PP181-3602E**		
J801	1-507-665-00	Jack, HEADPHONES		
L601	1-407-847-00	35μH, microinductor		
M1	8-835-008-11	Motor, MNF-1600B		
MIC901	8-814-198-91	Microphone, C-1004Q		
S301	1-552-849-00	Switch, slide; TONE		
S801	1-553-086-00	Switch, pushbutton; HOT LINE		
S901	1-553-226-00	Switch, leaf; POWER		
THP601	1-800-535-00	Thermistor		
		PRINTED CIRCUIT BOARD		
♦	1-601-517-00	AF Amp		
♦	1-601-518-00	Jack		
		COMPLETE CIRCUIT BOARD		
♦	A-3065-030-A	Servo Amp		
♦	A-3068-050-A	Main		

ACCESSORIES AND PACKING MATERIALS

Part No.	*Description*	*Part No.*	*Description*
1-528-052-00	Alkaline Battery, size AA (IEC designation R6) (US, Canadian, E model)	3-570-631-00	Bag, polyethylene (for cassette-case)
3-568-739-00	Cushion, upper	3-701-622-00	Bag, polyethylene (for set)
3-568-754-11	Case, cassette-type	3-701-625-00	Bag, polyethylene (for printed matters) (US model)
3-568-755-11	Band, shoulder		
3-568-756-11	Case, carring	3-783-008-14	Manual, instruction
		3-794-906-11	International Warranty Card
3-568-766-00	Carton, individual	8-893-525-10	Tape, demonstration
3-568-767-00	Cushion	————	Headphone, MDR3L2

New Model

US: Serial No. 106001 and later
Canadian: Serial No. 207501 and later
AEP: Serial No. 108501 and later
UK: Serial No. 117501 and later
E: Serial No. 118501 and later

Ref. No.	*Part No.*	*Description*		
		SEMICONDUCTORS		
		Transistors		
Q101, 201	8-729-245-83	2SC2458		
Q601, 602	8-729-663-47	2SC1364		
Q603	8-760-335-10	2SC1474		
		ICs		
IC101, 201	8-751-820-00	CX182		
IC102, 202	8-751-840-00	CX184		
IC601	8-751-830-00	CX183		
		Diodes		
D601	8-719-422-21	1T22AM		
D602	8-719-815-55	1S1555		
D901	8-719-801-09	TLR109		
		CAPACITORS		
		All capacitors are in μF. 50WV or less are not indicated except for electrolytics and tantalums. p : μμF, elect : electrolytic		
C101, 201	1-131-455-00	0.47	16V	solid aluminum
C102, 202	1-123-618-00	22	6.3V	elect
C103, 203	1-101-001-00	0.001		ceramic
C104, 204	1-101-888-00	68p		ceramic
C105, 205	1-123-617-00	10	16V	elect
C106, 206	1-102-106-00	100p		ceramic
C107, 207	1-161-021-00	0.047		ceramic (semiconductor)
C108, 208	1-161-013-00	0.01		ceramic (semiconductor)
C109, 209	1-123-647-00	47	6.3V	elect
C110, 210 C111, 211)	1-123-611-00	1	50V	elect
C112, 212	1-101-002-00	0.0022		ceramic
C113, 213	1-123-647-00	47	6.3V	elect
C114, 214 C115, 215)	1-161-019-00	0.033		ceramic (semiconductor)
C116, 216	1-123-296-00	220	6.3V	elect
C301	1-123-647-00	47	6.3V	elect
C601	1-131-392-00	33	3.15V	tantalum
C602	1-131-451-00	0.1	16V	tantalum
C603	1-131-345-00	0.47	35V	tantalum
C604, 605	1-131-392-00	33	3.15V	tantalum
C606	1-131-375-00	4.7	10V	tantalum
C607	1-131-383-00	10	6.3V	tantalum
C801	1-131-451-00	0.1	16V	tantalum
C901	1-123-296-00	220	6.3V	elect
		RESISTORS		
		Common 1/8W carbon resistors are omitted. Refer to the list on 25 page for their part numbers.		

Ref. No.	Part No.	Description
R606	1-211-697-00	2.2MΩ 1/16W micro
RV101,201	1-226-662-00	20kΩ-A, variable; VOLUME
RV601	1-226-488-00	5kΩ-B, adjustable

MISCELLANEOUS

CNJ901	1-507-447-XX	Jack, DC IN 3V
HP901	8-829-373-50	Playback Head, PP181-3602E
J801	1-507-665-00	Jack, HEADPHONES
L601	1-407-847-00	35μH, microinductor
M1	8-835-008-11	Motor, MNF-1600B

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

Ref. No.	Part No.	Description
MIC901	8-814-198-91	Microphone, C-1004Q
S301	1-552-849-00	Switch, slide; TONE
S801	1-553-086-00	Switch, pushbutton; HOT LINE
S901	1-553-226-00	Switch, leaf; POWER
THP601	1-800-535-00	Thermistor

PRINTED CIRCUIT BOARDS

♦1-601-517-00	AF Amp
♦1-601-518-00	Jack

COMPLETE CIRCUIT BOARDS

♦A-3065-030-A	Servo Amp
♦A-3068-057-A	Main

ACCESSORIES AND PACKING MATERIALS

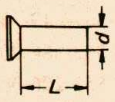
Part No.	Description
1-528-052-00	Alkaline Battery, size AA (IEC designation R6) (US, Canadian, E model)
3-568-739-00	Cushion, upper
3-568-754-11	Case, cassette-type
3-568-755-11	Band, shoulder
3-568-756-11	Case, carring
3-568-766-00	Carton, individual
3-568-767-00	Cushion
3-570-631-00	Bag, polyethylene (for cassette-case)
3-701-622-00	Bag, polyethylene (for set)
3-701-625-00	Bag, polyethylene (for printed matters) (US model)
3-783-008-14	Manual, instruction
3-794-906-11	International Warranty Card
8-893-525-10	Tape, demonstration
————	Headphone, MDR3L2

1/8 WATT CARBON RESISTOR

Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
2.0	—	13	1-246-821-00	91	1-246-831-00	620	1-246-841-00	4.3k	1-246-851-00	30k	1-246-861-00	200k	1-246-871-00
2.2	1-246-751-00	15	1-246-761-00	100	1-246-771-00	680	1-246-781-00	4.7k	1-246-791-00	33k	1-246-801-00	220k	1-246-811-00
2.4	—	16	1-246-822-00	110	1-246-832-00	750	1-246-842-00	5.1k	1-246-852-00	36k	1-246-862-00	240k	1-247-054-00
2.7	1-246-752-00	18	1-246-762-00	120	1-246-772-00	820	1-246-782-00	5.6k	1-246-792-00	39k	1-246-802-00	270k	1-247-046-00
3.0	—	20	1-246-823-00	130	1-246-833-33	910	1-246-843-00	6.2k	1-246-853-00	43k	1-246-863-00	300k	1-247-055-00
3.3	1-246-753-00	22	1-246-763-00	150	1-246-773-00	1.0k	1-246-783-00	6.8k	1-246-793-00	47k	1-246-803-00	330k	1-247-047-00
3.6	—	24	1-246-824-00	160	1-246-834-00	1.1k	1-246-844-00	7.5k	1-246-854-00	51k	1-246-864-00	360k	1-247-056-00
3.9	1-246-754-00	27	1-246-764-00	180	1-246-774-00	1.2k	1-246-784-00	8.2k	1-246-794-00	56k	1-246-804-00	390k	1-247-048-00
4.3	—	30	1-246-825-00	200	1-246-835-00	1.3k	1-246-845-00	9.1k	1-246-855-00	62k	1-246-865-00	430k	1-247-057-00
4.7	1-246-755-00	33	1-246-765-00	220	1-246-775-00	1.5k	1-246-785-00	10k	1-246-795-00	68k	1-246-805-00	470k	1-247-049-00
5.1	—	36	1-246-826-00	240	1-246-836-00	1.6k	1-246-846-00	11k	1-246-856-00	75k	1-246-866-00	510k	1-247-058-00
5.6	1-246-756-00	39	1-246-766-00	270	1-246-776-00	1.8k	1-246-786-00	12k	1-246-796-00	82k	1-246-806-00	560k	1-247-050-00
6.2	—	43	1-246-827-00	300	1-246-837-00	2.0k	1-246-847-00	13k	1-246-857-00	91k	1-246-867-00	620k	1-247-059-00
6.8	1-246-757-00	47	1-246-767-00	330	1-246-777-00	2.2k	1-246-787-00	15k	1-246-797-00	100k	1-246-807-00	680k	1-247-051-00
7.5	1-246-818-00	51	1-246-828-00	360	1-246-838-00	2.4k	1-246-848-00	16k	1-246-858-00	110k	1-246-868-00	750k	1-247-060-00
8.2	1-246-758-00	56	1-246-768-00	390	1-246-778-00	2.7k	1-246-788-00	18k	1-246-798-00	120k	1-246-808-00	820k	1-247-052-00
9.1	1-246-819-00	62	1-246-829-00	430	1-246-839-00	3.0k	1-246-849-00	20k	1-246-859-00	130k	1-246-869-00	910k	1-247-061-00
10	1-246-759-00	68	1-246-769-00	470	1-246-779-00	3.3k	1-246-789-00	22k	1-246-799-00	150k	1-246-809-00	1 M	1-247-053-00
11	1-246-820-00	75	1-246-830-00	510	1-246-840-00	3.6k	1-246-850-00	24k	1-246-860-00	160k	1-246-870-00		
12	1-246-760-00	82	1-246-770-00	560	1-246-780-00	3.9k	1-246-790-00	27k	1-246-800-00	180k	1-246-810-00		

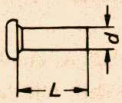
DIMENSIONS AND PART NO. OF PRECISION SCREWS

⊕ *K*
(Flat-countersunk-head screw)



Type	Size (mm) (d × L)	Part No.	
		Black	Silver
Type 1	K1.4 × 1.6 K1.4 × 1.8 K1.4 × 2 K1.4 × 2.2 K1.4 × 2.5 K1.4 × 2.8 K1.4 × 3 K1.4 × 3.5 K1.4 × 4 K1.4 × 4.5 K1.4 × 5	7-627-451-08 7-627-451-38 7-627-451-18 7-627-451-28 7-627-451-78	7-627-451-07 7-627-451-37 7-627-451-17 7-627-451-27 7-627-451-47 7-627-451-77
	K1.7 × 1.8 K1.7 × 2 K1.7 × 2.2 K1.7 × 2.5 K1.7 × 2.8 K1.7 × 3 K1.7 × 3.5 K1.7 × 4 K1.7 × 4.5 K1.7 × 5 K1.7 × 5.5 K1.7 × 6	 7-627-450-78 	
	K2 × 2 K2 × 2.2 K2 × 2.5 K2 × 2.8 K2 × 3 K2 × 3.5 K2 × 4 K2 × 4.5 K2 × 5 K2 × 5.5 K2 × 6 K2 × 7 K2 × 8	7-627-452-08 7-627-452-18 7-627-452-28 7-627-452-38	7-627-452-07 7-627-452-17

⊕ *P*
(Pan-head screw)



Type	Size (mm) (d × L)	Part No.	
		Black	Silver
Type 1	P1.4 × 1.4 P1.4 × 1.6 P1.4 × 1.8 P1.4 × 2 P1.4 × 2.2 P1.4 × 2.5 P1.4 × 2.8 P1.4 × 3 P1.4 × 3.5 P1.4 × 4 P1.4 × 4.5 P1.4 × 5	 7-627-551-08 7-627-551-18 7-627-551-28 7-627-551-88 7-627-551-58 7-627-551-68 7-627-551-78 7-627-551-38	7-627-551-47 7-627-551-07 7-627-551-17 7-627-551-27 7-627-551-57 7-627-551-67 7-627-551-77 7-627-551-37
	P1.7 × 1.6 P1.7 × 1.8 P1.7 × 2 P1.7 × 2.2 P1.7 × 2.5 P1.7 × 2.8 P1.7 × 3 P1.7 × 3.5 P1.7 × 4 P1.7 × 4.5 P1.7 × 5 P1.7 × 5.5 P1.7 × 6	7-627-552-18 7-627-552-28 7-627-552-08 7-627-552-38 7-627-552-78 7-627-552-48 7-627-552-58	 7-627-552-27 7-627-552-07 7-627-552-37 7-627-552-47 7-627-552-67 7-627-552-57
	P2 × 1.8 P2 × 2 P2 × 2.2 P2 × 2.5 P2 × 2.8 P2 × 3 P2 × 3.5 P2 × 4 P2 × 4.5 P2 × 5 P2 × 5.5 P2 × 6 P2 × 7 P2 × 8 P2 × 10	 7-627-553-18 7-627-553-28 7-627-553-38 7-627-553-48 7-627-553-58 7-627-553-88 7-627-553-98 7-627-553-78	 7-627-553-17 7-627-554-07 7-627-553-27 7-627-553-37 7-627-554-17 7-627-553-47 7-627-553-57 7-627-553-67 7-627-553-87 7-627-553-97 7-627-553-77
Type 3	P1.4 × 1.4 P1.4 × 1.6 P1.4 × 1.8 P1.4 × 2 P1.4 × 2.2 P1.4 × 2.5 P1.4 × 2.8 P1.4 × 3 P1.4 × 3.5 P1.4 × 4 P1.4 × 4.5 P1.4 × 5	 7-627-850-08 7-627-850-18 7-627-850-28 7-627-850-58 7-627-850-68 	7-627-850-37 7-627-850-47 7-627-850-77 7-627-850-07 7-627-850-17 7-627-850-27 7-627-850-57 7-627-850-67 7-627-851-17 7-627-851-27

Sony Corporation

9-954-823-12

80K04132-1
Printed in Japan

SONY

Service Bulletin

Date	Ref. N°	Model
06 FEB 81	TC-00181	TPS-L2

Subject: Information on the speaker panel assembly
Information sur le panneau du haut-parleur
Information über den Lautsprecherdeckel

English :

The speaker panel ass'y has been separated into three parts as follows.

Français :

Le panneau du haut-parleur a été séparé en trois pièces individuelles :

Deutsch :

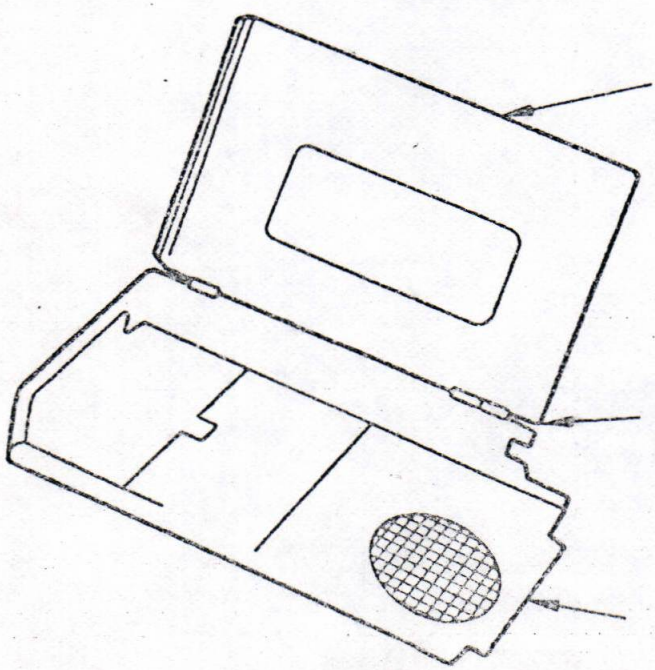
Der Lautsprecherdeckel ist in drei separat lieferbare Teile getrennt worden :

Former/Ancien/Alt	New/Nouveau/Neu	Price/Prix/Preis
X-3568-707-0 Cassette panel ass'y Panneau du haut-parleur Lautsprecherdeckel	X-3568-711-1 Cassette lid ass'y, top Couvercle du compartiment de cassette Cassettenfachdeckel	(K)
	3-557-539-00 Cassette lid shaft Charnière du couvercle Scharnier des Deckels	(B)
	X-3568-713-1 Cassette lid ass'y, bottom Couvercle du haut-parleur Lautsprecherdeckel	(F)

Only the new parts will be supplied as repair parts.

Seules les nouvelles pièces seront délivrées comme pièces de rechange.

Nur die neuen Teile werden als Ersatzteile geliefert.



X-3568-711-1
Cassette lid ass'y, top
Couvercle du compartiment de cassette
Cassettenfachdeckel

3-557-539-00
Cassette lid shaft
Charnière du couvercle
Scharnier des Deckels

X-3568-713-1
Cassette lid ass'y, bottom
Couvercle du haut-parleur
Lautsprecherdeckel

Date	Ref. N°	Model
17 Apr 81	TC-01981	TPS-L2

Subject: Remedy against static noise
Remède contre le souffle statique
Abhilfe für statisches Rauschen

English:

Applicable to serial No.:

US	106001~	UK	117501~
Canadian	207501~	E	118501~
AEP	108501~		

Symptom

Static noise is heard in the R-CH output.

Remedy

1) Replace the middle pulley ass'y, the FWD idler ass'y and the belt (B) with new ones.
2) When static noise is still heard in spite of remedy 1, attach a shield to the inside of the bottom cassette lid ass'y, covering IC202 and the middle pulley ass'y.

Français:

Nos. de série concernés:

Symptôme

Un souffle statique dans le canal droit.

Remède

1) Remplacez la poulie intermédiaire, la poulie FWD et la courroie (B).

2) Si le remède mentionné sous 1 n'est pas effectif, il y a lieu d'équiper l'intérieur du couvercle postérieur d'une feuille isolante afin de protéger l'IC202 et la poulie intermédiaire.

Deutsch:

Betr. Seriennummern:

Symptom

Statisches Rauschen im rechten Kanal.

Abhilfe

1) Zwischenrolle, FWD-Rolle und Riemen (B) austauschen.

2) Die Möglichkeit besteht, daß die unter 1 angegebene Abhilfe nicht effektiv ist. In diesem Fall die Innenseite des Hinterdeckels zur Abdeckung von IC202 und der Zwischenrolle mit einer Isolierfolie ausstatten.

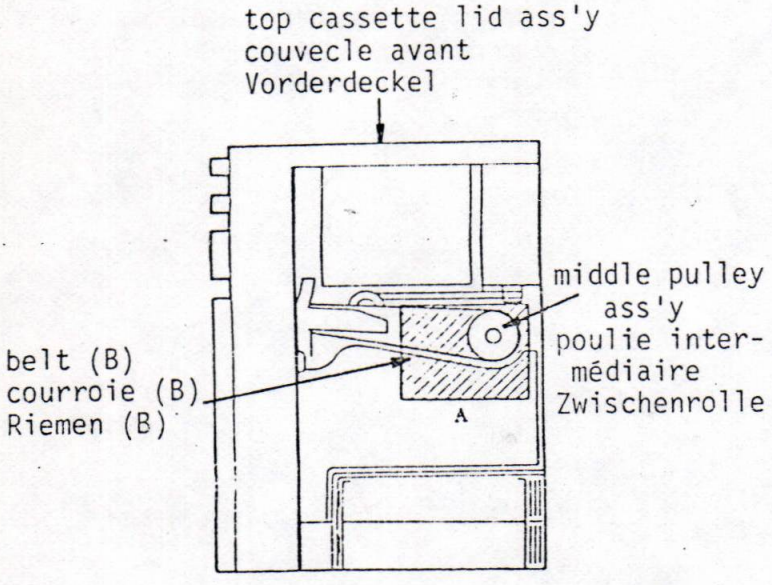


Fig./Abb. 1

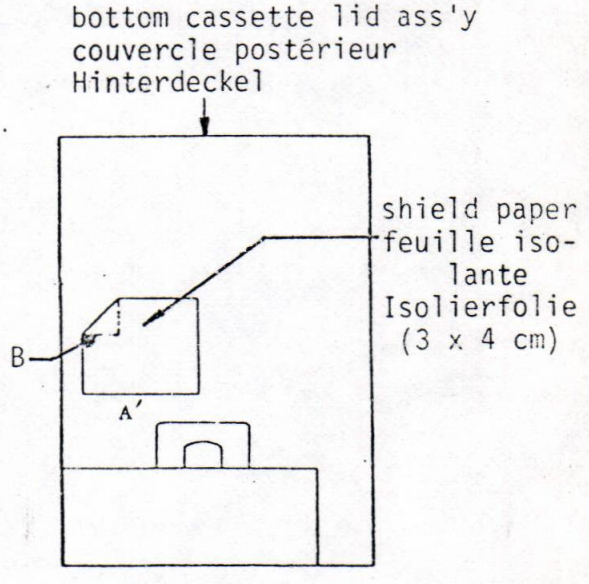


Fig./Abb. 2

../..

Description Désignation Beschreibung	Part number N° de pièce Sachnummer	Price Prix Preis
Pulley ass'y, middle Poulie intermédiaire Zwischenrolle	X-3557-410-0	Ⓑ
Idler ass'y, FWD Poulie FWD FWD-Rolle	X-3557-417-0	Ⓒ
Belt (B) Courroie (B) Riemen (B)	3-480-135-00	Ⓑ

Fold the shield paper as shown in Fig. 2 (B) and peel off the paint of the revealed area in order to have a good electric contact with the ground.
NOTE: The shield paper should not touch the conductor portions of the board.

Pliez le coin B de la feuille comme indiqué en fig. 2 et grattez la laque de l'endroit exposé afin d'établir suffisamment de contact électrique avec la masse.

NOTE: Veillez à ce que la feuille isolante n'ait pas de contact avec les parties conductrices de la platine.

Ecke B der Folie wie in Abb. 2 angedeutet falten und den Lack von der freigekommenen Stelle abkratzen. Dies gewährleistet einen tauglichen elektrischen Kontakt mit der Masse.
ANMERKUNG: Die Isolierfolie darf mit den leitenden Platineteilen keinen Kontakt haben.

SONY

Service Bulletin

Date	Ref. N°	Model
08 JUN 1981	TC-02681	TPS-L2

Subject: Remedy against static noise
Remède contre le souffle statique
Abhilfe für statisches Rauschen

English :

Note :
This Service Bulletin is valid for the recent models, equipped with a new main board. (This S/B does not supersede the previous one (TC-01981) which also applies to the same problem.)

Symptom :
Ticking noise, due to static discharge, is heard in the R-channel of the TPS-L2.

Français :

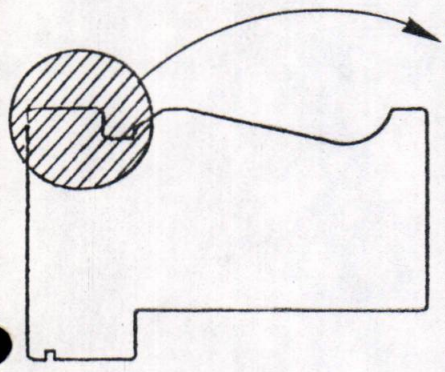
Note :
Ce Service Bulletin concerne les modèles récents munis de la nouvelle platine principale. Cependant il ne remplace pas le Service Bulletin TC-01981 relatif au même problème.

Symptôme :
Un cliquetis, dû à la décharge statique, se produit dans le canal droit.

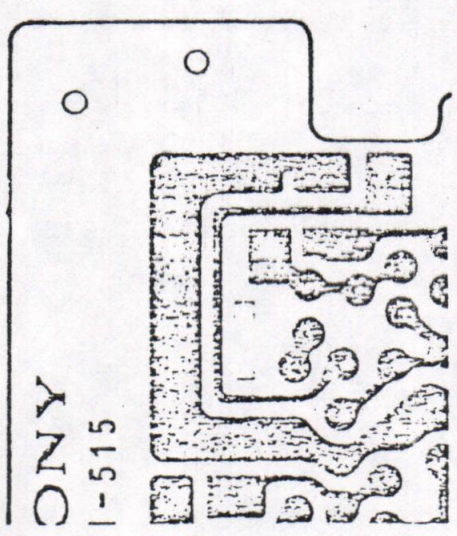
Deutsch :

Anmerkungen :
Dieses Service Bulletin bezieht sich auf die mit einer neuen Hauptplatine ausgestatteten Geräte der späteren Produktion.
Service Bulletin TC-01981, das ebenfalls dieses Problem behandelt, wird damit jedoch nicht aufgehoben.

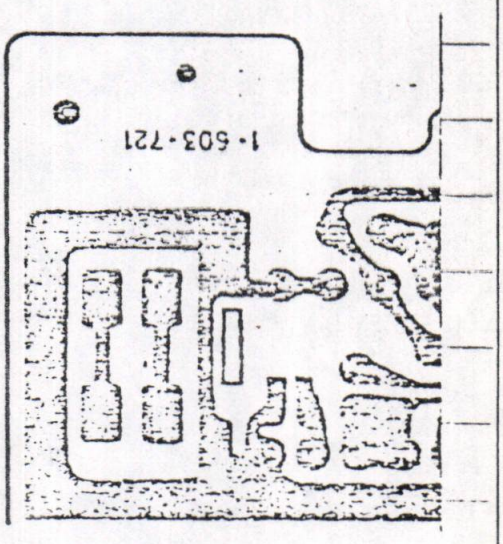
Symptom :
Durch statische Entladung wird im rechten Kanal ein Ticklaut erzeugt.



Main board
Platine principale
Hauptplatine



OLD (early production)
ANCIEN (production initiale)
ALT (erste Produktion)



NEW (later production)
NOUVEAU (production ultérieure)
NEU (spätere Produktion)

Fig. 1.

Remedy :
Shield the area, shown in Fig. 2, with a copper sheet.

Remède :
Recouvrez l'endroit indiqué d'un blindage de cuivre.

Abhilfe :
Die angegebene Stelle mit einer Kupferplatte isolieren.

./.

Description Désignation Beschreibung	Part Number N°de pièce ET-Nummer
250 x 280 mm copper shield plaquette de cuivre Kupferplatte	3-701-895-01

Note :
The shield kit is a large sheet of copper, enough for some 200 modifications.

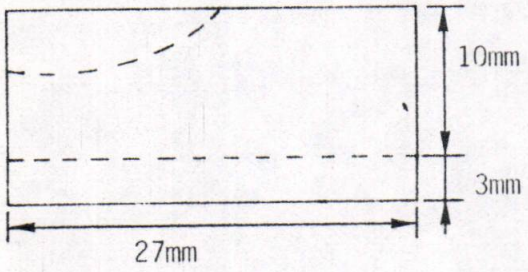
Note :
Le blindage de cuivre suffit pour ca. 200 modifications.

Anmerkung :
Die Kupferplatte reicht für ca. 200 Modifizierungen.

Trim to the contour of the main board after the copper sheet is glued on the board.

Collez la plaquette de cuivre à la platine principale et coupez-la au long des contours de la platine.

Die Kupferplatte auf die Hauptplatine kleben und an der Leiterplatte entlang abschneiden.

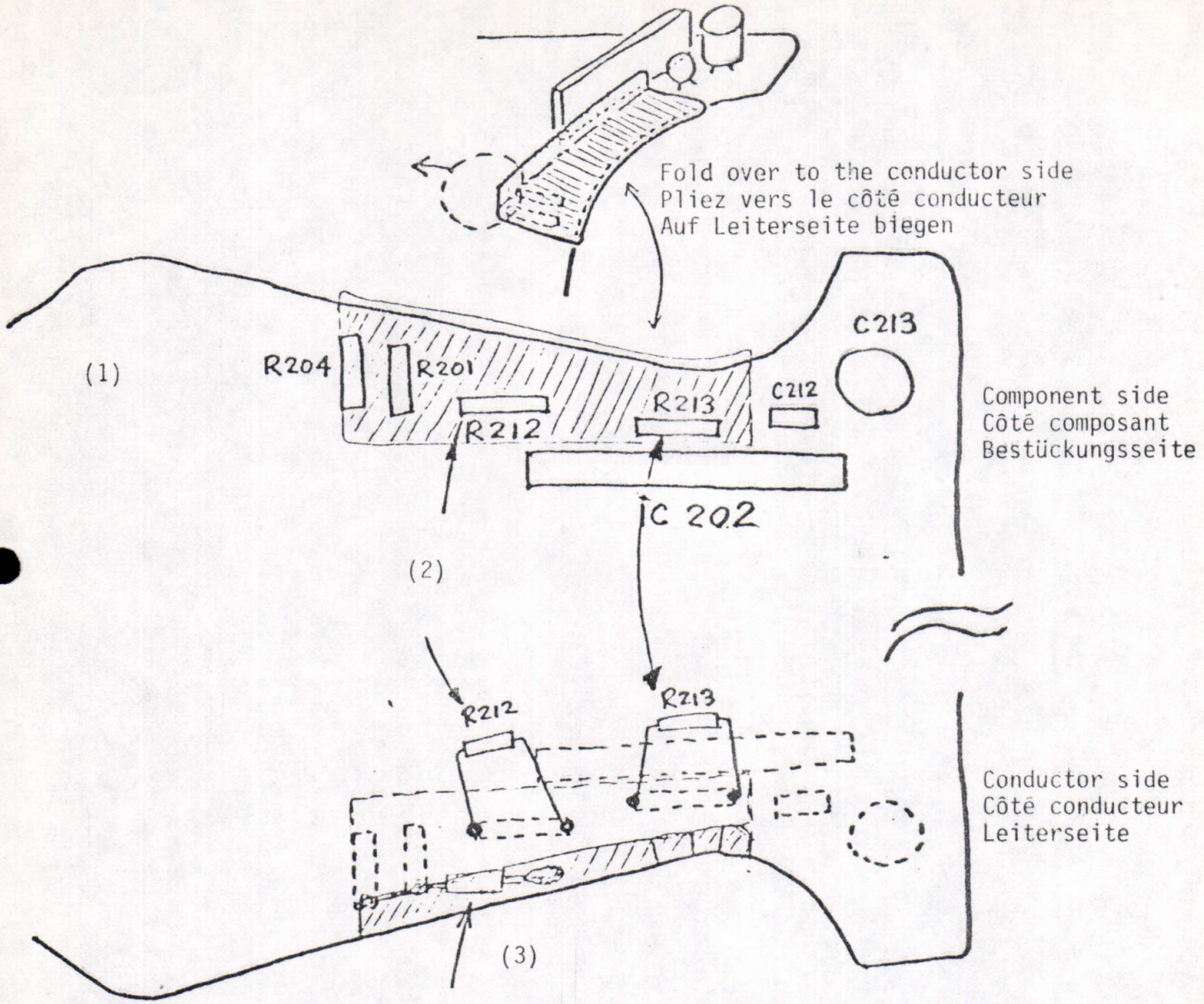


Copper sheet/Plaquette de cuivre/Kupferplatte
Cut the sheet to the size shown/
Coupez la plaquette afin d'obtenir le profil indiqué/
Zu angegebenen Abmessungen abschneiden.

Confirm thereafter that FWD and FF works properly. The sheet should be trimmed away from the gears beneath.

Après, controlez les fonctions FWD et FF. Profilez la plaquette afin qu'elle n'ait pas de contact avec les engrenages.

Danach FWD und FF überprüfen. Die Platte darf mit den Zahnrädern keinen Kontakt haben.



(1) This area is rather critical. Do not oversize or undersize the copper sheet.

(2) Remove R212 and R213 to the conductor size and solder them flush on the surface. Do not put wires through holes.

(3) Solder the copper sheet to the grounding side of R204 and R201. (Use care not to damage nearby rubber belt and middle pulley.) (Use a wire as thick as possible.)

(1) Cet endroit est critique. Veillez à ne pas utiliser un format trop petit ou trop grand.

(2) Déplacez R212 et R213 du côté conducteur et soudez-les à ras à la surface. Ne mettez pas de fils à travers les trous.

(3) Soudez le blindage de cuivre au côté-masse de R204 et R201. Veillez à ne pas endommager la courroie de caoutchouc et la poulie intermédiaire. (Utilisez le fil le plus épais possible.)

(1) Diese Stelle ist für die Betriebsicherheit wichtig. Kupferplatte weder zu gro3 noch zu klein schneiden.

(2) R212 und R213 auf Leiterseite bringen und in gleicher Ebene an die Oberfläche löten. Durch die Löcher niemals Drähte ziehen.

(3) Die Kupferplatte an den Massenanschluß von R204 und R201 löten. Die benachbarten Gummiriemen und Zwischenrad nicht beschädigen. (Einen Draht so dick wie möglich anwenden.)

Fig. 2.

Date	Ref. N°	Model
08 JUN 1981	TC-02881	TPS-L2

Subject: Correction of Service Bulletin TC-01981
Correction du Service Bulletin TC-01981
Korrektur von Service Bulletin TC-01981

English :

The part number of the belt is wrong. Please change as follows :

Français :

Le N° de pièce de la courroie cité était erroné. Veuillez apporter la correction suivante :

Deutsch :

Die ET-Nummer des Riemens wurde falsch angegeben. Die Nummer bitte wie folgt korrigieren :

Description Désignation Beschreibung	Wrong Part Number N°de pièce erroné Falsche ET-Nr.	Correct Part Number N°de pièce correct Richtige ET-Nr.	Price Prix Preis
Belt (B) Courroie (B) Riemen (B)	3-480-135-00	3-480-136-00	(B)