2082

EL-D8

AC-26

Canadian Model
AEP Model
UK Model

ELCASET STEREO ELCASET-CORDER

SPECIFICATIONS

Power Requirements: 120 V ac, 60 Hz for Canadian model,
240 V ac ~, 50/60 Hz for UK model,
220 V ac, 50/60 Hz for AEP model with Sony AC Power Adaptor AC-26 (supplied)
8 batteries IEC designation R20 (size D)
Sony Rechargeable Battery Pack BP-55 (optional)
12 V car battery with Sony Car Battery Cord DCC-130 (optional)

Power Consumption: 11 W (with AC-26)

Dimensions: Approx. 332 (w) x 100 (h) x 298 (d) mm
13 1/8 (w) x 4 (h) x 11 3/4 (d) inches
including projecting parts and controls

Weight: Approx. 5.2 kg, 11 lb 6 oz
including the battery case and shoulder strap

Track: 4-track 2-channel stereo

Tape Speed: 9.5 cm/s, 3¾ ips

Fast Forward and Rewind Time: Approx. 120 sec. (with Sony Elcaset LC-60)

Frequency Response: DOLBY NR OFF
- With Type II Elcaset (FeCr)
  15—25,000 Hz (NAB)
  25—22,000 Hz ±3 dB (NAB)
  20—23,000 Hz (DIN)
- With Type I Elcaset (SLH)
  15—23,000 Hz (NAB)
  25—20,000 Hz ±3 dB(NAB)
  20—20,000 Hz (DIN)

— Continued on page 2 —

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND ⚠ MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS 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 A LA SECURITE !

LES COMPOSANTS IDENTIFIES PAR UN TRAME ET UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHEMATIQUES, LES VUES EXPLOSEES ET LA LISTE DES PIECES SONT CRITIQUES POUR LA SECURITE DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIECES SONY DONT LES NUMEROS SONT DONNES DANS CE MANUEL OU DES SUPPLEMENTS PUBLIES PAR SONY.

ELCASET

Look for this mark on all products manufactured under the ELCASET standard.

* **'Dolby'** and the double-D symbol are the trade marks of Dolby Laboratory Inc. Noise reduction system manufactured under license from Dolby Laboratory Inc. *0 dB = 0.775 V

SONY®

SERVICE MANUAL

Wow and Flutter:	0.04 % WRMS (NAB) ±0.1 % (DIN)
S/N Ratio:	DOLBY NR OFF •With Type II Elcaset (FeCr) 62 dB at peak level (NAB) 62 dB (DIN, 1975 rev.) •With Type I Elcaset (SLH) 59 dB at peak level DOLBY NR ON Improved by 5 dB at 1 kHz, 10 dB above 5 kHz
Total Harmonic Distortion:	0.8 %
Record Bias Frequency:	160 kHz
Inputs:	MIC (two phone jacks) Sensitivity: 0.24 mV (−70 dB) for low-impedance microphone LINE IN (two phono jacks) Sensitivity: 77.5 mV (−20 dB) Impedance: 100 kΩ
Outputs:	LINE OUT (two phono jacks) Output Level: 0.435 V (−5 dB) at load impedance 100 kΩ Suitable Load Impedance: more than 10 kΩ HEADPHONES (binaural jack) Output Level: −∞ to −16 dB at load impedance 8 Ω
Power Output:	400 mW
Speaker:	Approx. 70 mm dia. (2¾ inches), 8 Ω
Battery Life:	Continuous recording time: Approx. 4 hours with Sony Super Batteries SUM-1S Approx. 16 hours with Eveready Alkaline Batteries No. E95

0 dB = 0.775 V

ELCASET

STEREO ELCASET-CORDER

EL-D8
AC-26

Canadian Model
AEP Model
UK Model

CORRECTION

No. 1
May, 1978

: Corrected Portion. Correct the service manual as shown below.

Page 14

- **Tape Speed Adjustment**

Specification:

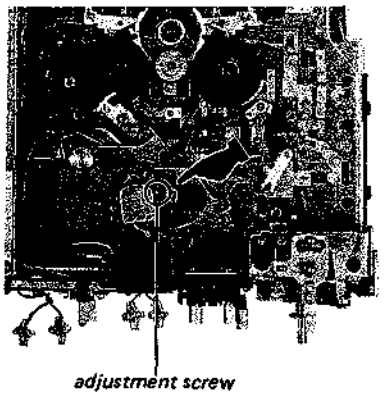
speed checker	digital frequency counter
−0.17 −+0.17 %	2,995 − 3,005 Hz

Frequency difference between beginning and end of tape should be within 7 % (20 Hz).

Page 15

- **Record/playback Head Azimuth Adjustment**

Adjustment Location:



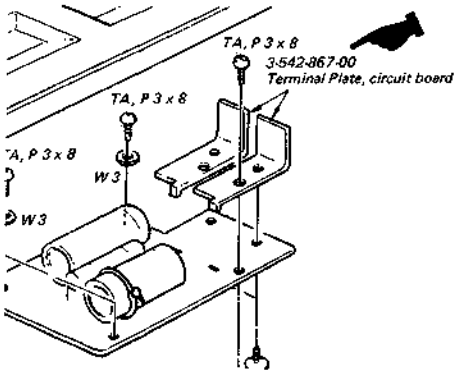
adjustment screw

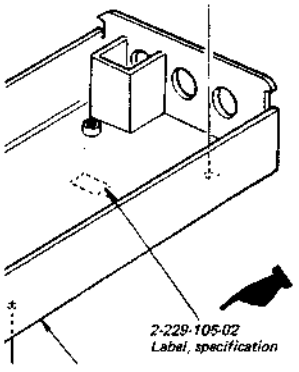
SONY®
SERVICE MANUAL

: Corrected Portions.

Page 48

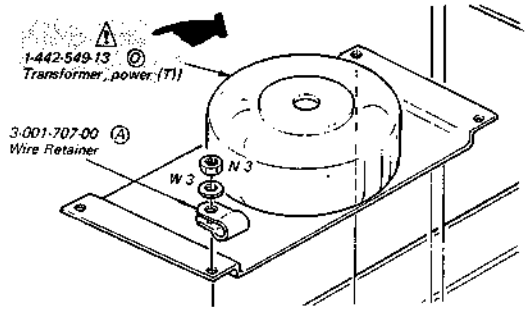
- EXPLODED VIEWS





Page 49

- EXPLODED VIEWS



Page 50

- ELECTRICAL PARTS LIST

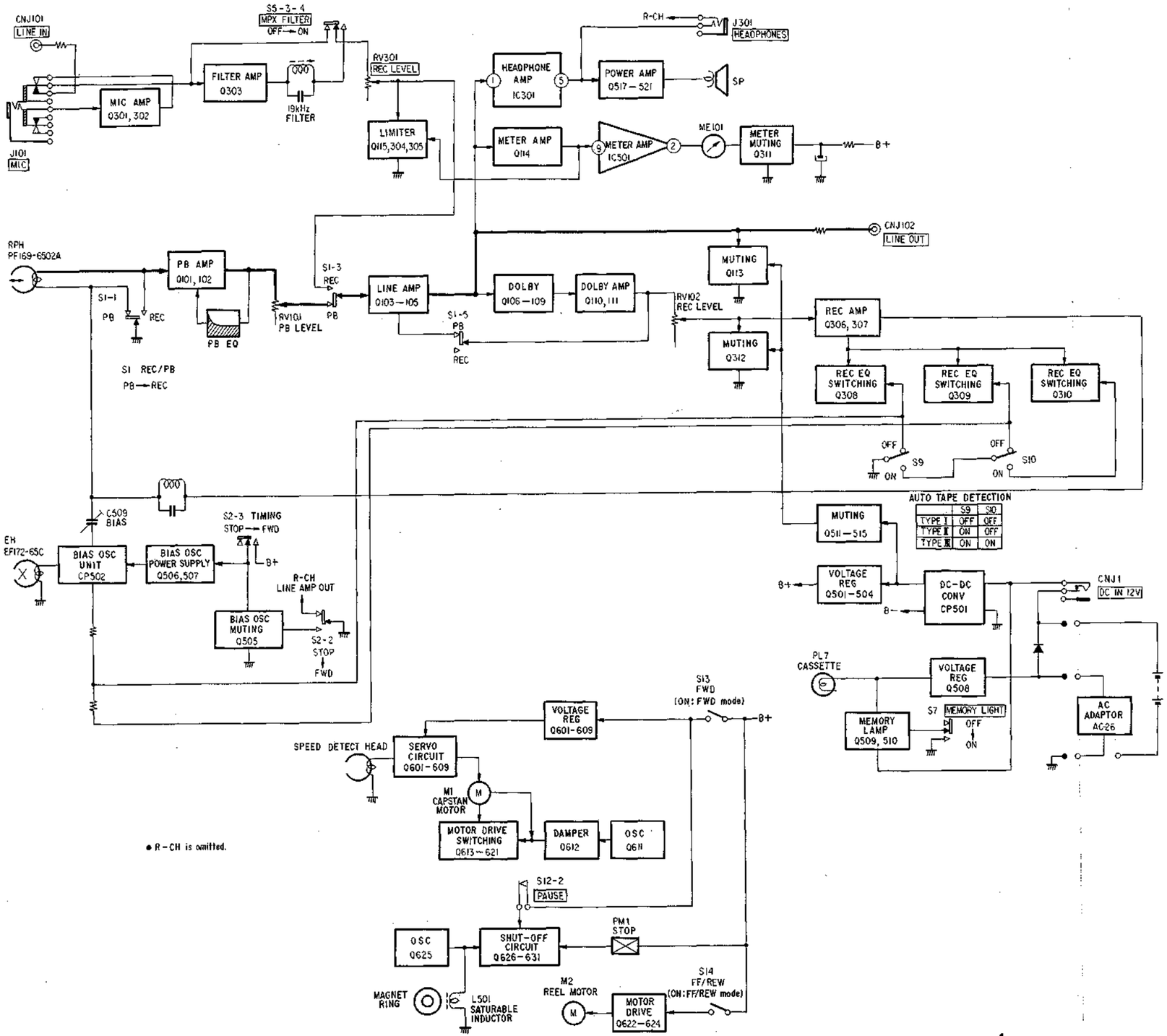
Ref. No.	*Part No.*	*Description*
C901	⚠1-123-047-11	Ⓒ Capacitor, electrolytic; 2200 μF, 25 V
CP901	⚠1-231-326-21	Spark Killer (Canadian Model)
⇒D901–904	⚠8-719-911-55	Ⓓ Diode, U05G
S	⚠1-516-259-11	Ⓔ Switch, seesaw, POWER
T	⚠1-446-069-11	Transformer, power (Canadian Model)
T	⚠1-442-549-13	Ⓞ Transformer, power (AEP, UK Model)
	⚠1-534-986-21	Cord, power (Canadian Model)
	⚠1-534-777-13	Ⓔ Cord, power (UK Model)
	⚠1-534-817-XX	Ⓔ Cord, power (AEP Model)

78E0578-1
9-954-611-91
Sony Corporation

Printed in Japan

SECTION 1
OUTLINE

1-1. BLOCK DIAGRAM



● R-CH is omitted.

1-2. CIRCUIT DESCRIPTION (See Fig. 1)

The CX-067 includes two log amplifiers, full-wave rectifiers, peak hold circuits, and meter drive circuits, for left and right channels. In addition, a pair of power supply circuits have also been incorporated to provide the voltages required for IC operation.

1. Log Amplifier

The input signal level may be changed according to a logarithmic function that is made by a diode inserted in the negative-feedback loop of an operational amplifier. The amount of negative-feedback is varied by changing the resistance value of RV302 (402) connected across pins 15 (10) and 14 (11) of IC501, thereby constituting an amplifier of logarithmic characteristics.

2. Full-Wave Rectifier

To detect both the positive and negative peaks in the audio signal, full-wave rectification is needed. In the CX-067, this is achieved by half-wave rectification of positive portion of the signal, amplifying it by two times and then mixing the result with the inverted original signal. The peak meter is thus capable of giving readings proportional to the peak levels.

Although the peak meter is capable of responding to the pulse-like signals by this circuit only, the meter needle moves too rapidly for the eye to make accurate readings. Therefore, the signals are also passed through a peak hold circuit which maintains the same rapid response to signal peaks, but slows down the return movement of the meter needle.

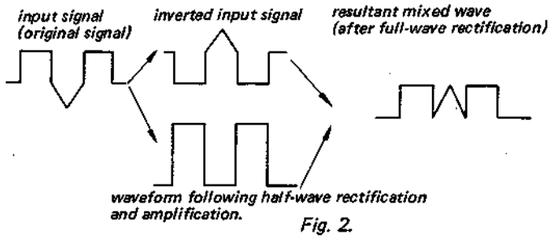


Fig. 2.

3. Peak Hold Circuit

The full-wave signal rectified is charged up on C315 (415) connected to pin 19 (6). The charging amplifier is the same as that used for full-wave rectification. Consequently, the voltage applied to C315 (415) results in the application of negative feedback across the full-wave rectification amplifier via R324 (424) at the level that is proportional to the voltage. If R324 (424) is not employed, the circuit always maintains the peak values theoretically (Therefore, the peak hold circuit could also be turned on and off by switching R324 (424)). C315 (415) charges up extremely rapidly (80 μ sec.), but since the meter needle cannot respond nearly as quickly, the circuit maintains the peak value for a period of time proportional to the time constant (C314 (414) x R323 (423)) at the pin 18 (7) until the needle is able to respond. The capacitor commences to discharge from pin 19 (6) to pin 20 (5) via R324 (424).

There are two ways in which the peak hold circuit could be turned on and off. (See Fig. 3).

(1) Set T1 to infinity by disconnecting R323 (423).
(2) Set T2 to infinity by disconnecting R324 (424).

Either method cuts off the C315 (415) discharge route to turn the peak hold circuit on. In the EL-D8, the former has been adopted.

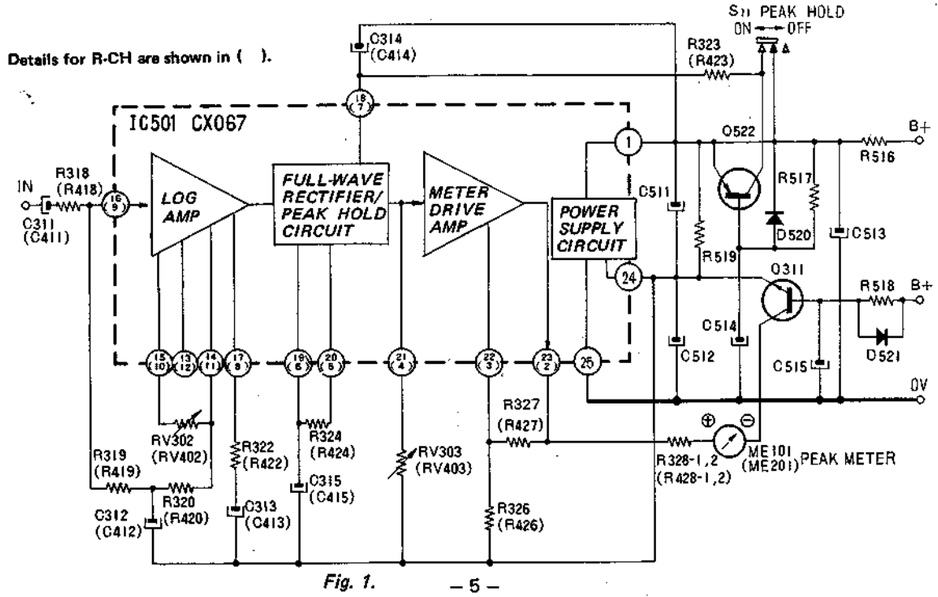


Fig. 1.

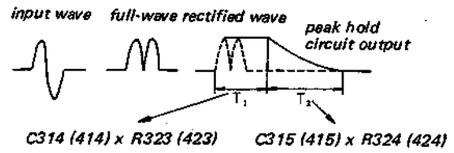


Fig. 3

4. Meter Muting Circuit

The muting of peak hold circuit is achieved by Q522, while muting of the meter drive amplifier output by Q311.

(1) Q522 is always turned on when the power supply is turned on, irrespecitive of whether S11 is on or not. This consequently prevents T1 from being set to infinity.

(2) Q311 that is connected in series with the meters remains off for approximately 2 seconds due to the base time constant of this transistor after the power supply is turned on. This is sufficient time for the power supply circuits in IC to reach stability.

Shut-Off Circuit (See Fig. 4)

1. During Tape Transport

The signal (A) generated by the Colpitz oscillator consisting of Q625 and LC is applied to R649 and L501 connected in series. L501 (saturable inductor) is employed to rotate the supply reel spindle, and a magnetic ring that is attached to an intermediate pulley. The consequent changes in magnet polarities result in changes in impedance of L501. This changes the base voltage of Q626, thereby switching this transistor on and off. As a result, the rectangular wave signal (C) is produced on the collector of Q627.

The signal (C) is rectified by D606 and D607, and then charged up in C630. This consequently raises the base voltage of Q629, thereby turning Q629 on. Accordingly, both Q630 and Q631 are turned off, preventing the stop solenoid from being activated.

2. During FWD/PAUSE

C630 is charged up by the current flowing via route (1), turning Q629 on, and again preventing the stop solenoid from being activated.

3. At End of Tape (Tape Shut-Off)

When the supply reel spindle (magnetic ring) stops rotating, L501 is in saturated mode. So Q626 is turned off since its base voltage is less than 0.6 V. Q627 is consequently turned on, and the collector of Q627 is grounded, resulting in the discharge of C630. This reduces the base voltage of Q629, thereby turning Q629 off. While C633 is then being charged up, the Darlington amplifier consisting of Q630 and Q631 is turned on, activates the stop solenoid. This brings tape transport to a stop.

If L501 is unsaturated when the supply reel spindle stops rotating, Q626 is turned on since its base voltage exceeds 0.6 V. Q627 is consequently turned off, with C629 being charged up by the collector voltage of Q627. Once C629 is charged up, C630 discharges, turning Q629 off, and triggering the discharge of C633. While C633 is discharging, the Darlington amplifier is turned on, thereby bring tape transport to a stop as before.

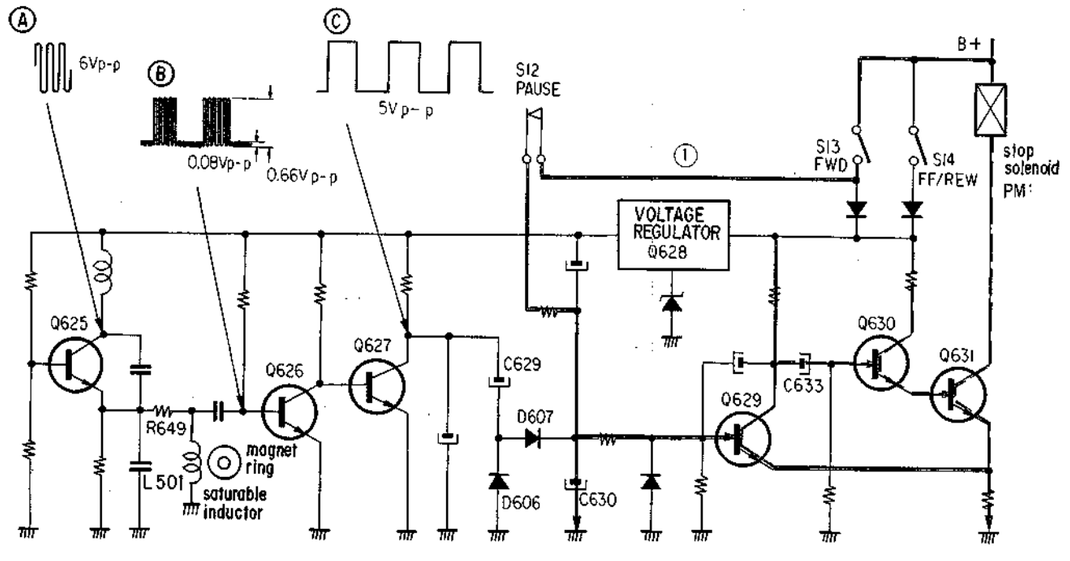


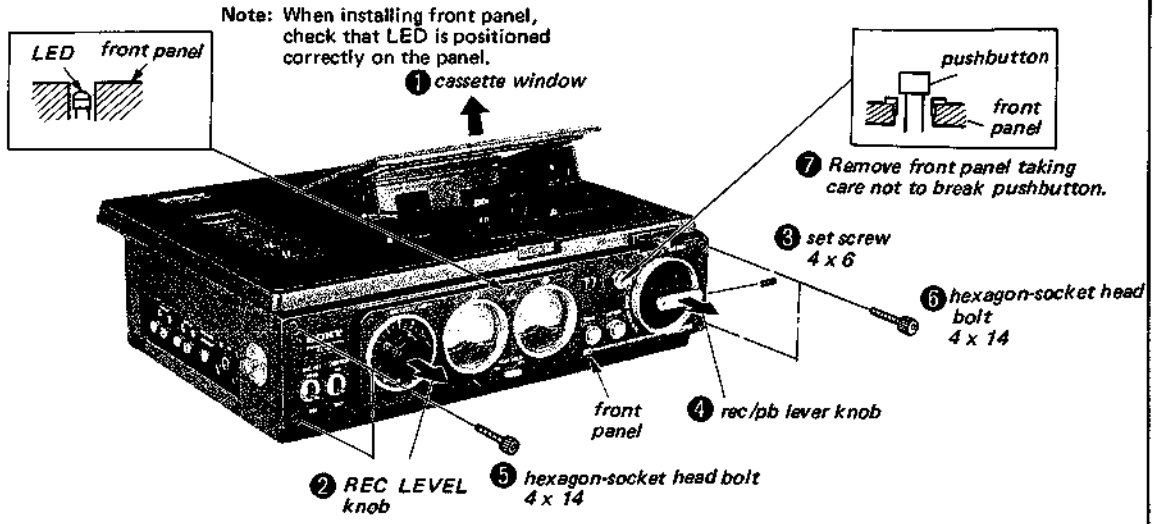
Fig. 4

SECTION 2

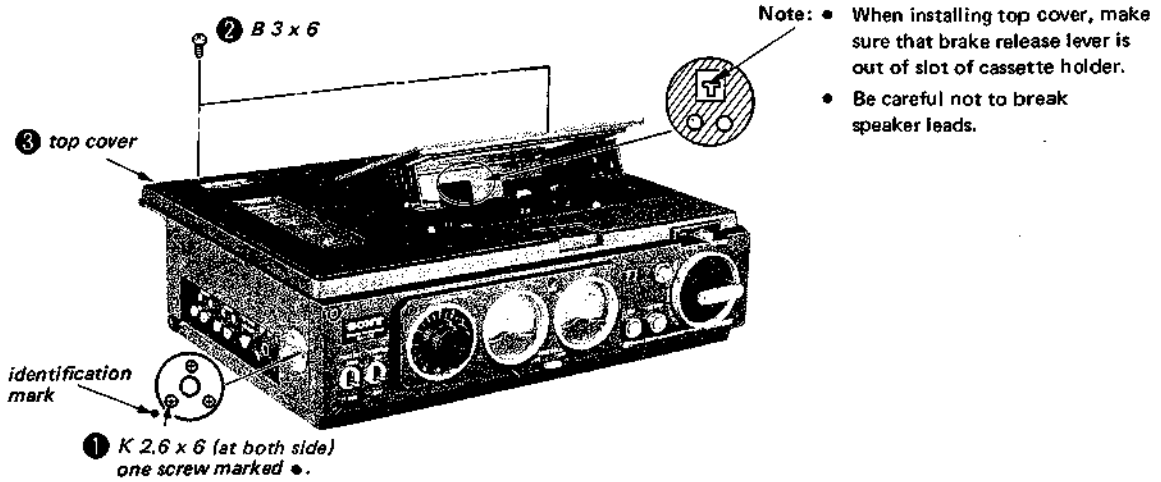
DISASSEMBLY

Follow the disassembly procedure in the numerical order given.

Cassette Window and Front Panel Removal

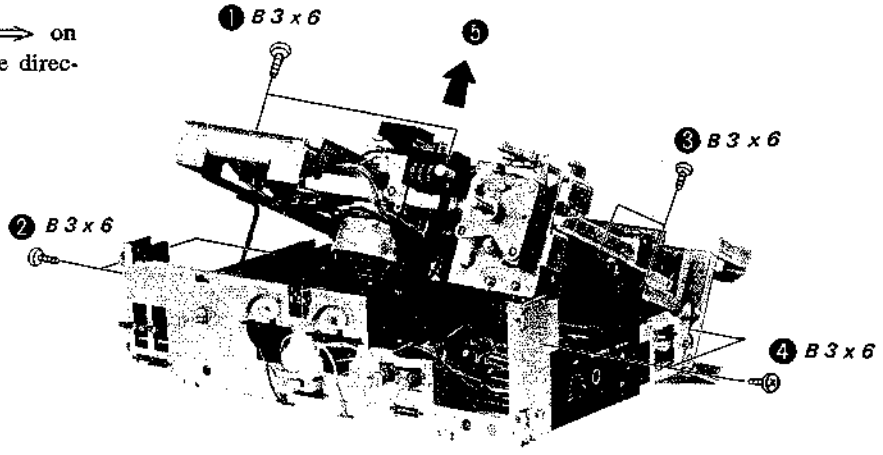


Top Cover Removal



Circuit Board Check

Remove eight screws marked ⟹ on chassis, and raise chassis in the direction shown by arrow ❺ .



SECTION 3
ADJUSTMENTS

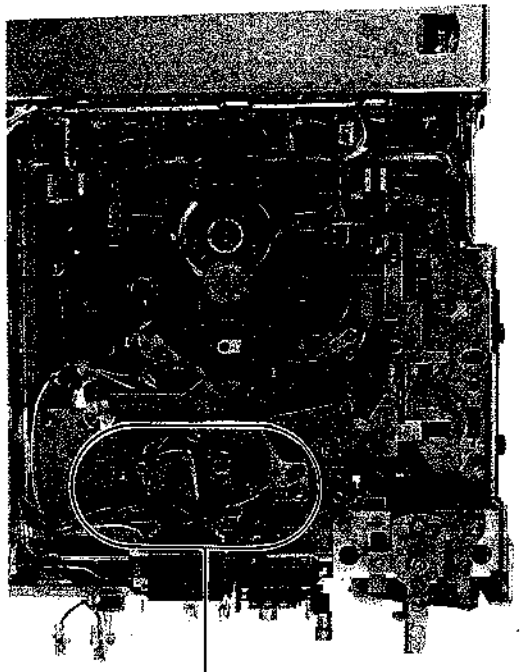
3-1. MECHANICAL ADJUSTMENTS

PRECAUTION

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

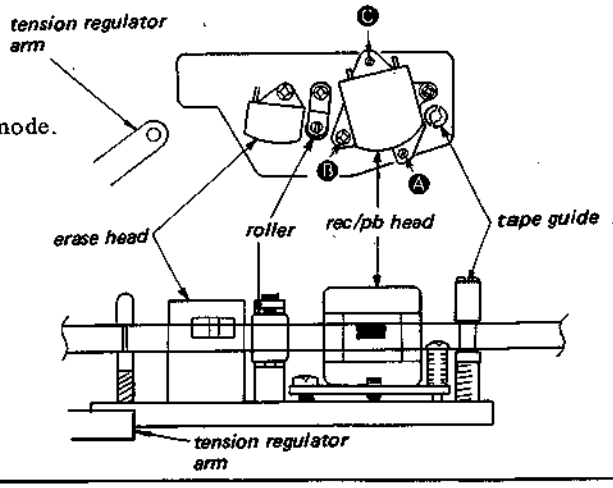
record/playback head	pinch roller
erase head	rubber belts
capstan	idlers

2. Demagnetize the record/playback head with a head demagnetizer.
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.



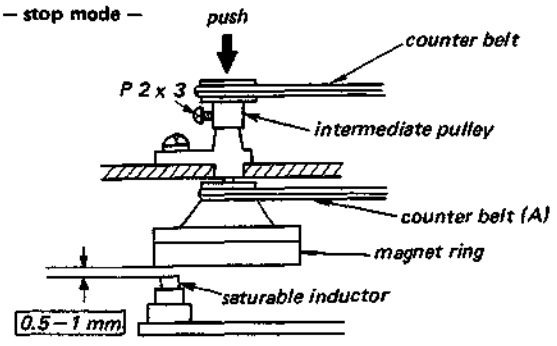
Tape Path Adjustment

1. Insert an Elcaset in the set.
2. Make sure that tape does not curl and twist at tape guide and tension regulator arm in forward mode.
3. Make sure that upper and lower edges of tape passes on roller, and roller rotates (roller play is 0.1 to 0.3 mm).
4. Adjust three adjustment screws (Ⓐ – Ⓒ) so that upper edge of tape is in line with upper end of rec/pb head core.
5. Adjust tension regulator arm so that upper edge of tape is positioned 0.2–0.3 mm lower than upper end of erase head core.



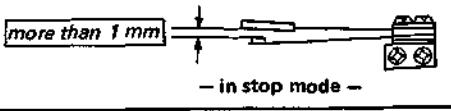
Intermediate Pulley Height Adjustment

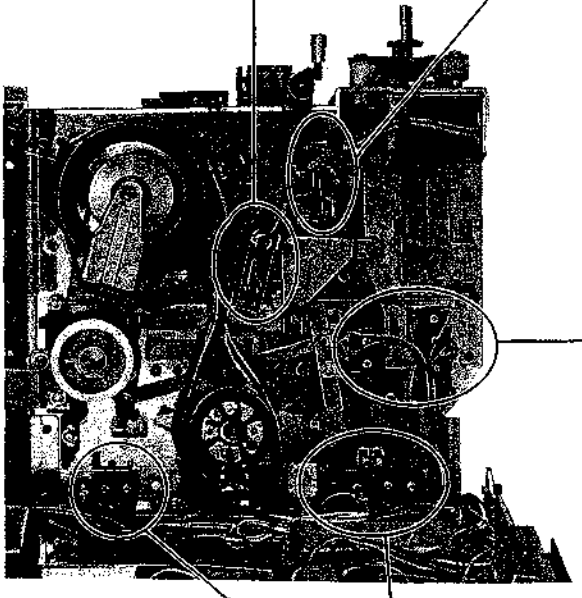
1. With pulley pushed in the direction shown by arrow, adjust pulley height with screw (P 2 x 3).



Leaf Switch (S13) Position Adjustment

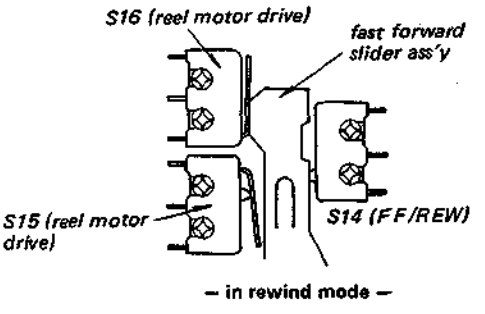
1. Make sure that clearance is more than 1 mm in stop mode.
2. Adjust switch position so that switch (S13) is turned on in forward mode.

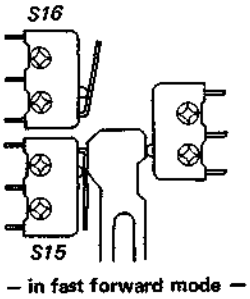




Miniature Switch (S14, 15, 16) Position Adjustment

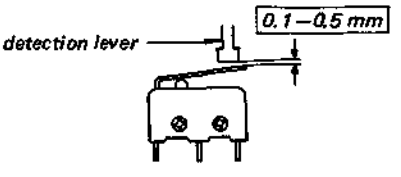
1. Adjust each switch position so that both S14 and S16 are turned on in fast forward mode.
2. Adjust each switch position so that both S14 and S15 are turned on in rewind mode.

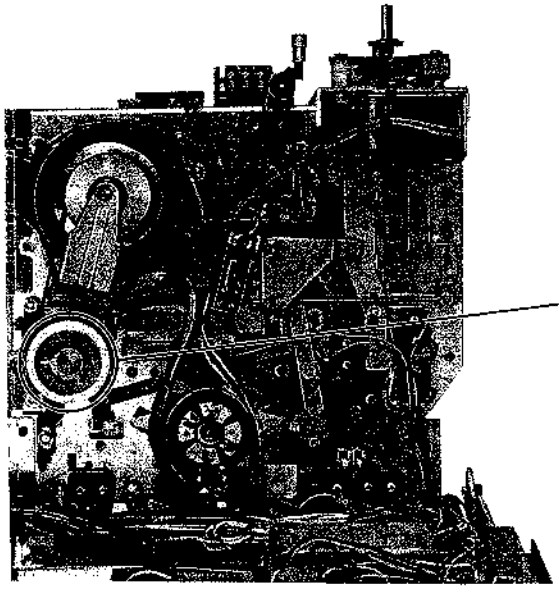




Miniature Switch (S8, 9, 10) Position Adjustment

1. Adjust each switch position for specified clearance.
2. Make sure that each switch correctly operates.
   S8: Automatic Dolby Detector.
   S9: Automatic Tape Type Detector.
   S10: Automatic Tape Type Detector.

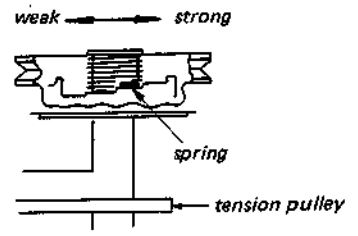




Forward Torque Adjustment

— in forward mode —

torque meter	forward torque
CQ101L	100 ± 10 g · cm (1.24 – 1.52 oz · inch)



Fast Forward/Rewind Torque Measurement

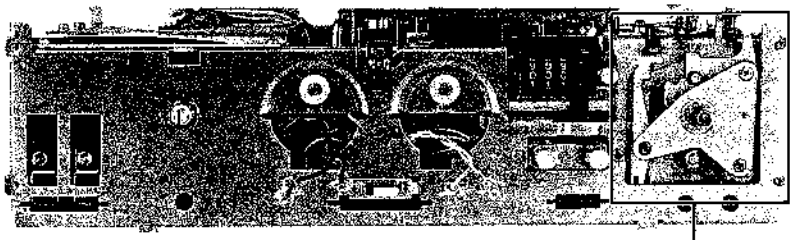
200 – 250 g · cm (2.76–3.45 oz · inch) . CQ-101L

Pinch Roller Pressure Measurement

550 – 650 g · cm (7.59–8.97 oz · inch)

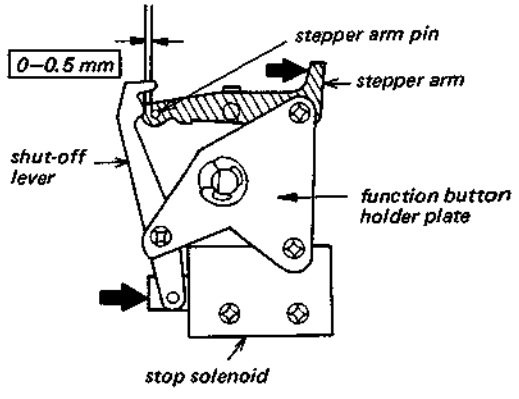
Back Tension Torque Measurement

50 – 75 g · cm (0.69–1.03 oz · inch) . . . CQ-101L



Stop Solenoid Position Adjustment

1. Adjust solenoid position for specified clearance When solenoid and stepper arm are pushed in the direction shown by arrows.



3-2. ELECTRICAL ADJUSTMENTS

Note: The adjustment should be performed in the order given in this service manual.
The adjustments should be performed for both L-CH and R-CH.

Test Equipment/Tools Required:

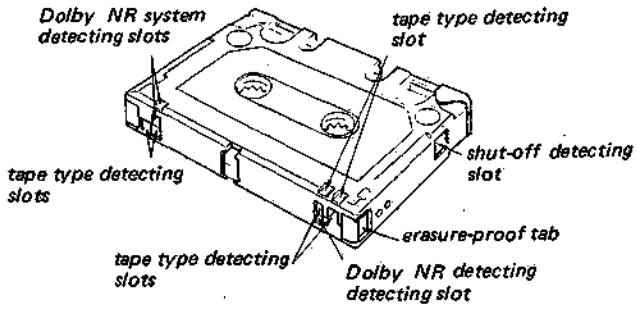
audio oscillator (af osc)
VTVM
digital frequency counter
speed checker SONY LFM-30 or equivalent.
oscilloscope
attenuator (600 Ω)
non-magnetic screwdriver
resistors. .600 Ω (¼W), 10 kΩ (¼W), 100 kΩ (¼W)
blank tapes (completely erased with bulk eraser)
SONY test tape (L-9-MR)

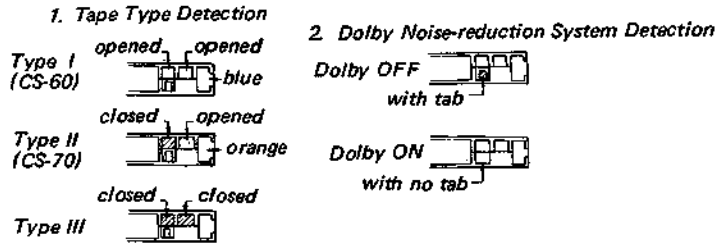
Recorded Time	40 sec.	60 sec.	40 sec.	180 sec.
Frequency	315 Hz	7 kHz	12.5 kHz	3 kHz
Level	0 dB	−10 dB	−10 dB	0 dB

Switches and controls should be set as follows unless otherwise specified.

MIC ATT. . . . . 0 dB
LIMITER. . . . . OFF
MPX FILTER . . . . . OFF
BATTERY. . . . . OFF
LIGHT . . . . . OFF
PEAK . . . . . OFF

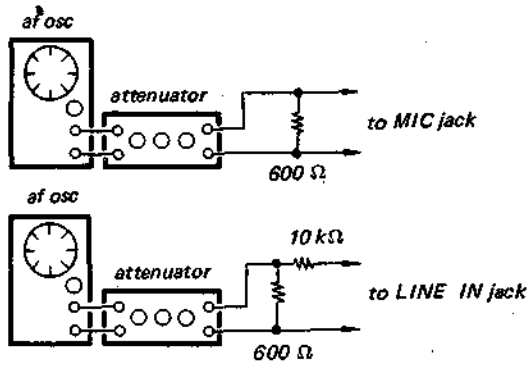
Note: This set is equipped with the automatic detector of tape type for adjusting equalization and bias to suit the tape used, and automatic detector of Dolby noise-reduction system.
When the Elcaset is inserted in the set, the corresponding lamp will turn on automatically by detecting slots of Elcaset as shown below.





Test Equipment Connections:

Input side:



Standard Record:

Deliver the standard sinput signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

Standard Input Level

	MIC	LINE IN
source impedance	300 Ω	10 kΩ
input level	−60 dB (0.77 mV)	0.25 V (−10 dB)

Standard Output Level

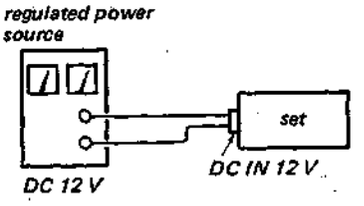
	LINE OUT
load impedance	100 kΩ
output level	0.435 V (−5 dB)

B+ Voltage Adjustment

Procedure:

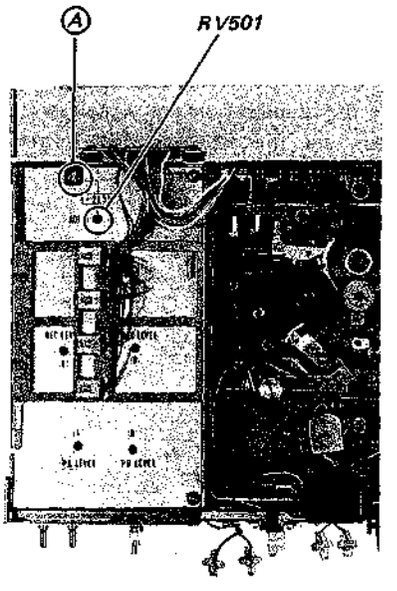
Mode: Playback

Adjust RV501 for 21.5 V dc reading at TP Ⓐ



Adjustment Location:

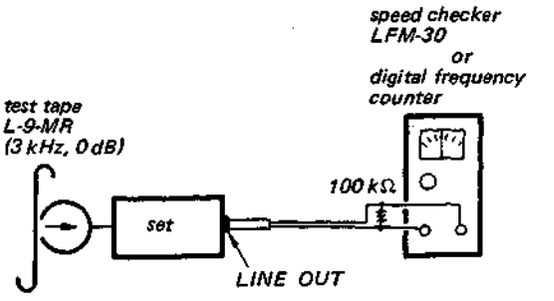
– playback amp board –



Tape Speed Adjustment

Procedure:

Mode: Playback



Adjust RV601 to obtain the specified values below.

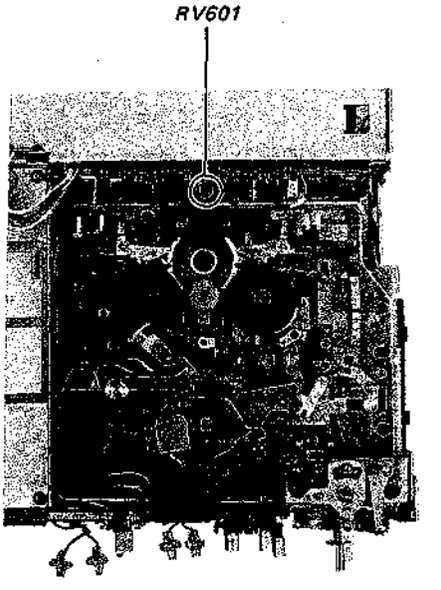
Specification:

speed checker	digital frequency counter
–0.17 – +0.17 %	2,995 – 3,005 Hz

Frequency difference between beginning and end of tape should be within 0.7 % (20 Hz).

Adjustment Location:

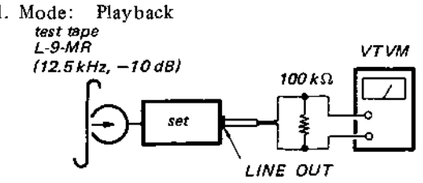
– system control board –



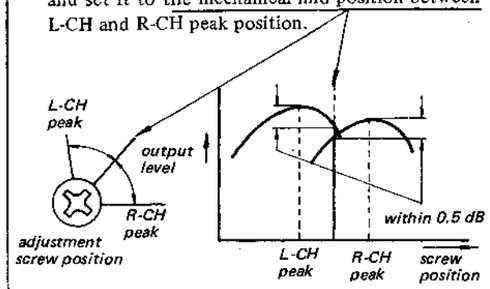
Record/playback Head Azimuth Adjustment

Procedure:

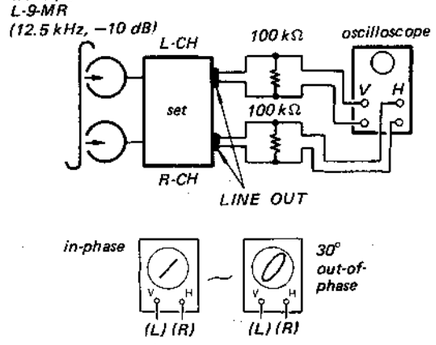
1. Mode: Playback



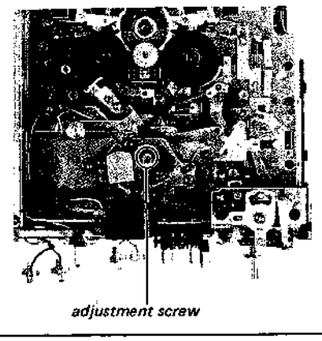
2. Turn the adjustment screw for the maximum level and set it to the mechanical mid position between L-CH and R-CH peak position.



3. Mode: Playback



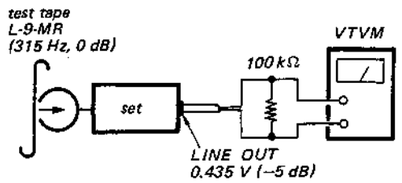
Adjustment Location:



Playback Level Adjustment

Procedure:

1. Mode: Playback



Adjust RV101 (L-CH) and RV201 (R-CH) to obtain 0.435 V (−5 dB) VTVM reading.

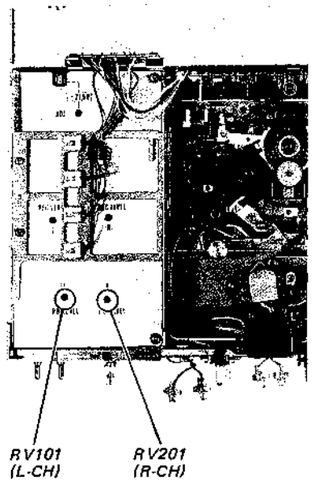
2. Confirm that the LINE OUT level does not change when the mode is changed from playback to stop several times.

Specification:

LINE OUT level: 0.43 V – 0.46 V
(−4.5 to −5.5 dB)

Adjustment Location:

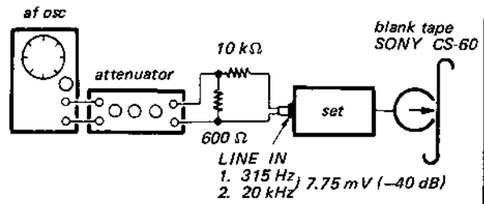
– playback amp board –



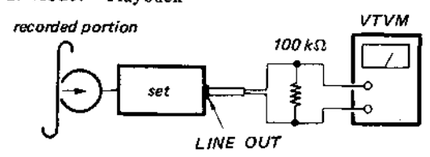
Record Bias Adjustment

Procedure:

1. Mode: Standard record (See page 13).



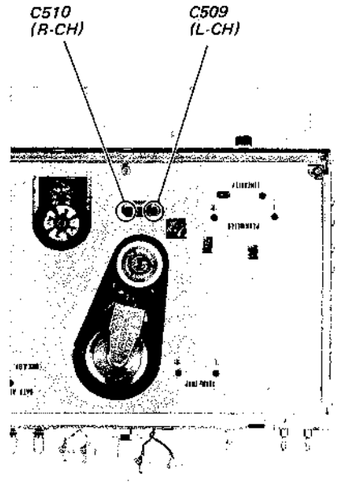
2. Mode: Playback



Turn C509 (L-CH) and C510 (R-CH) fully counter-clockwise, and then turn them to make 315 Hz and 20 Hz signal output levels equal clockwise.

Adjustment Location:

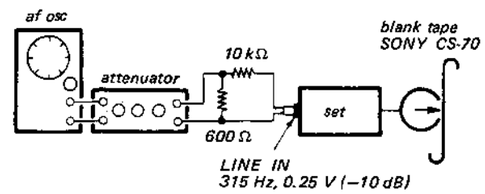
– record amp board –



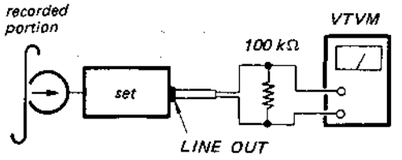
Record Level Adjustment

Procedure:

1. Mode: Standard record (See page 13).



2. Mode: Playback



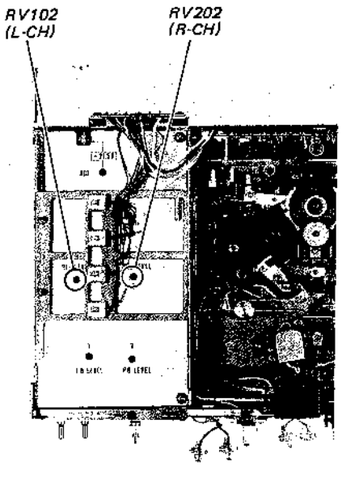
Adjust RV102 (L-CH) and RV202 (R-CH) to obtain 0.435 V (−5 dB) VTVM reading.

Specification:

LINE OUT level: 0.39–0.49 V
(−5 dB ± 1 dB)

Adjustment Location:

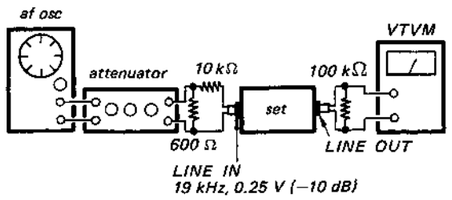
– playback amp board –



19 kHz Filter Adjustment

Procedure:

1. Mode: Standard record (See page 13).



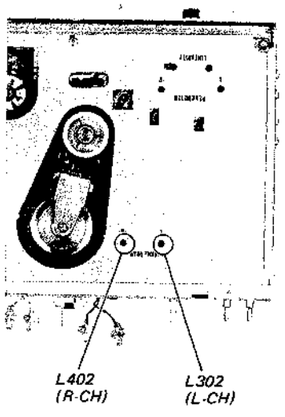
Adjust L302 (L-CH) and L402 (R-CH) for minimum VTVM reading.

Specifications

17 mV or less (−33 dB or less)

Adjustment Location:

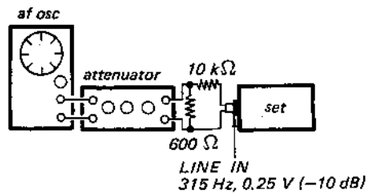
– record amp board –



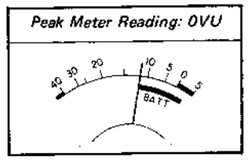
Peak Meter 0 VU Calibration

Procedure:

Mode: Standard record (See page 13).

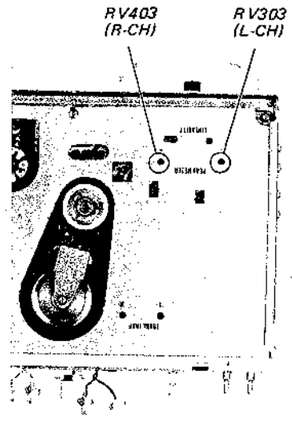


Adjust RV303 (L-CH) and RV403 (R-CH) for specified meter reading.



Adjustment Location:

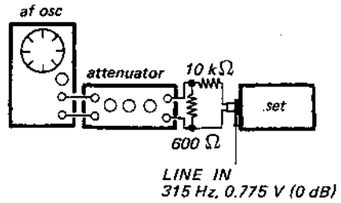
– record amp board –



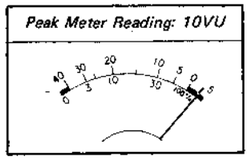
Peak Meter 10 VU Calibration

Procedure:

1. Mode: Standard record (See page 13).

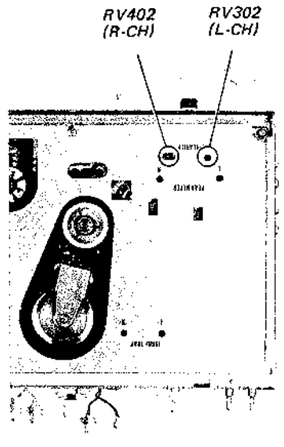


Adjust RV302 (L-CH) and RV402 (R-CH) for specified meter reading.



Adjustment Location:

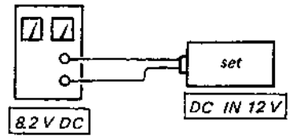
– record amp board –



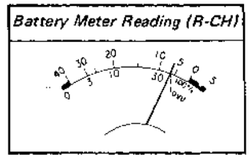
Battery Meter Calibration

Procedure:

Mode: Playback

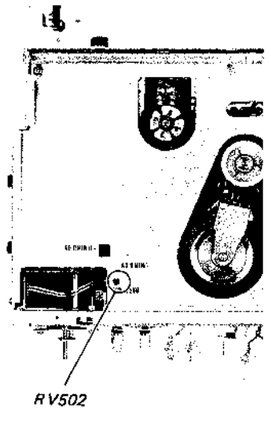


Adjust RV502 for specified battery meter reading when the BATTERY Button is pushed.



Adjustment Location:

– record amp board –

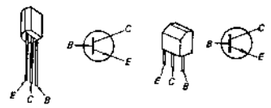


SECTION 4
DIAGRAMS

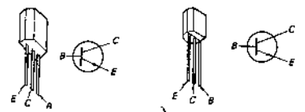
4-1. MOUNTING DIAGRAM – Amplifier Section –
– Conductor Side –

- **Replacement Semiconductors**
  For replacement, use semiconductors except in ( ).

Q101–103, 110
Q201–203, 210
Q301–303
Q401–403 : 2SC1364 (2SC1345)

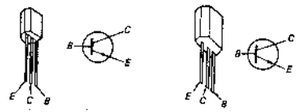


Q104, 105
Q204, 205: 2SC1364 (2SC945)

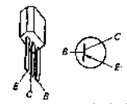


Q106–109, 114, 115
Q206–209, 214, 215
Q304, 305
Q404, 405
Q505, 506, 512–517 : 2SC1364 (2SC634A)

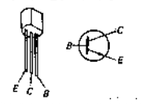
Q311, 411: 2SC1364 (2SC633A)



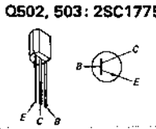
Q111, 306–310
Q211, 406–410
Q510, 511, 518 : 2SA678
Q522



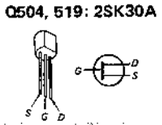
Q113, 213
Q312, 412
Q507, 508, 520 : 2SC1474
Q501: 2SC1475



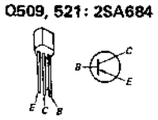
Q502, 503: 2SC1775



Q504, 519: 2SK30A

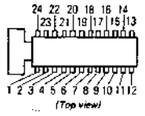


Q509, 521: 2SA684 (2SA772)

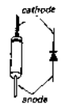


IC301, 401: TA714OP

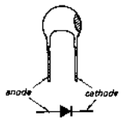
IC501: CX067



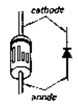
D102, 104
D202, 204: 1T22AM (1T22A)
D103, 203: 1S1555
D105, 106
D503–507, 510
D514–517
D519–521 : 1S1555 (1T40)



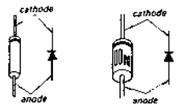
D106, 206: VD1220



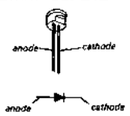
D501: EQB01-08 (EQA01-08S)
D502: EQB01-15 (EQA01-15R)
D509: EQB01-11Z (EAQ01-11S)
D512: EQB01-06 (EQA01-06R)
D513: EQB01-05 (EQA01-05S)



D508, 511: 10E2 (SIB01-02)

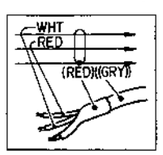


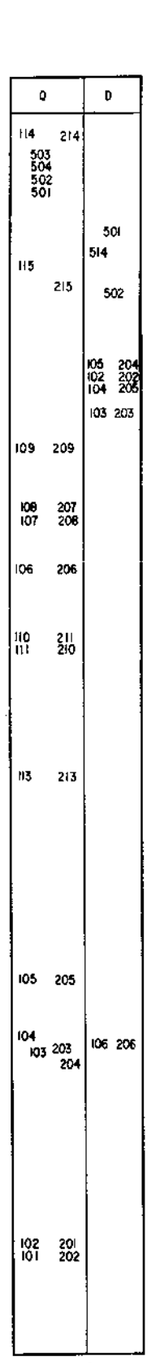
D518: SLP24B

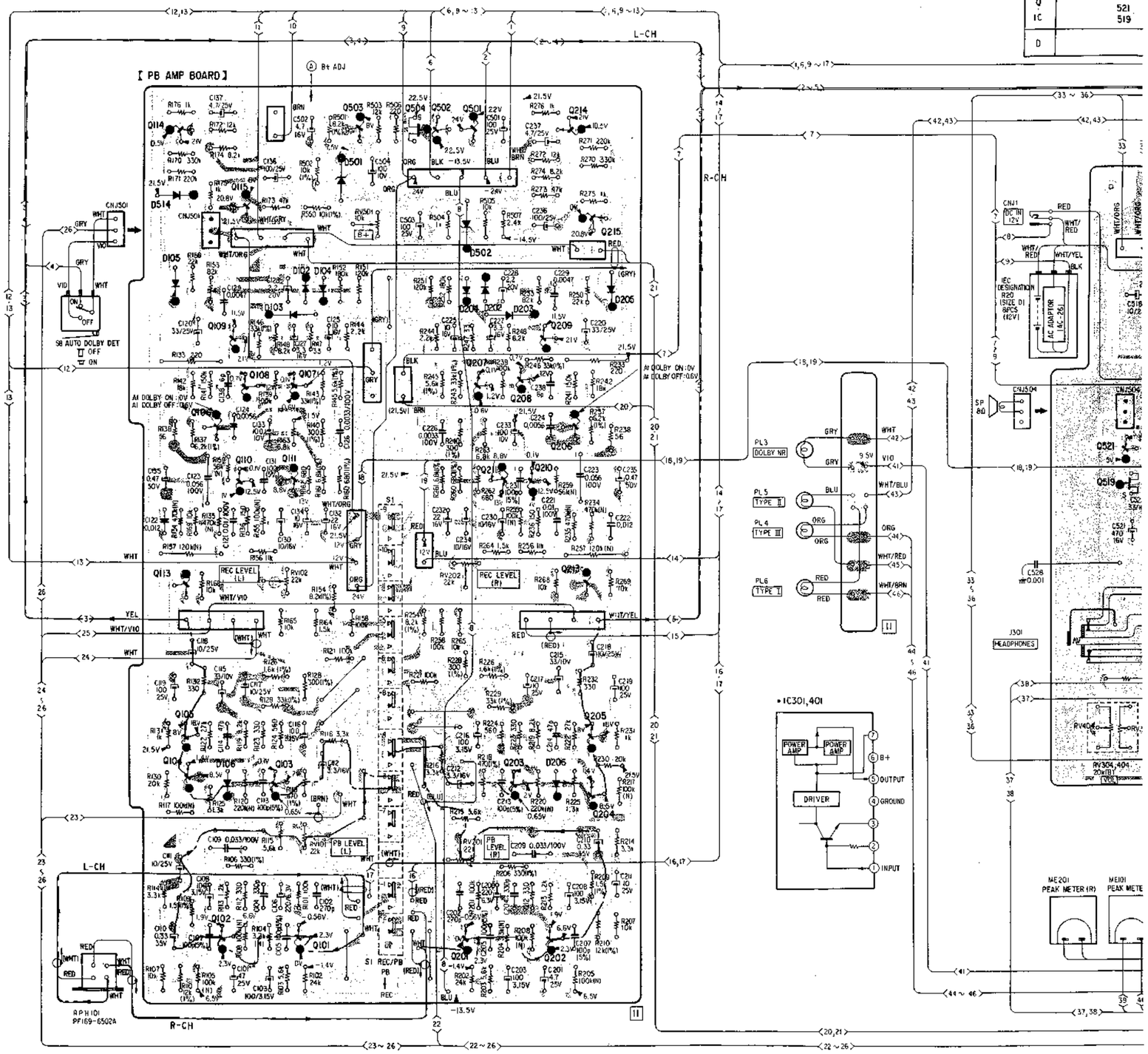


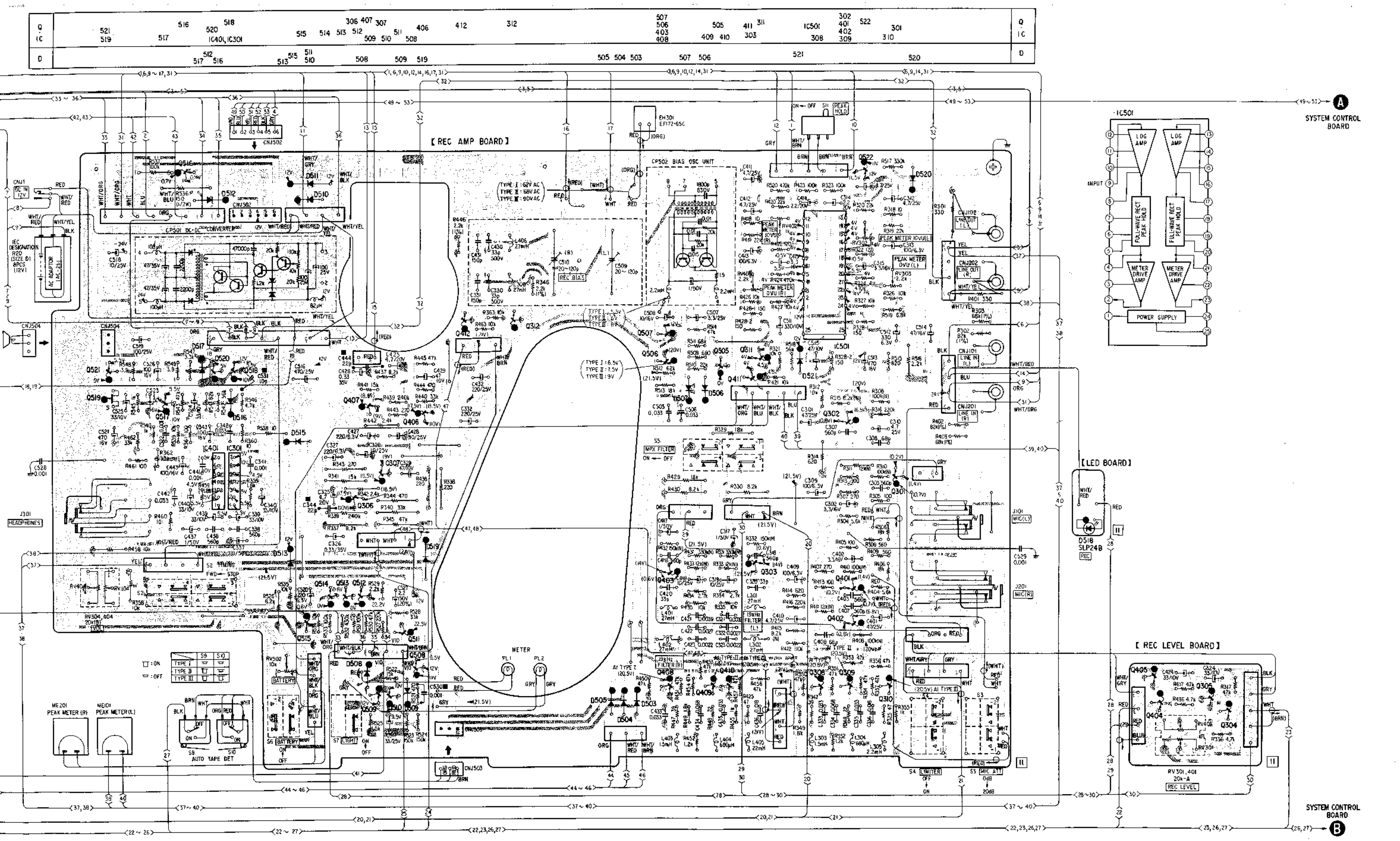
Note:

- ▬ : B+ pattern.
- ■ : part mounted on the conductor side.
- Signal Path
- ▬ ▸ : L-CH
- ▬ ▸ : R-CH
- ▬▬▸ : Common
- : B– pattern.
- Color code of sleeving over

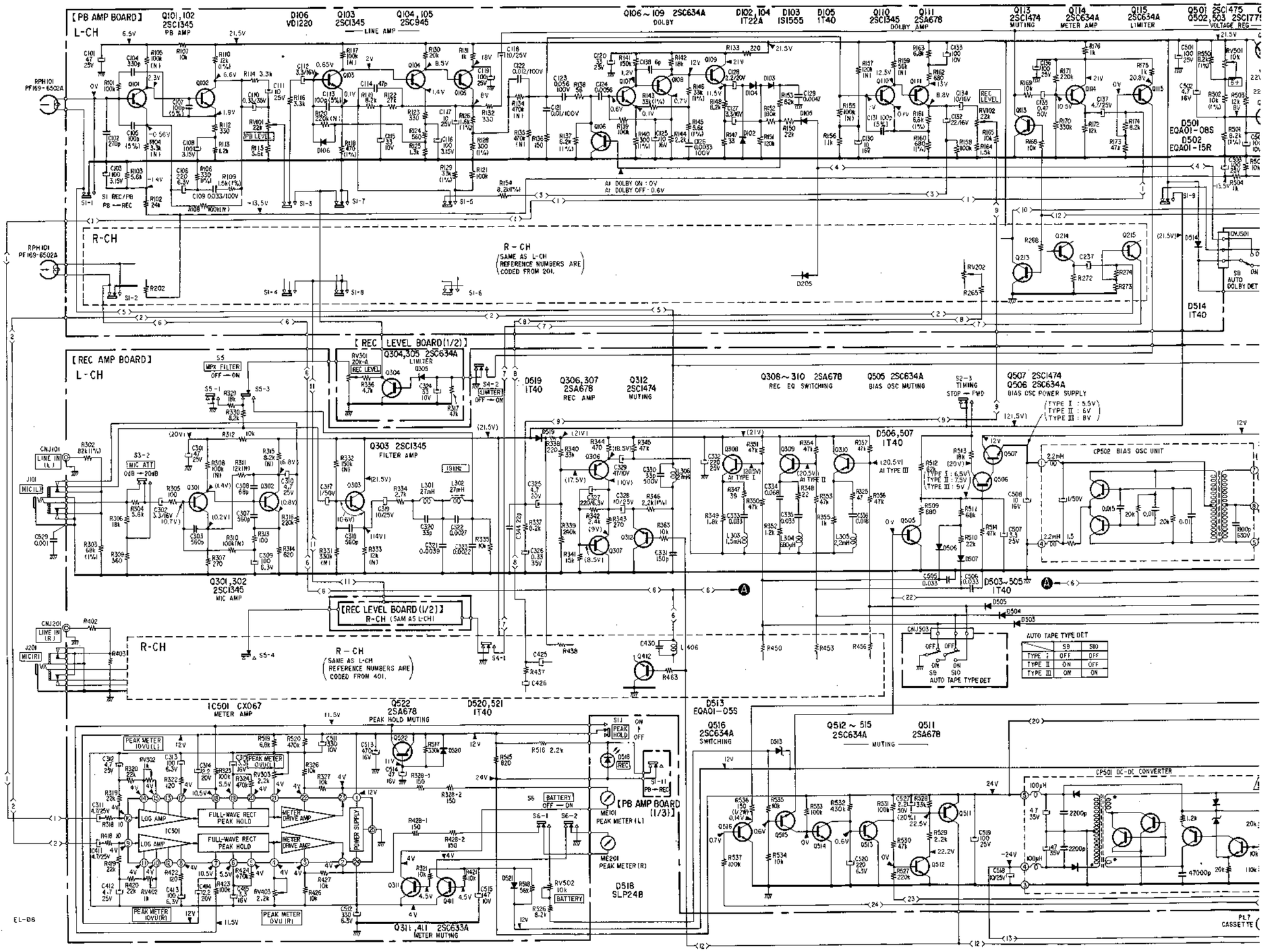


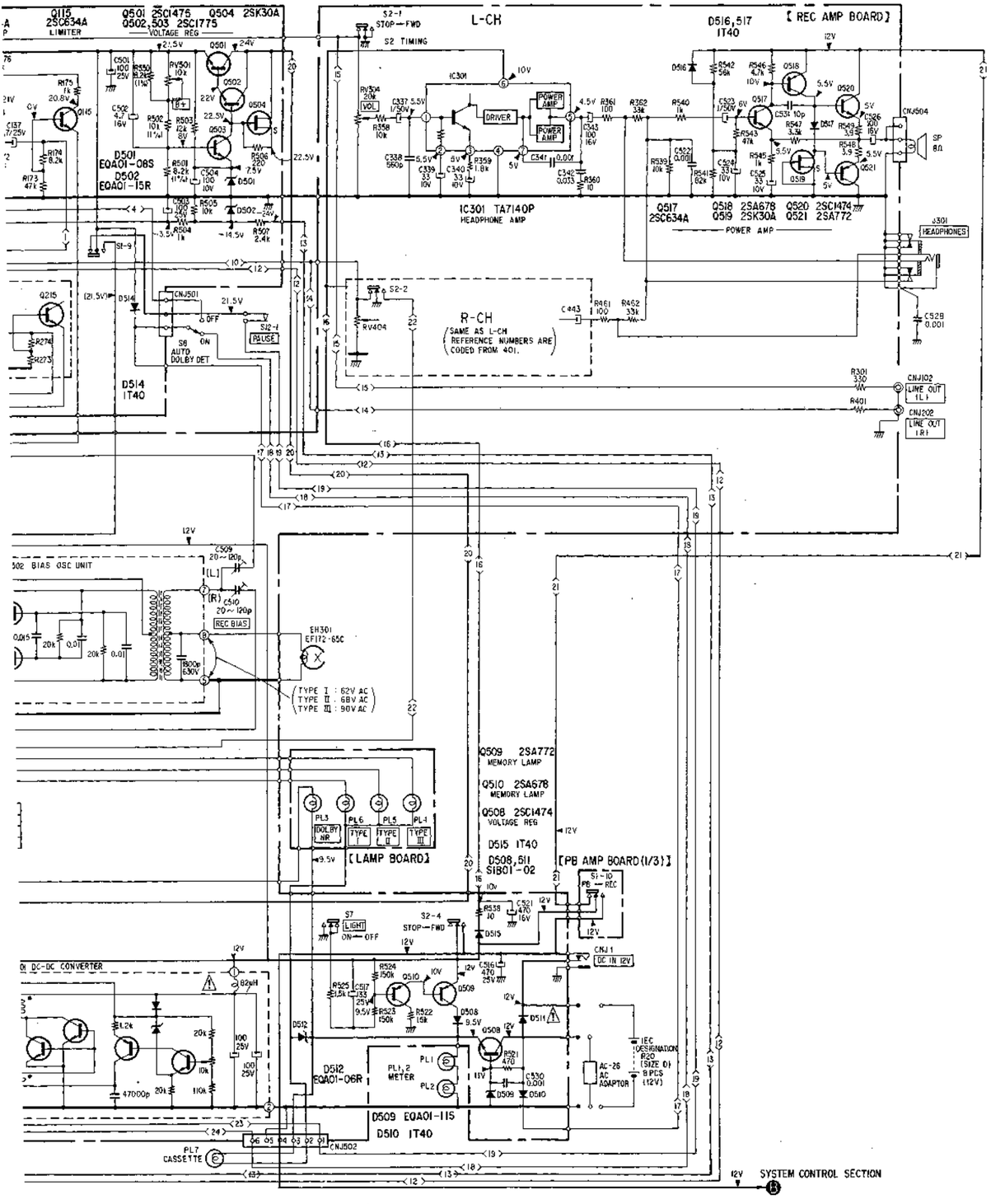





REC AMP BOARD
CPS01 DC-DC CONVERTER
CP502 BIAS OSC UNIT
IC501
LED BOARD
REC LEVEL BOARD
SYSTEM CONTROL BOARD
METER
ME201 PEAK METER (R)
ME101 PEAK METER (L)
S9 AUTO TAPE DET
S10
J301 HEADPHONES
D518 SLP248
RV301, 401 20k-A
REC LEVEL

4-2. SCHEMATIC DIAGRAM
– Amplifier Section –





Note:

- All capacitors are in μF unless otherwise noted. pF = μμF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼W unless otherwise noted. kΩ = 1000 Ω, MΩ = 1000 kΩ
- All adjustable resistors have characteristic curve B, unless otherwise noted.
- Components for right channel have the same values as for left channel. Reference numbers are coded from 401.
- (N): low-noise capacitor and resistor.
- 1% indicates component tolerance.
- ▭ : panel designation.
- ▭ : adjustment for repair.
- ——— : B+ bus.
- – – – : B− bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no signal conditions in forward mode with a VOM (20 kΩ/V).
- Voltage variations may be noted due to normal production tolerances.
- Switch:

Ref. No.	Switch	Position
S1-1~1 11	REC/PB	PB
S2-1~2-4	TIMING	STOP
S3-1, 2	MIC ATT	0 dB
S4-1, 2	LIMITER	OFF
S3-1~5-4	MPX FILTER	OFF
S6-1, 2	BATTERY	OFF
S7	LIGHT	OFF
S8	AUTO DOLBY DETECT	ON
S9	AUTO TAPE TYPE DETECT	OFF
S10	AUTO TAPE TYPE DETECT	OFF
S11	PEAK HOLD	OFF
S12-1	PAUSE	OFF

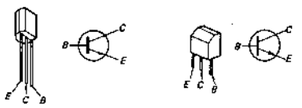
Note: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

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

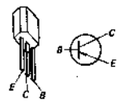
4-3. MOUNTING DIAGRAM — System Control Board —
— Conductor Side —

- **Replacement Semiconductors**
  For replacement, use semiconductors except in ( ).

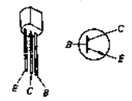
Q601–606, 608 / Q611–614, 616 / Q617, 619, 620 / Q623–630 : 2SC1364 (2SC634A)



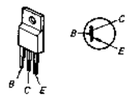
Q607: 2SA678



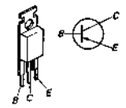
Q615, 618: 2SC1475 / Q610 / Q621, 631 : 2SC1474



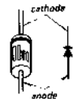
Q609: 2SA861



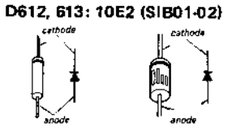
Q622: 2SA473



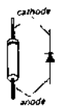
D604: EQB01-08 (EQA01-08S)
D608: EQB01-07 (EQA01-07S)

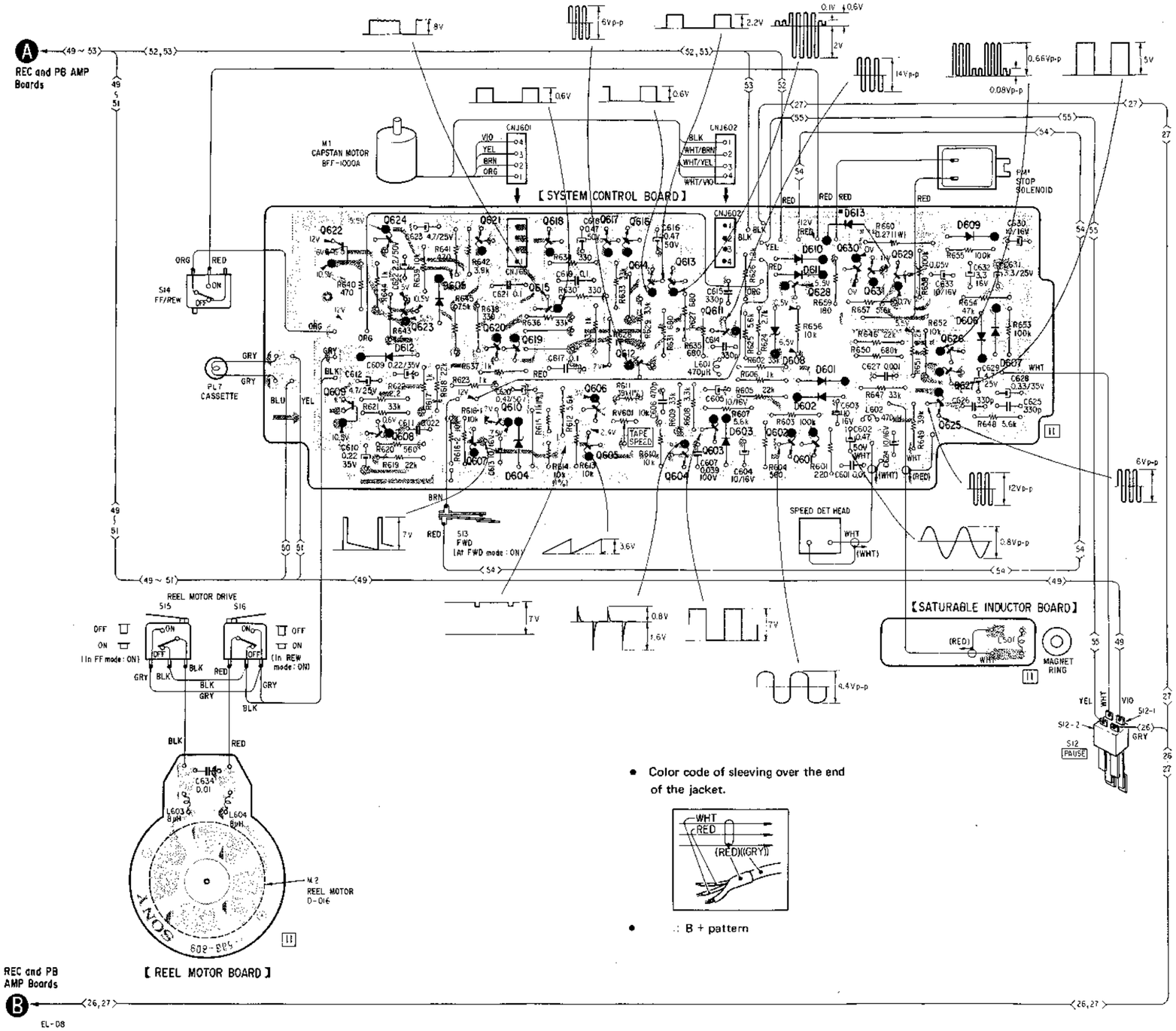


D612, 613: 10E2 (SIB01-02)



D601–603 / D605–607 / D609–611 : 1S1555 (1T40)

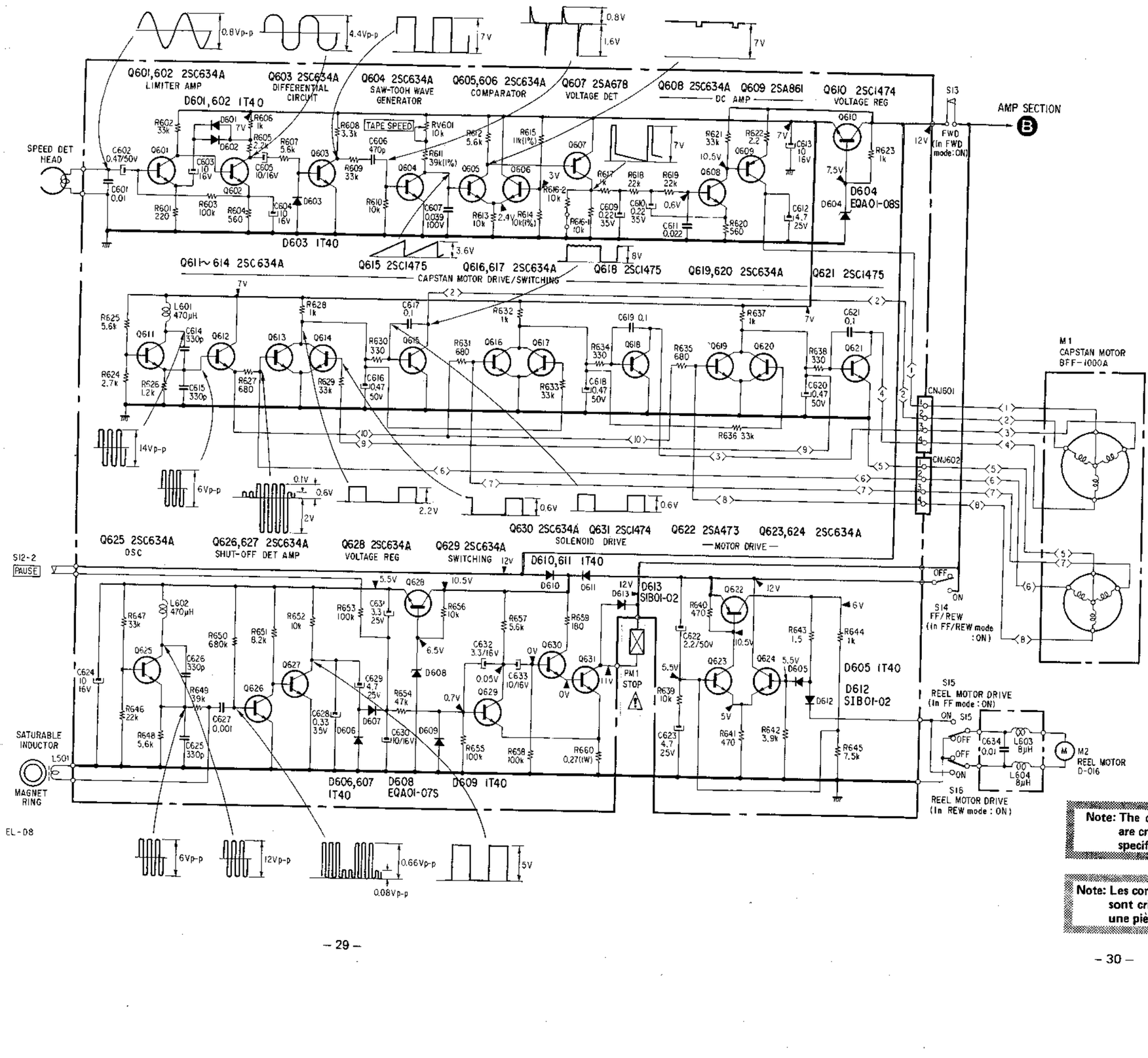




- Color code of sleeving over the end of the jacket.

- : B + pattern

4-4. SCHEMATIC DIAGRAM — System Control Section —



Note:

- All capacitors are in μF unless otherwise noted. pF = μμF 50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼W unless otherwise noted. kΩ = 1000 Ω; MΩ = 1000 kΩ
- All adjustable resistors have characteristic curve B, unless otherwise noted.
- (N): low-noise capacitor and resistor.
- 1 % indicates component tolerance.
- Switch:

Ref. No.	Switch	Position
S12-2	PAUSE	OFF
S13	FWD	OFF
S14	FF/REW	OFF
S15	REEL MOTOR	OFF
S16	REEL MOTOR	OFF

- ▭ : adjustment for repair.
- ——— : B+ bus.
- - - - : B— bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no signal conditions in forward mode with a VOM (20 kΩ/V).
- Voltage variations may be noted due to normal production tolerances.

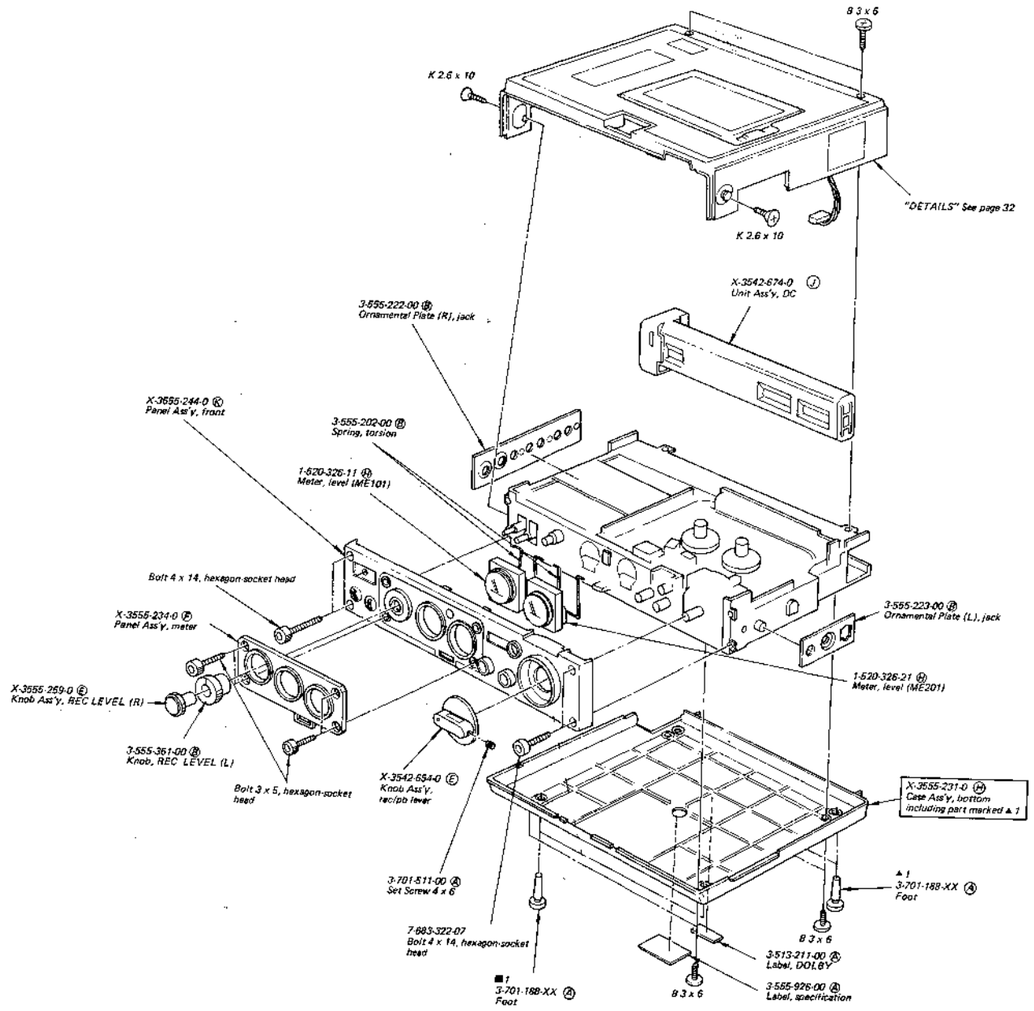
Note: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

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

SECTION 5

EXPLODED VIEWS

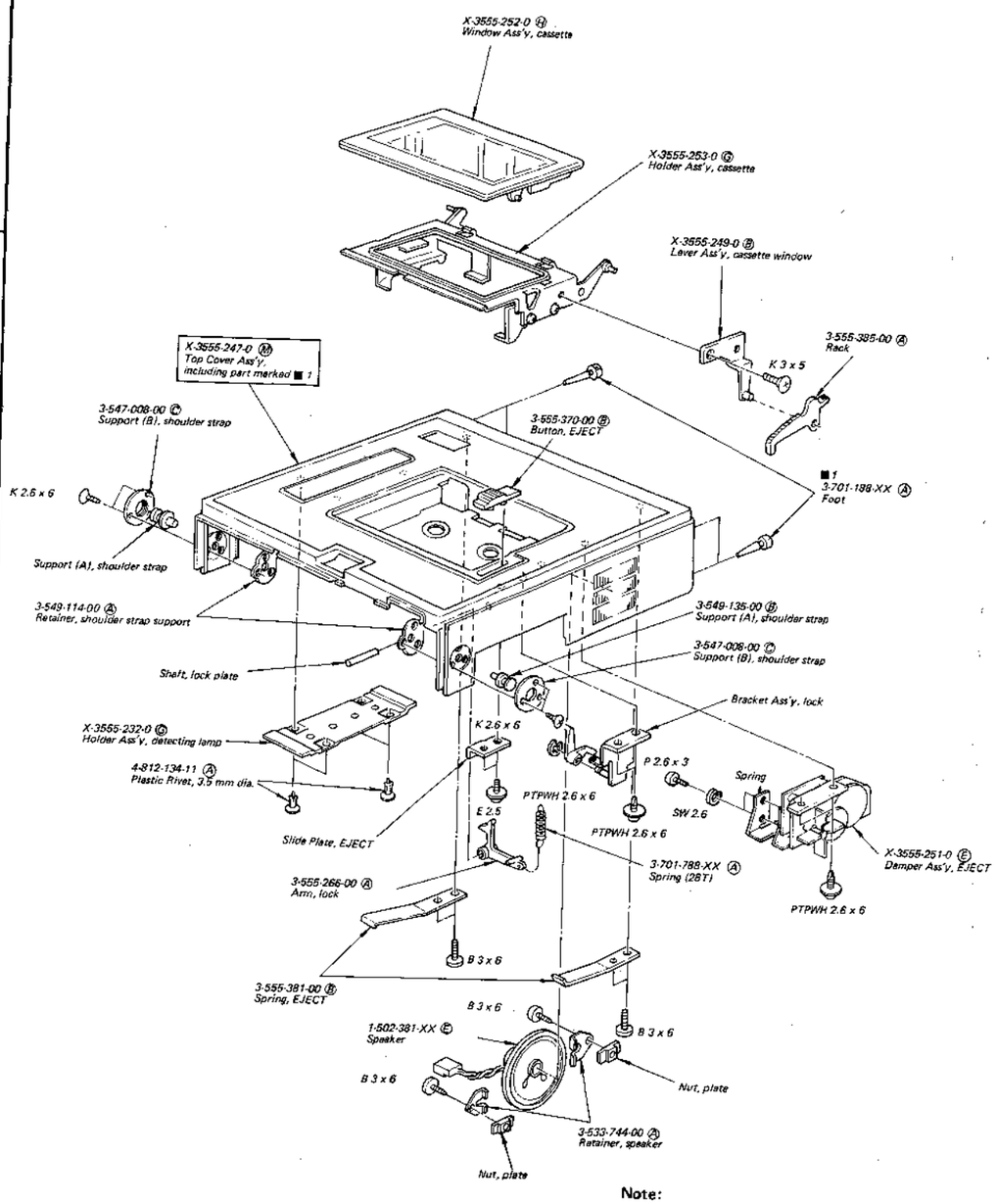
5-1.



Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (—) = slotted head
- (□□T) shows the number of coils in spring.
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

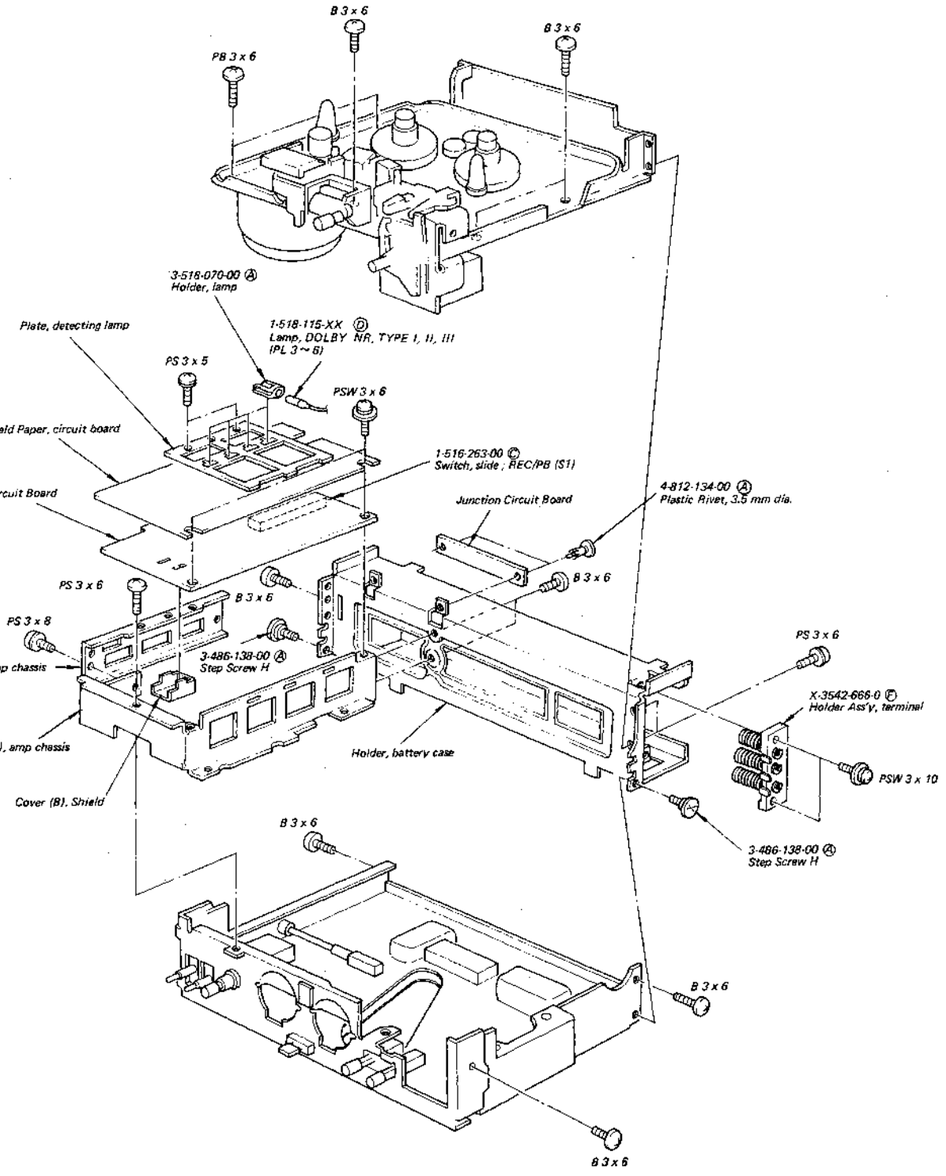
5-2.



Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (—) = slotted head
- (□□T) shows the number of coils in spring.
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

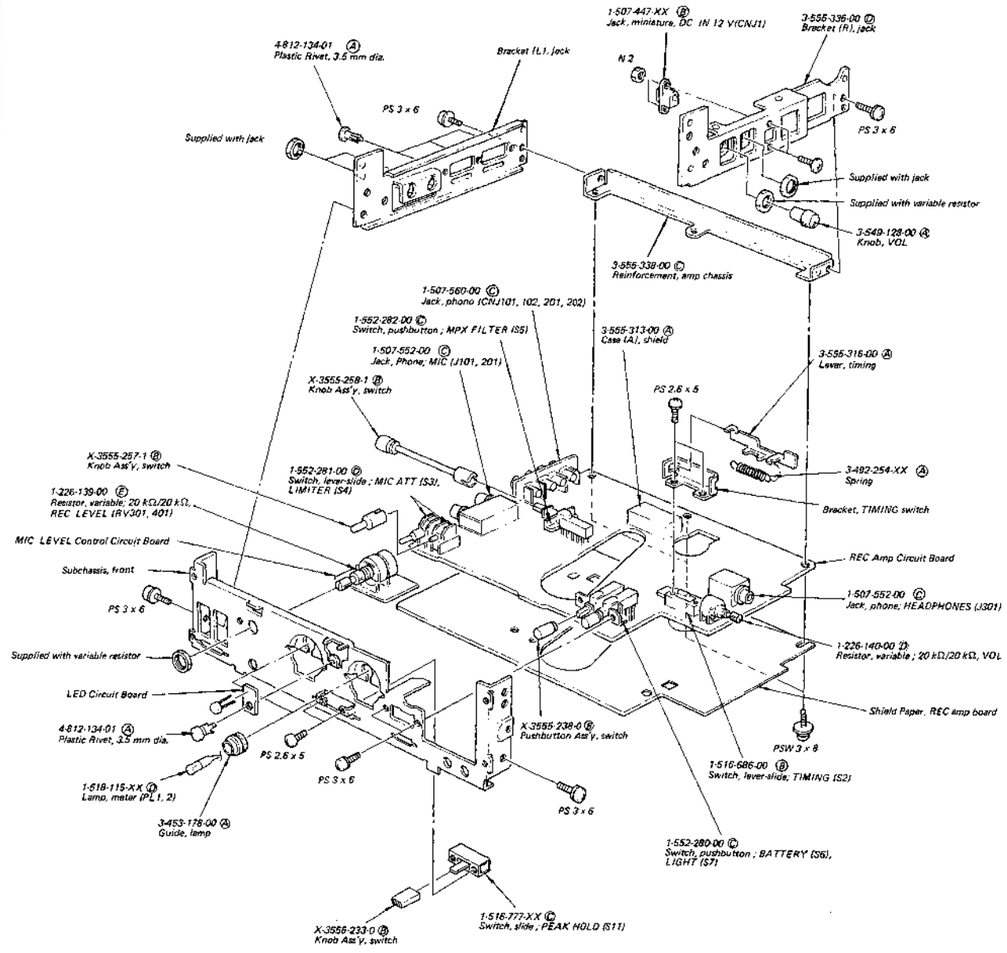
5-3.



Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head
- (□□T) shows the number of coils in spring.
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

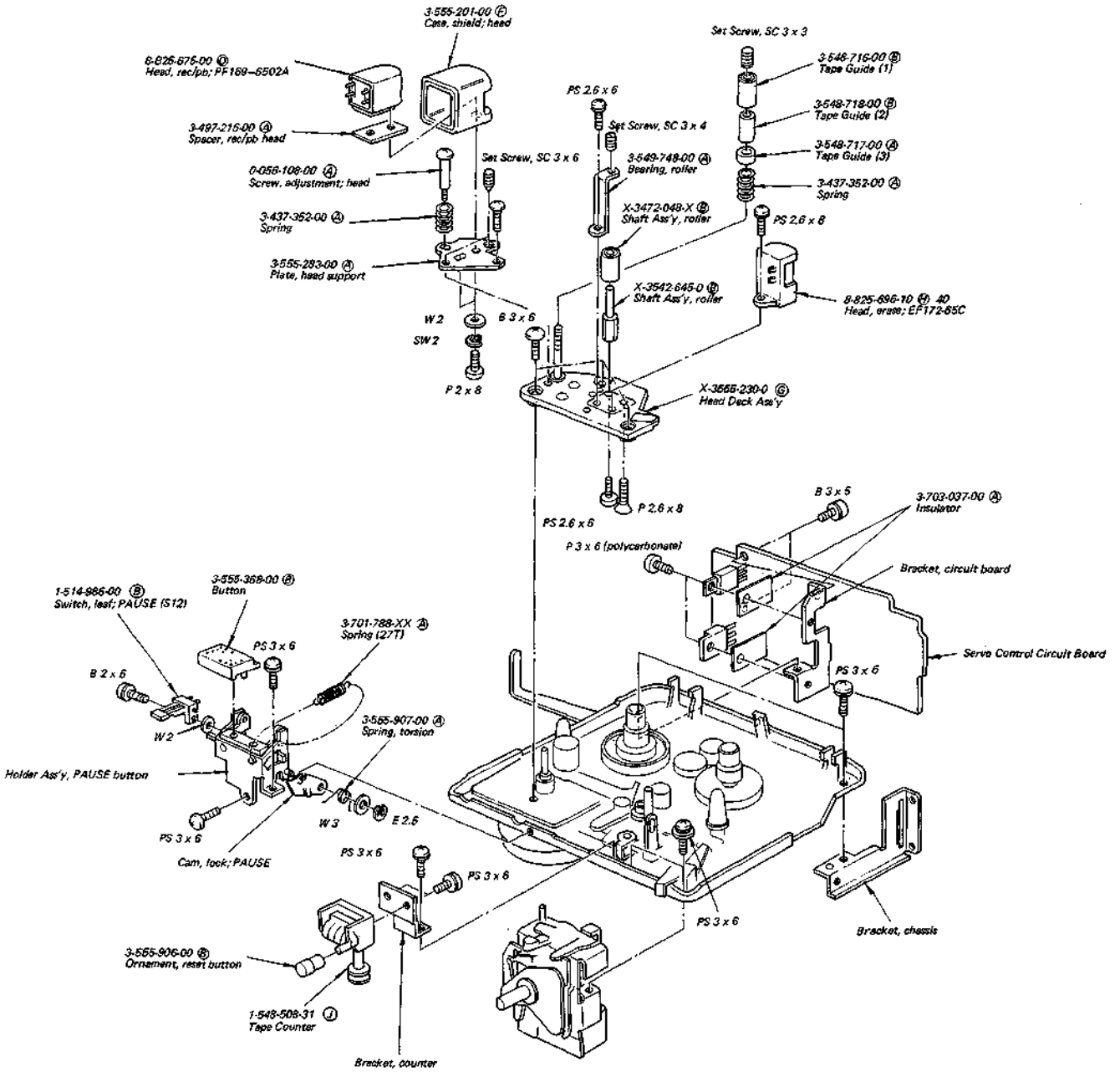
5-4.



Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head
- (□□T) shows the number of coils in spring.
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

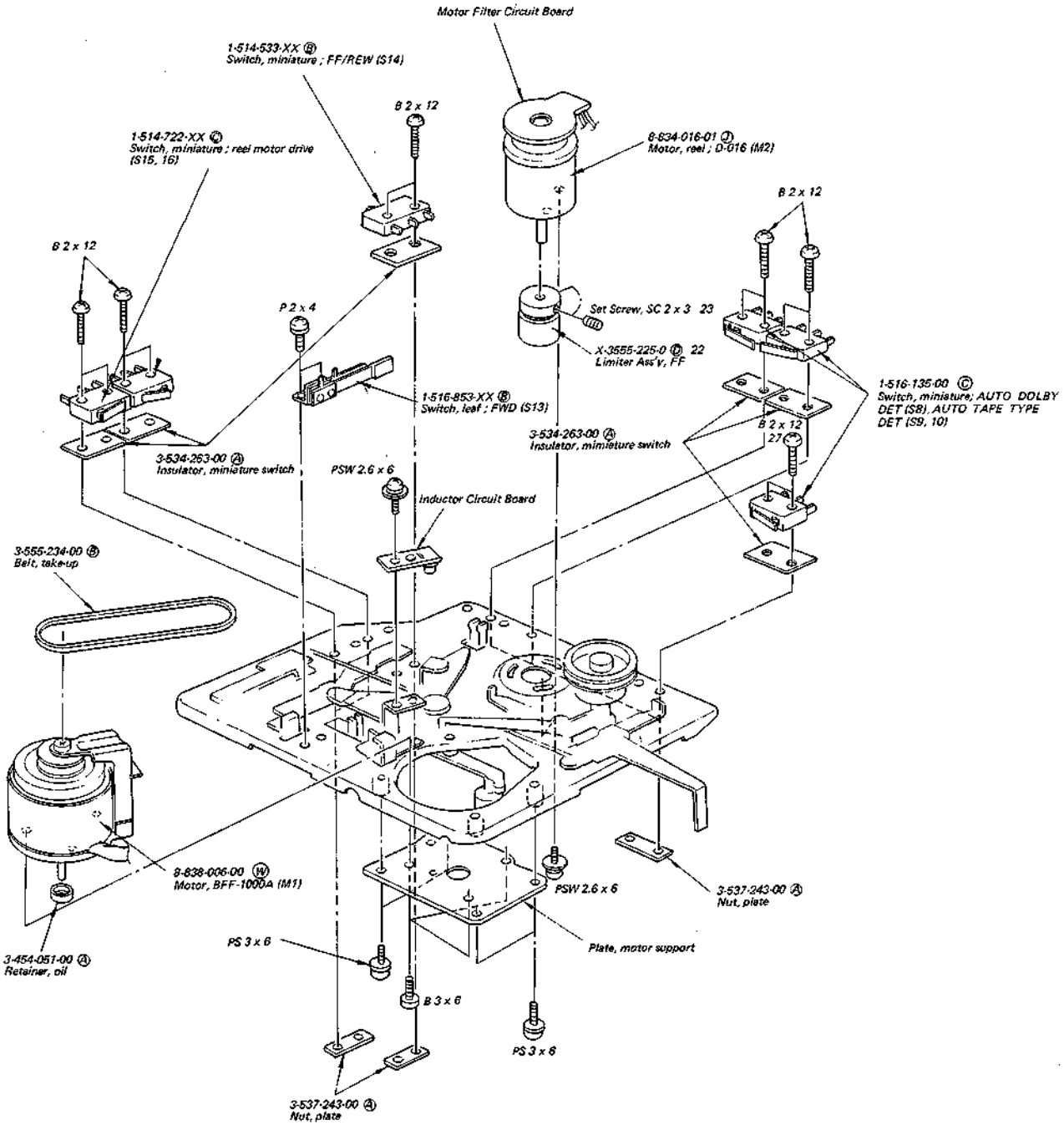
5-5.



Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head
- (□□T) shows the number of coils in spring.
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

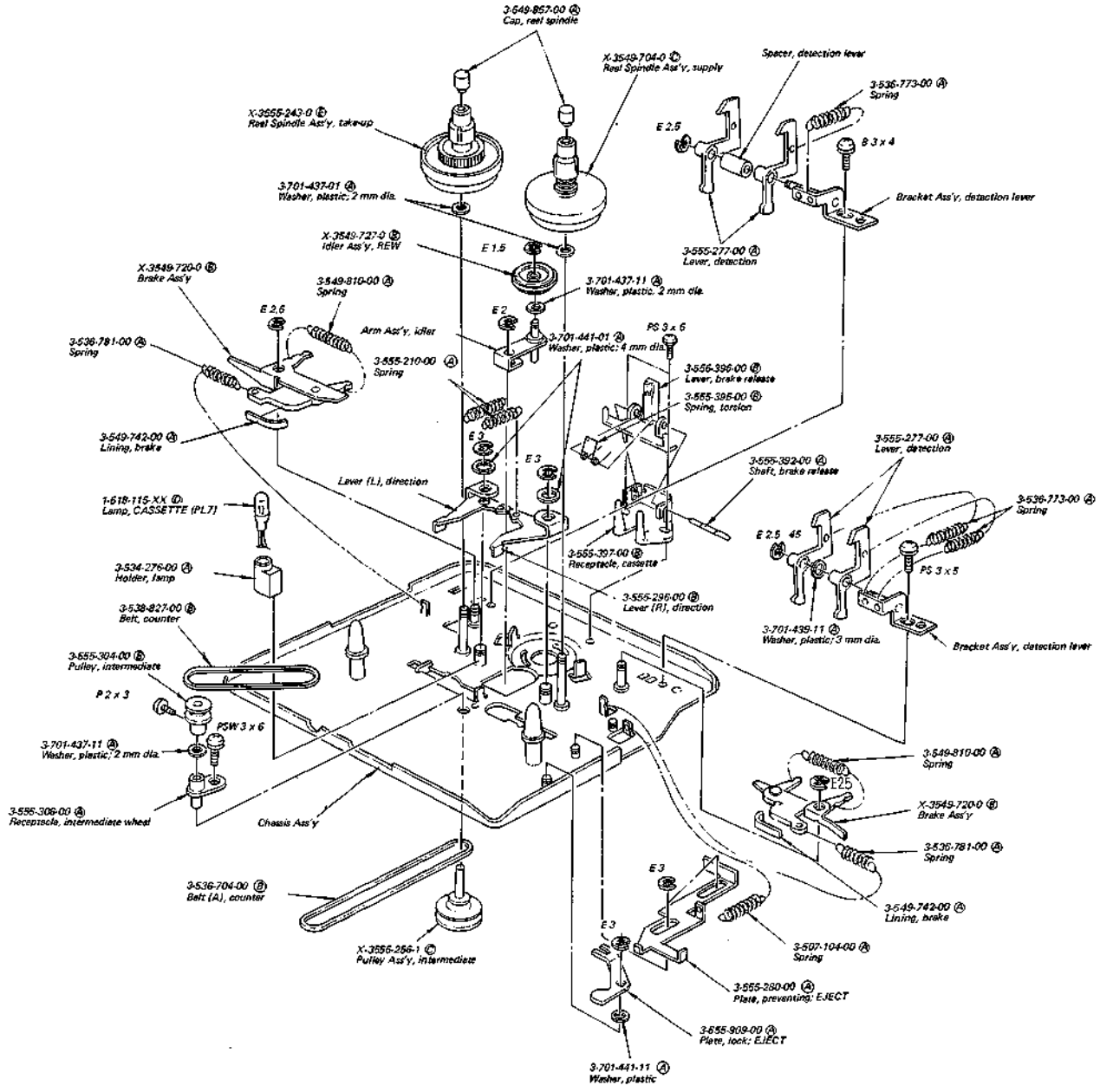
5-6.



Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head
- (□□T) shows the number of coils in spring.
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

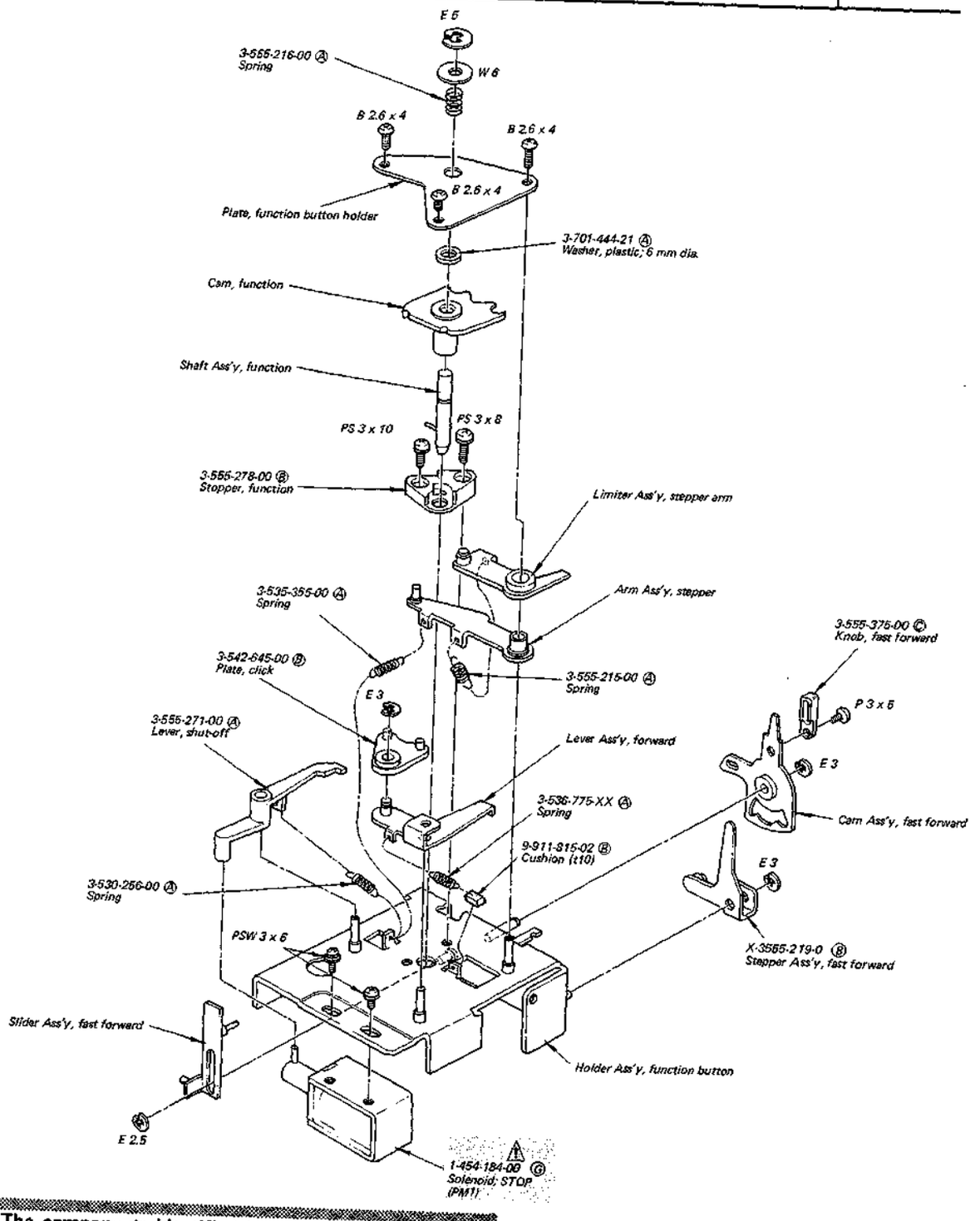
5-7.



Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head
- (□□T) shows the number of coils in spring.
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

5-8.



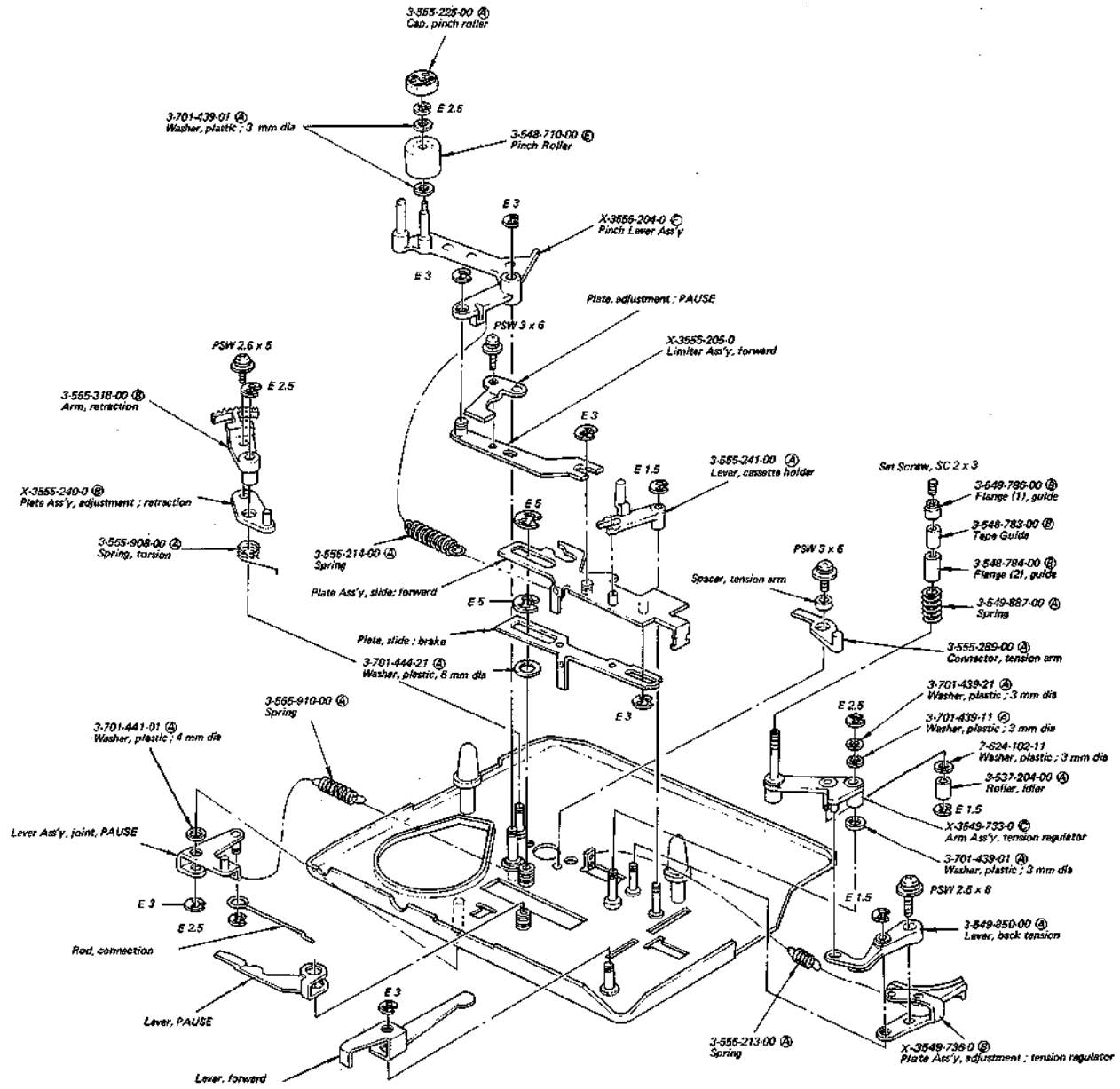
Note: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

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

Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head
- (□□T) shows the number of coils in spring.
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

5-9.



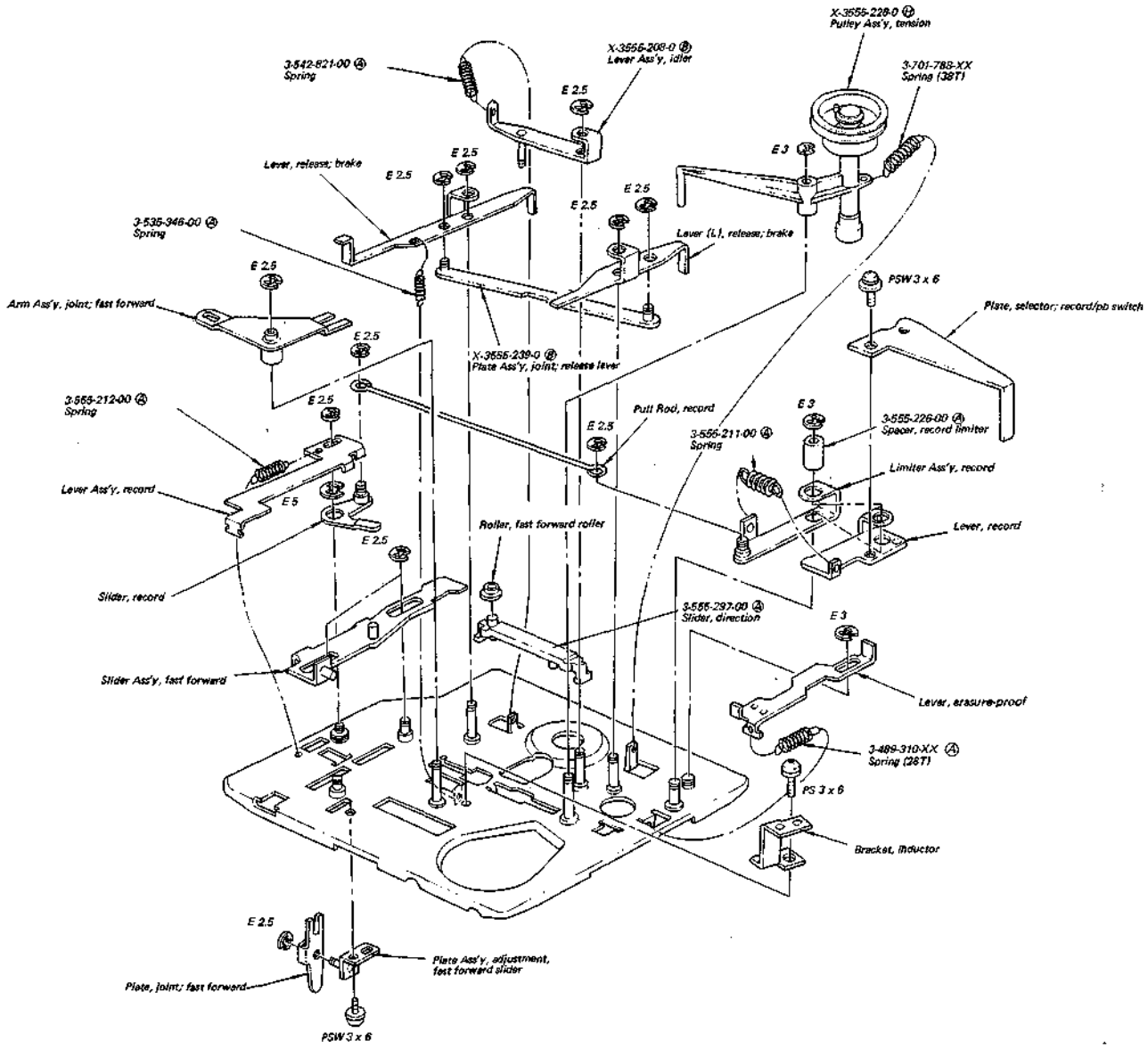
Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (—) = slotted head
- (□□T) shows the number of coils in spring.
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

A B C D

1 2 3 4 5

5-10.



Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (—) = slotted head
- (□□T) shows the number of coils in spring.
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

SECTION 6

ELECTRICAL PARTS LIST

• Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

Ref. No.	Part No.	Description
		SEMICONDUCTORS
		Transistors
⇒ Q101–110 ⇒ Q201–210	8-729-663-47	Ⓑ 2SC1364
Q111, 211	8-727-788-00	Ⓒ 2SA678
Q113, 213	8-760-335-10	Ⓑ 2SC1474
⇒ Q114, 115 ⇒ Q214, 215	8-729-663-47	Ⓑ 2SC1364
⇒ Q301–305 ⇒ Q401–405	8-729-663-47	Ⓑ 2SC1364
Q306–310 Q406–410	8-727-788-00	Ⓒ 2SA678
⇒ Q311, 411	8-729-663-47	Ⓑ 2SC1364
Q312, 412	8-760-335-10	Ⓑ 2SC1474
Q501	8-760-413-10	Ⓒ 2SC1475
Q502, 503	8-729-377-58	Ⓑ 2SC1775
Q504	8-729-203-04	Ⓑ 2SK30A
⇒ Q505, 506	8-729-663-47	Ⓑ 2SC1364
Q507, 508	8-760-335-10	Ⓑ 2SC1474
⇒ Q509	8-729-468-43	Ⓒ 2SA684
Q510, 511	8-727-788-00	Ⓒ 2SA678
⇒ Q512–517	8-729-663-47	Ⓑ 2SC1364
Q518	8-727-788-00	Ⓒ 2SA678
Q519	8-729-203-04	Ⓑ 2SK30A
Q520	8-760-335-10	Ⓑ 2SC1474
⇒ Q521	8-729-468-43	Ⓒ 2SA684
Q522	8-727-788-00	Ⓒ 2SA678
⇒ Q601–606	8-729-663-47	Ⓑ 2SC1364
Q607	8-727-788-00	Ⓒ 2SA678
⇒ Q608	8-729-663-47	Ⓑ 2SC1364
Q609	8-763-213-00	Ⓒ 2SA861
Q610	8-760-335-10	Ⓑ 2SC1474
⇒ Q611–614	8-729-663-47	Ⓑ 2SC1364
Q615	8-760-413-10	Ⓒ 2SC1475
⇒ Q616, 617	8-729-663-47	Ⓑ 2SC1364
Q618	8-760-413-10	Ⓒ 2SC1475
⇒ Q619, 620	8-729-663-47	Ⓑ 2SC1364
Q621	8-760-335-10	Ⓑ 2SC1474
Q622	8-729-247-33	Ⓒ 2SA473
⇒ Q623–630	8-729-663-47	Ⓑ 2SC1364
Q631	8-760-335-10	Ⓑ 2SC1474
		ICs
IC301, 401	8-759-271-40	Ⓒ TA7140P
IC501	8-750-670-00	Ⓚ CX067
		Diodes
⇒ D102, 202	8-719-422-21	Ⓐ 1T22AM
D103, 203	8-719-815-55	Ⓐ 1S1555
⇒ D104, 204	8-719-422-21	Ⓐ 1T22AM
⇒ D105, 205	8-719-815-55	Ⓐ 1S1555
D106, 206	8-719-122-00	Ⓑ VD1220
⇒ D501	8-719-931-08	Ⓑ EQB01-08
⇒ D502	8-719-931-15	Ⓑ EQB01-15
⇒ D503–507	8-719-815-55	Ⓐ 1S1555
⇒ D508	8-719-200-02	Ⓑ 10E2
⇒ D509	8-719-930-11	Ⓑ EQB01-11Z
⇒ D510	8-719-815-55	Ⓐ 1S1555
⇒ D511	⚠ 8-719-200-02	Ⓑ 10E2
⇒ D512	8-719-931-06	Ⓑ EQB01-06
⇒ D513	8-719-931-05	Ⓑ EQB01-05
⇒ D514–517	8-719-815-55	Ⓐ 1S1555
D518	8-719-900-24	Ⓑ SLP24B
⇒ D519–521	8-719-815-55	Ⓐ 1S1555
⇒ D601–603	8-719-815-55	Ⓐ 1S1555
⇒ D604	8-719-931-08	Ⓑ EQB01-08
⇒ D605–607	8-719-815-55	Ⓐ 1S1555
⇒ D608	8-719-931-07	Ⓑ EQB01-07
⇒ D609–611	8-719-815-55	Ⓐ 1S1555
⇒ D612, 613	8-719-200-02	Ⓑ 10E2

• ⇒: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

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

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

• Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

Ref. No.	*Part No.*	*Description*		
		COILS		
L301, 401	1-407-878-00	Ⓑ 27mH, microinductor		
L302, 402	1-407-938-00	Ⓑ 27mH, variable		
L303, 403	1-407-213-XX	Ⓑ 1.5mH, microinductor		
L304, 404	1-407-490-00	Ⓑ 680μH, microinductor		
L305, 405	1-407-198-XX	Ⓑ 2.2mH, microinductor		
L306, 406	1-407-878-00	Ⓑ 27mH, microinductor		
L501	1-407-939-00	Ⓑ Saturable Inductor		
L601, 602	1-407-661-XX	Ⓐ 470μH, microinductor		
L603, 604	1-407-519-00	Ⓑ 8μH, microinductor		
		CAPACITORS		

All capacitors are in μF and electrolytic unless otherwise noted. 50 WV or less are not indicated except for electrolytics.
pF = μμF

C101, 201	1-121-410-11	Ⓐ 47	25 V	
C102, 202	1-102-980-11	Ⓐ 270p		ceramic
C103, 203	1-131-187-11	Ⓑ 100	3.15 V	tantalum
C104, 204	1-102-832-11	Ⓐ 330p		ceramic
C105, 205	1-102-975-11	Ⓐ 100p		ceramic
C106, 206	1-131-427-11	Ⓔ 220	6.3 V	tantalum
C107, 207	1-102-975-11	Ⓐ 100p		ceramic
C108, 208	1-131-187-11	Ⓑ 100	3.15 V	tantalum
C109, 209	1-130-117-11	Ⓑ 0.033	100 V	polyethylene
C110, 210	1-131-212-11	Ⓑ 0.33	35 V	tantalum
C111, 211	1-121-398-11	Ⓐ 10	25 V	
C112, 212	1-131-197-11	Ⓑ 3.3	16 V	tantalum
C113, 213	1-102-975-11	Ⓐ 100p		ceramic
C114, 214	1-101-881-11	Ⓐ 47p		ceramic
C115, 215	1-121-402-11	Ⓐ 33	10 V	
C116, 216	1-131-187-11	Ⓐ 100	3.15 V	tantalum
C117, 217, C118, 218	1-121-398-11	Ⓐ 10	25 V	
C119, 219	1-121-416-11	Ⓐ 100	25 V	
C120, 220	1-121-404-11	Ⓐ 33	25 V	
C121, 221	1-129-701-11	Ⓑ 0.01	100 V	polyethylene
C122, 222	1-129-896-11	Ⓑ 0.012	100 V	polyethylene
C123, 223	1-129-899-11	Ⓑ 0.056	100 V	polyethylene
C124, 224	1-108-573-12	Ⓐ 0.0056		mylar
C125, 225	1-121-651-11	Ⓐ 10	16 V	
C126, 226	1-129-794-11	Ⓑ 0.0033	100 V	polyethylene
C127, 227	1-131-197-11	Ⓑ 3.3	16 V	tantalum
C128, 228	1-131-196-11	Ⓑ 2.2	20 V	tantalum
C129, 219	1-102-125-11	Ⓐ 0.0047		ceramic
C130, 230	1-121-651-11	Ⓐ 10	16 V	
C131, 231	1-102-975-11	Ⓐ 100p		ceramic
C132, 232	1-131-201-11	Ⓑ 22	16V	tantalum
C133, 233	1-121-414-11	Ⓐ 100	10 V	
C134, 234	1-121-651-11	Ⓐ 10	16 V	
C135, 235	1-121-726-11	Ⓐ 0.47	50 V	
C136, 236	1-121-416-11	Ⓐ 100	25 V	
C137, 237	1-121-395-11	Ⓐ 4.7	25 V	
C138, 238	1-102-943-11	Ⓐ 6p		ceramic
C301, 401	1-121-410-11	Ⓐ 47	25 V	
C302, 402	1-131-197-11	Ⓑ 3.3	16 V	tantalum
C303, 403, C307, 407	1-102-115-11	Ⓐ 560p		ceramic
C308, 408	1-101-888-11	Ⓐ 68p		ceramic
C309, 409	1-121-413-11	Ⓐ 100	6.3 V	
C310–312, C410–412	1-121-395-11	Ⓐ 4.7	25 V	
C313, 413	1-121-413-11	Ⓐ 100	6.3 V	
C314, 414	1-131-196-11	Ⓑ 2.2	20 V	tantalum
C315, 415	1-131-197-11	Ⓑ 3.3	16 V	tantalum
C317, 417	1-121-912-11	Ⓐ 1	50 V	
C318, 418	1-102-115-11	Ⓐ 560p		ceramic
C319, 419	1-121-398-11	Ⓐ 10	25 V	
C320, 420	1-102-604-11	Ⓐ 33p		ceramic
C321, 421	1-108-569-12	Ⓐ 0.0039		mylar
C322, 422	1-130-023-11	Ⓐ 0.0027		polyethylene
C323, 423	1-108-563-12	Ⓐ 0.0022		mylar
C324, 424	1-121-402-11	Ⓐ 33	10 V	
C325, 425	1-131-203-11	Ⓑ 4.7	20 V	tantalum
C326, 426	1-131-212-11	Ⓑ 0.33	35 V	tantalum
C327, 427	1-131-427-11	Ⓔ 220	6.3 V	tantalum
C328, 428	1-121-398-11	Ⓐ 10	25 V	
C329, 429	1-121-352-11	Ⓐ 47	10 V	
C330, 430	1-107-159-11	Ⓐ 33p	500 V	silvered mica

• Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

Ref. No.	Part No.	Description		
C331, 431	1-101-361-11	Ⓐ 150p		ceramic
C332, 432	1-121-422-11	Ⓑ 220	25 V	
C333, 433	1-108-591-12	Ⓐ 0.033		mylar
C334, 434	1-108-599-12	Ⓐ 0.068		mylar
C335, 435	1-108-591-12	Ⓐ 0.033		mylar
C336, 436	1-108-585-12	Ⓐ 0.018		mylar
C337, 437	1-121-391-11	Ⓐ 1	50 V	
C338, 438	1-102-115-11	Ⓐ 560p		ceramic
C339, 439	1-121-402-11	Ⓐ 33	10 V	
C340, 440	1-121-402-11	Ⓐ 33	10 V	
C341, 441	1-102-074-11	Ⓐ 0.001		ceramic
C342, 442	1-161-019-11	Ⓐ 0.033		ceramic (semiconductor)
C343, 443	1-121-415-11	Ⓐ 100	16 V	
C344, 444	1-102-967-11	Ⓐ 22p		ceramic
C501	1-121-416-11	Ⓐ 100	25 V	
C502	1-131-232-11	Ⓑ 4.7	25 V	tantalum
C503	1-121-416-11	Ⓑ 100	25 V	
C504	1-121-414-11	Ⓐ 100	10 V	
C505, 506	1-161-019-11	Ⓐ 0.033		ceramic (semiconductor)
C507	1-121-392-11	Ⓑ 3.3	25 V	
C508	1-121-651-11	Ⓐ 10	16 V	
C509, 510	1-141-010-XX	Ⓑ trimmer, 20–120p; REC-BIAS		
C511	1-121-805-11	Ⓑ 330	10 V	
C512	1-121-751-11	Ⓐ 330	6.3 V	
C513	1-121-426-11	Ⓑ 470	16 V	
C514	1-121-409-11	Ⓐ 47	16 V	
C515	1-121-352-11	Ⓐ 47	10 V	
C516	1-121-733-11	Ⓑ 470	25 V	
C517	1-121-404-11	Ⓑ 33	25 V	
C518	1-121-398-11	Ⓐ 10	25 V	
C519	1-121-416-11	Ⓐ 100	25 V	
C520	1-121-981-11	Ⓑ 220	6.3 V	
C521	1-121-426-11	Ⓑ 470	16 V	
C522	1-102-074-11	Ⓐ 0.001		ceramic
C523	1-121-391-11	Ⓐ 1	50 V	
C524, 525	1-121-402-11	Ⓐ 33	10 V	

Ref. No.	Part No.	Description		
C526	1-121-415-11	Ⓐ 100	16 V	
C527	1-121-986-11	Ⓐ 2.2	50 V	
C528-530	1-101-455-11	Ⓐ 0.001		ceramic
C531	1-102-954-11	Ⓐ 10p		ceramic
C601	1-108-579-12	Ⓐ 0.01		mylar
C602	1-121-726-11	Ⓐ 0.47	50 V	
C603-605	1-121-651-11	Ⓐ 10	16 V	
C606	1-102-836-11	Ⓐ 470p		ceramic
C607	1-130-140-11	Ⓑ 0.039	100 V	polyethylene
C609, 610	1-131-211-11	Ⓑ 0.22	35 V	tantalum
C611	1-108-587-12	Ⓐ 0.022		mylar
C612	1-121-395-11	Ⓐ 4.7	25 V	
C613	1-121-651-11	Ⓐ 10	16 V	
C614, 615	1-102-832-11	Ⓐ 330p		ceramic
C616	1-121-726-11	Ⓐ 0.47	50 V	
C617	1-108-603-12	Ⓑ 0.1		mylar
C618	1-121-726-11	Ⓐ 0.47	50 V	
C619	1-108-603-12	Ⓑ 0.1		mylar
C620	1-121-726-11	Ⓐ 0.47	50 V	
C621	1-108-603-12	Ⓑ 0.1		mylar
C622	1-121-450-11	Ⓐ 2.2	50 V	
C623	1-121-395-11	Ⓐ 4.7	25 V	elect
C624	1-121-651-11	Ⓐ 10	16 V	
C625, 626	1-102-832-11	Ⓐ 330p		ceramic
C627	1-102-074-11	Ⓐ 0.001		ceramic
C628	1-131-212-11	Ⓑ 0.33	35 V	tantalum
C629	1-121-395-11	Ⓐ 4.7	25 V	
C630	1-121-651-11	Ⓐ 10	16 V	
C631	1-121-392-11	Ⓐ 3.3	25 V	elect
C632	1-131-197-11	Ⓑ 3.3	16 V	tantalum
C633	1-121-651-11	Ⓐ 10	16 V	
C634	1-102-129-11	Ⓐ 0.01		ceramic

RESISTORS

All resistors are in ohms. Common ¼W carbon resistors are omitted. Refer to the list on page 51 for their part numbers. All adjustable and variable resistors have characteristic curve B, unless otherwise noted.
kΩ = 1000Ω, MΩ = 1000 kΩ

R106, 206	1-214-120-11	Ⓐ 330	¼W	metal oxide

• Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

Ref. No.	Part No.	Description		
R109, 209	1-214-136-11	Ⓐ 1.5 k	¼W	metal oxide
R110, 210	1-214-158-11	Ⓐ 12 k	¼W	metal oxide
R118, 218	1-214-124-11	Ⓐ 470	¼W	metal oxide
R126, 226	1-214-137-11	Ⓐ 1.6 k	¼W	metal oxide
R128, 228	1-214-119-11	Ⓐ 300	¼W	metal oxide
R129, 229	1-214-168-11	Ⓐ 33 k	¼W	metal oxide
R137, 237	1-214-151-11	Ⓐ 6.2 k	¼W	metal oxide
R140, 240	1-214-119-11	Ⓐ 300	¼W	metal oxide
R143, 243	1-214-168-11	Ⓐ 33 k	¼W	metal oxide
R145, 245	1-214-150-11	Ⓐ 5.6 k	¼W	metal oxide
R146, 246	1-214-168-11	Ⓐ 33 k	¼W	metal oxide
R154, 254	1-214-154-11	Ⓐ 8.2 k	¼W	metal oxide
R160, 260	1-214-128-11	Ⓐ 680	¼W	metal oxide
R161, 261	1-214-152-11	Ⓐ 6.8 k	¼W	metal oxide
R302, 402	1-214-178-11	Ⓐ 82 k	¼W	metal oxide
R303, 403	1-214-176-11	Ⓐ 68 k	¼W	metal oxide
R346, 446	1-214-140-11	Ⓐ 2.2 k	¼W	metal oxide
R501	1-214-154-11	Ⓐ 8.2 k	¼W	metal oxide
R502	1-214-156-11	Ⓐ 10 k	¼W	metal oxide
R536	1-244-853-11	Ⓐ 150	¼W	carbon
R550	1-214-154-11	Ⓐ 8.2	¼W	metal oxide
R611	1-214-170-11	Ⓐ 39 k	¼W	metal oxide
R614	1-214-156-11	Ⓐ 10 k	¼W	metal oxide
R615	1-214-157-11	Ⓐ 11 k	¼W	metal oxide
R660	1-212-353-11	Ⓐ 0.27	1W	metal oxide
RV 101, 201 / 102, 202	1-224-253-XX	Ⓑ 22 k, adjustable ; PB LEVEL, REC LEVEL		
RV301, 401	1-226-139-00	Ⓔ 20 k, variable ; REC LEVEL		
RV302, 402	1-224-249-XX	Ⓑ 1 k, adjustable ; PEAK METER (10 VU)		
RV303, 403	1-224-250-XX	Ⓑ 2.2 k, adjustable ; PEAK METER (0 VU)		
RV304, 404	1-226-140-00	Ⓓ 20 k, variable ; VOL		
RV501, 502	1-224-252-XX	Ⓑ 10 k, adjustable ; B+, BATTERY		
RV601	1-224-493-00	Ⓑ 10 k, adjustable ; TAPE SPEED		

SWITCHES

S1	1-516-263-00	Ⓒ Slide, REC/PB
S2	1-516-686-00	Ⓑ lever-slide, TIMING
S3, 4	1-552-281-00	Ⓓ lever-slide, MIC ATT, LIMITER
S5	1-552-282-00	Ⓒ pushbutton, MPX FILTER
S6, 7	1-552-280-00	Ⓒ pushbutton, BATTERY, LIGHT
S8	1-516-135-00	Ⓒ miniature, AUTO DOLBY DET
S9	1-516-135-00	Ⓒ miniature, AUTO TAPE TYPE DET
S10	1-516-135-00	Ⓒ miniature, AUTO TAPE TYPE DET
S11	1-516-777-XX	Ⓒ slide, PEAK HOLD
S12	1-514-986-00	Ⓑ leaf, PAUSE
S13	1-516-853-XX	Ⓑ leaf, FWD
S14	1-514-533-XX	Ⓑ miniature, FF/REW
S15, 16	1-514-722-XX	Ⓒ miniature, REEL MOTOR DRIVE

JACKS

CNJ1	1-507-447-XX	Ⓑ miniature, DC IN 12 V
CNJ 101, 102 / 201, 202	1-507-560-00	Ⓒ phono, LINE IN, LINE OUT
J101, 201	1-507-552-00	Ⓒ phone, MIC
J301	1-507-552-00	Ⓒ phone, HEADPHONES

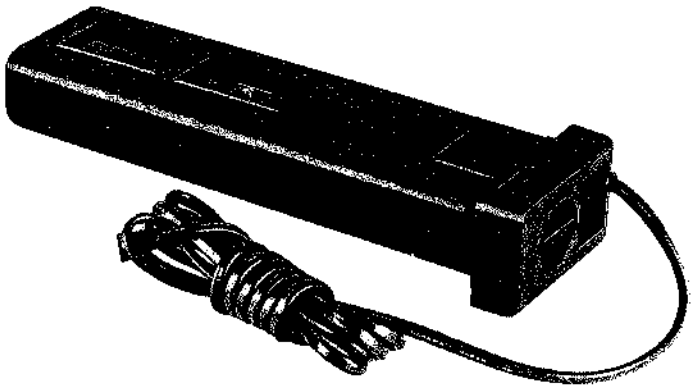
MISCELLANEOUS

CP501	⚠ 1-464-076-00	Ⓚ DC-DC Converter
CP502	1-464-077-00	Ⓖ Bias OSC Unit
EH301	8-825-696-10	Ⓗ Head, erase; EF172-65C
M1	8-838-006-00	Ⓦ Motor, capstan; BFF-1000A
M2	8-834-016-01	Ⓙ Motor, reel; D-016
ME101	1-520-326-11	Ⓗ Meter, level
ME201	1-520-326-21	Ⓗ Meter, level
PL1, 2	1-518-115-XX	Ⓓ Lamp, meter 6 V 35mA
PL3	1-518-115-XX	Ⓓ Lamp, DOLBY NR
PL4-6	1-518-115-XX	Ⓓ Lamp, TYPE I, II, III
PL7	1-518-115-XX	Ⓓ Lamp, CASSETTE 6 V 35mA
PM1	⚠ 1-454-184-00	Ⓗ Solenoid, STOP
RPH101	8-825-675-00	Ⓞ Head, rec/pb; PF169-6502A
SP	1-502-381-XX	Ⓔ Speaker
	1-535-116-21	Ⓐ Terminal with base 3P
	1-535-121-21	Ⓐ Terminal Post, 8P
	1-548-508-31	Ⓙ Tape Counter

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

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

[AC-26]



AC POWER ADAPTOR

SPECIFICATIONS

AC Input Voltage:	220 V ac, 50 Hz (AEP Model) 240 V ac, 50 Hz (UK Model) 120 V ac, 60 Hz (Canadian Model)
DC Output Voltage:	12 V
DC Output Current:	400 mA (nominal)
Dimensions:	80 (w) x 55 (h) x 285 (d) mm 3⅛ (w) x 2⅛ (h) x 11¼ (d) inches (from cord-bushing to other side)
Weight:	725 g, 1 lb 10 oz

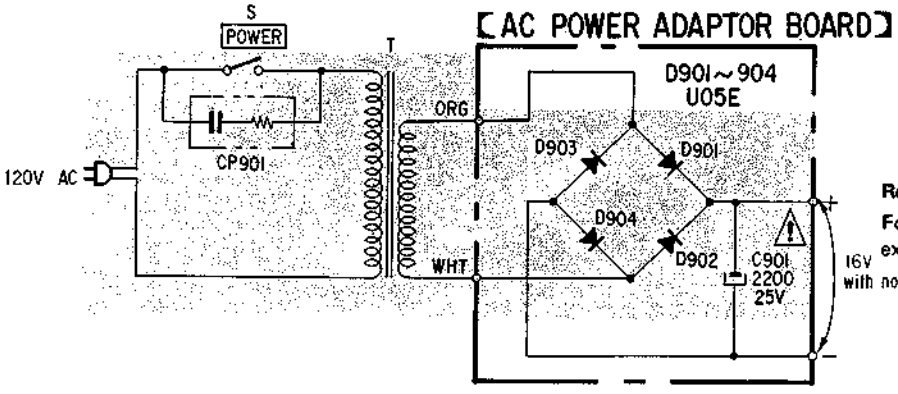
SECTION 1
DIAGRAMS

[Canadian Model]

A | B | C | D

1 2 3 4 5

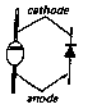
[SCHEMATIC DIAGRAM]



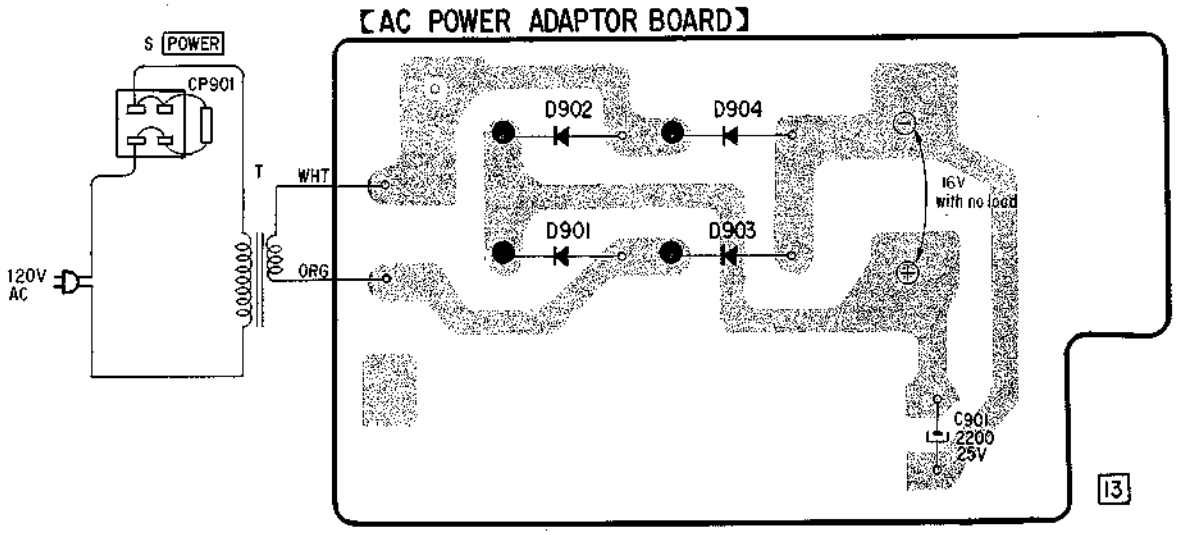
Replacement Semiconductors

For replacement, use semiconductors except in ( ).

D901 – 904 U05G (U05E)



[MOUNTING DIAGRAM]



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

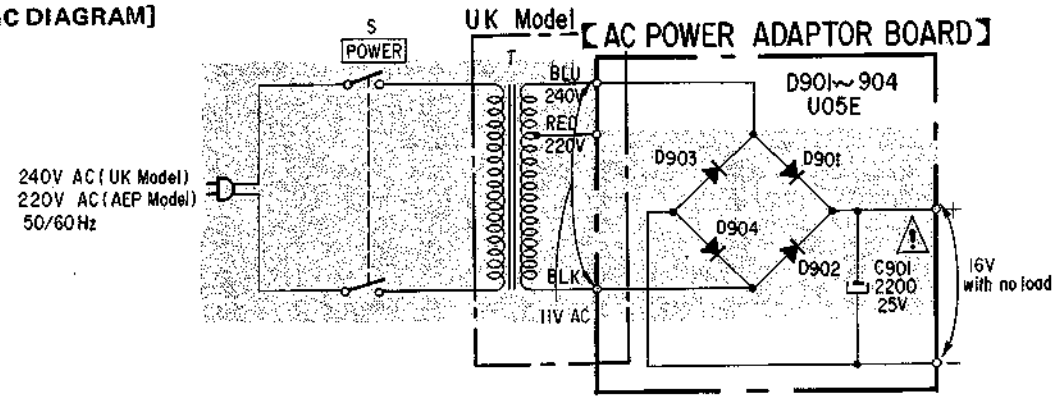
Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

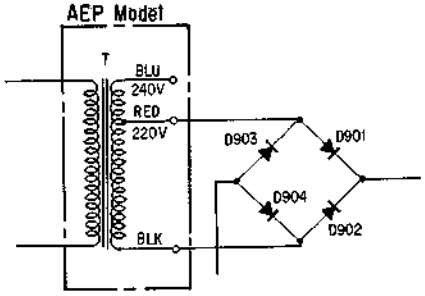
[AEP, UK Model]

A B C D

1 2 3 4 5

[SCHEMATIC DIAGRAM]

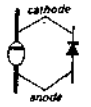




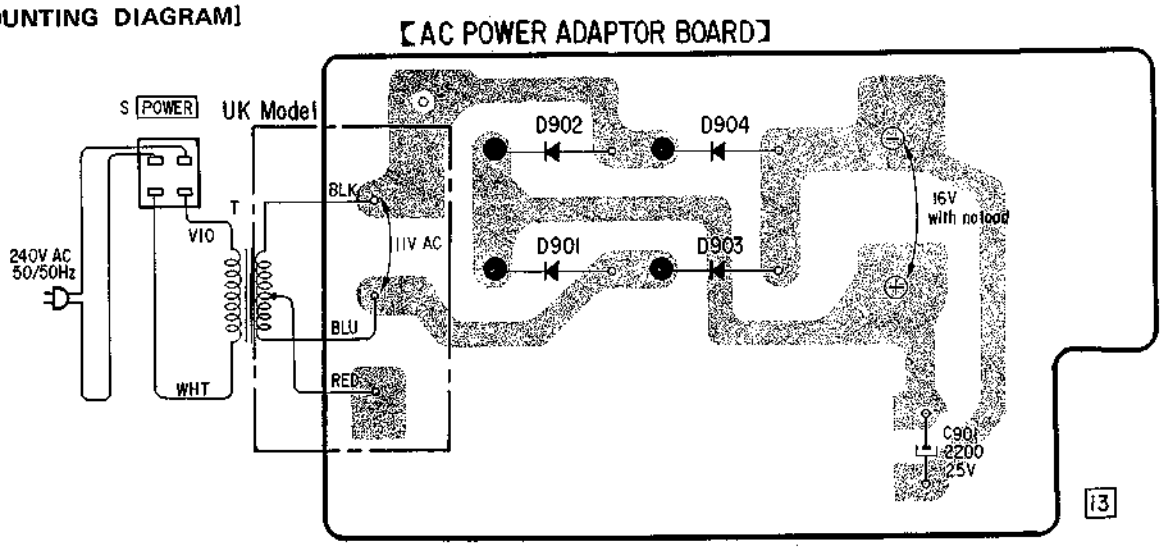
Replacement Semiconductors

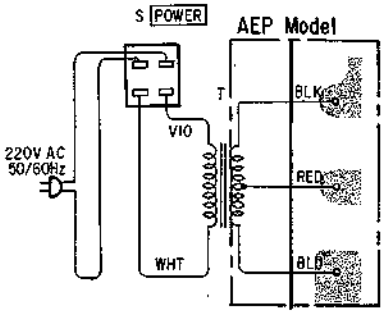
For replacement, use semiconductors except in ( ).

D901—904 U05G (U05E)



[MOUNTING DIAGRAM]





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

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

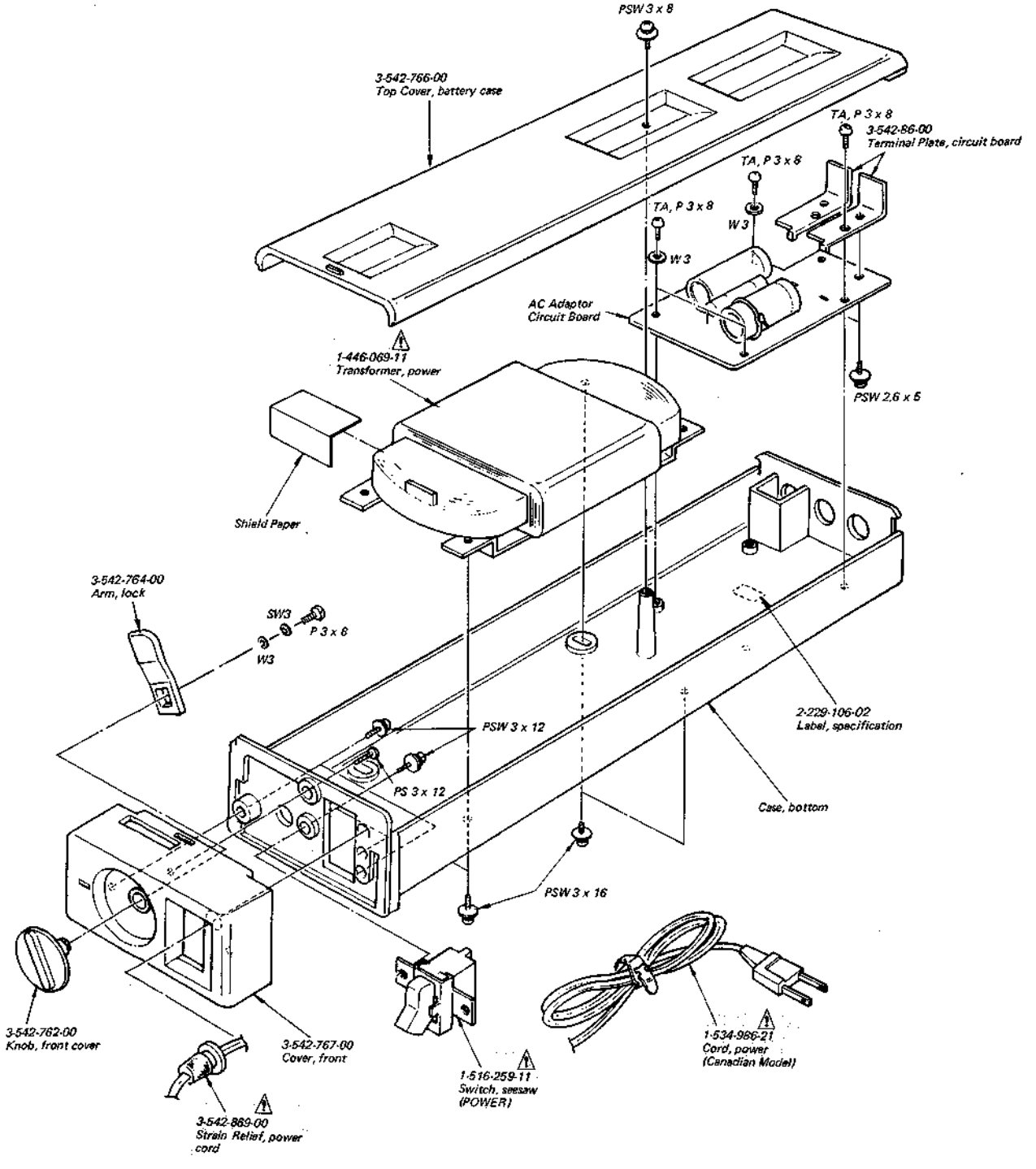
SECTION 2

EXPLODED VIEWS

A B C D

1 2 3 4 5

[Canadian Model]



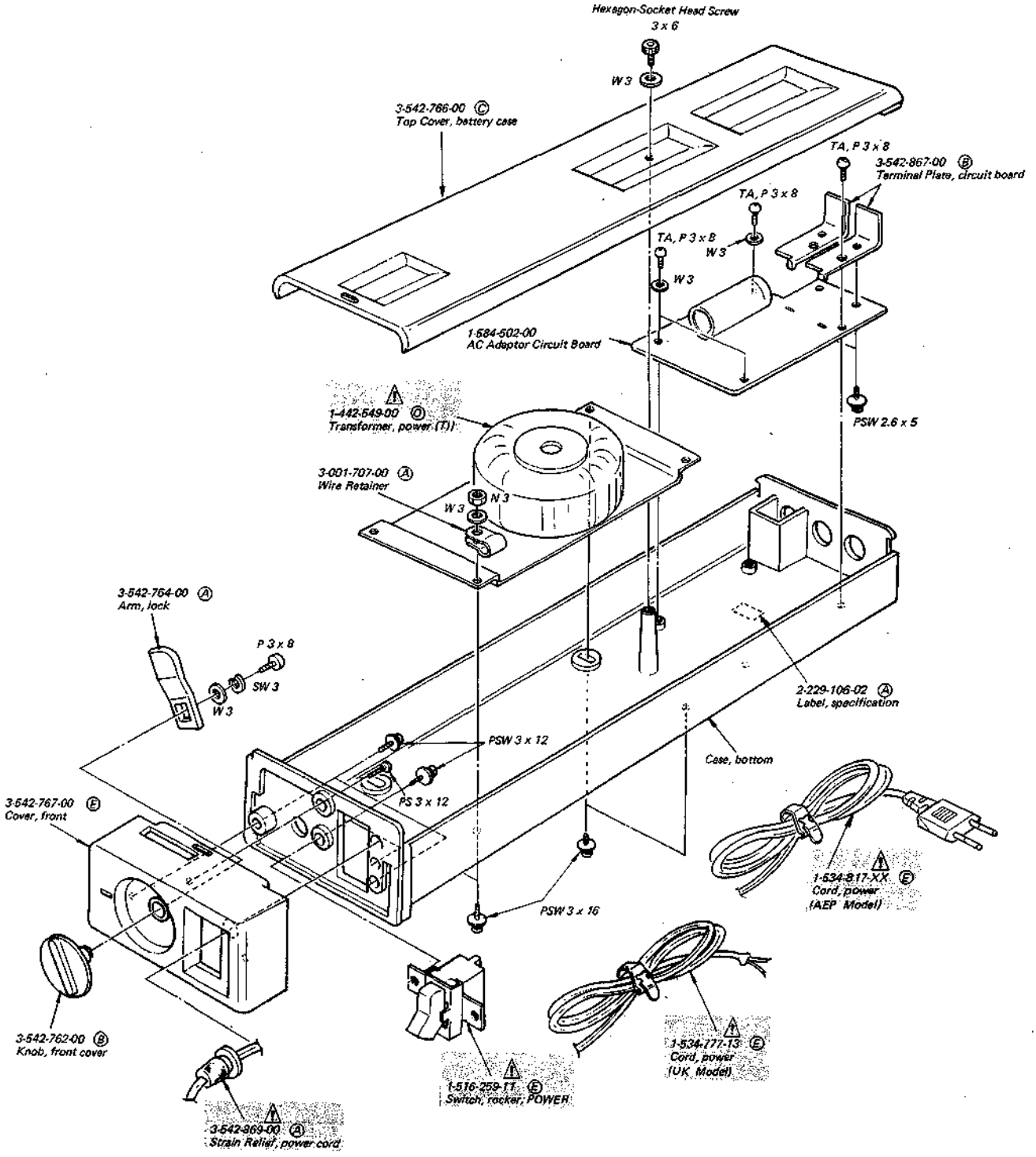
Note: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

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

Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head

[AEP, UK Model]



Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (—) = slotted head
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

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

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

SECTION 3

ELECTRICAL PARTS LIST

Ref. No.	*Part No.*	*Description*
C901	⚠1-123-047-11	Ⓒ Capacitor, electrolytic; 2200 μF, 25 V
CP901	⚠1-231-326-21	Spark Killer (Canadian Model)
⇒D901–904	⚠8-719-911-55	Ⓓ Diode, U05G
S	⚠1-516-259-11	Ⓔ Switch, rocker; POWER
T	⚠1-446-069-11	Transformer, power (Canadian Model)
T	⚠1-442-549-13	Ⓞ Transformer, power (AEP, UK Model)
	⚠1-534-986-21	Cord, power (Canadian Model)
	⚠1-534-773-13	Ⓔ Cord, power (UK Model)
	⚠1-534-817-XX	Ⓔ Cord, power (AEP Model)

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

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

- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

⇒: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

ACCESSORIES AND PACKING MATERIALS

Part No.	*Description*
X-3701-105-1	Ⓐ Cleaning Tip Ass'y, head
2-040-910-00	Ⓐ Bag, plastic (for AC adaptor)
3-555-921-00	Ⓑ Box, accessories
3-555-922-00	Ⓑ Cushion, upper
3-555-923-00	Ⓑ Cushion, lower
3-555-925-00	Ⓑ Bag, plastic
3-555-931-00	Ⓐ Holder, eject
3-770-414-11	Ⓚ Manual, instruction

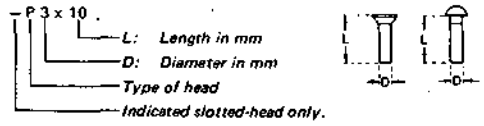
1/4 WATT CARBON RESISTORS Ⓐ

Note: Circled letter Ⓐ is applicable to European model only.

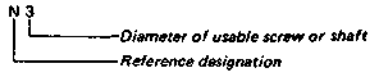
Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
1.0	1-244-601-11	10	1-244-625-11	100	1-244-649-11	1.0k	1-244-673-11	10k	1-244-697-11	100k	1-244-721-11	1.0M	1-244-745-11
1.1	1-244-602-11	11	1-244-626-11	110	1-244-650-11	1.1k	1-244-674-11	11k	1-244-698-11	110k	1-244-722-11	1.1M	1-244-746-11
1.2	1-244-603-11	12	1-244-627-11	120	1-244-651-11	1.2k	1-244-675-11	12k	1-244-699-11	120k	1-244-723-11	1.2M	1-244-747-11
1.3	1-244-604-11	13	1-244-628-11	130	1-244-652-11	1.3k	1-244-676-11	13k	1-244-700-11	130k	1-244-724-11	1.3M	1-244-748-11
1.5	1-244-605-11	15	1-244-629-11	150	1-244-653-11	1.5k	1-244-677-11	15k	1-244-701-11	150k	1-244-725-11	1.5M	1-244-749-11
1.6	1-244-606-11	16	1-244-630-11	160	1-244-654-11	1.6k	1-244-678-11	16k	1-244-702-11	160k	1-244-726-11	1.6M	1-244-750-11
1.8	1-244-607-11	18	1-244-631-11	180	1-244-655-11	1.8k	1-244-679-11	18k	1-244-703-11	180k	1-244-737-11	1.8M	1-244-751-11
2.0	1-244-608-11	20	1-244-632-11	200	1-244-656-11	2.0k	1-244-680-11	20k	1-244-704-11	200k	1-244-728-11	2.0M	1-244-752-11
2.2	1-244-609-11	22	1-244-633-11	220	1-244-657-11	2.2k	1-244-681-11	22k	1-244-705-11	220k	1-244-729-11	2.2M	1-244-753-11
2.4	1-244-610-11	24	1-244-634-11	240	1-244-658-11	2.4k	1-244-682-11	24k	1-244-706-11	240k	1-244-730-11	2.4M	1-244-754-11
2.7	1-244-611-11	27	1-244-635-11	270	1-244-659-11	2.7k	1-244-683-11	27k	1-244-707-11	270k	1-244-731-11	2.7M	1-244-755-11
3.0	1-244-612-11	30	1-244-636-11	300	1-244-660-11	3.0k	1-244-684-11	30k	1-244-708-11	300k	1-244-732-11	3.0M	1-244-756-11
3.3	1-244-613-11	33	1-244-637-11	330	1-244-661-11	3.3k	1-244-685-11	33k	1-244-709-11	330k	1-244-733-11	3.3M	1-244-757-11
3.6	1-244-614-11	36	1-244-638-11	360	1-244-662-11	3.6k	1-244-686-11	36k	1-244-710-11	360k	1-244-734-11	3.6M	1-244-758-11
3.9	1-244-615-11	39	1-244-639-11	390	1-244-663-11	3.9k	1-244-687-11	39k	1-244-711-11	390k	1-244-735-11	3.9M	1-244-759-11
4.3	1-244-616-11	43	1-244-640-11	430	1-244-664-11	4.3k	1-244-688-11	43k	1-244-712-11	430k	1-244-736-11	4.3M	1-244-760-11
4.7	1-244-617-11	47	1-244-641-11	470	1-244-665-11	4.7k	1-244-689-11	47k	1-244-713-11	470k	1-244-737-11	4.7M	1-244-761-11
5.1	1-244-618-11	51	1-244-642-11	510	1-244-666-11	5.1k	1-244-690-11	51k	1-244-714-11	510k	1-244-738-11	5.1M	1-244-762-11
5.6	1-244-619-11	56	1-244-643-11	560	1-244-667-11	5.6k	1-244-691-11	56k	1-244-715-11	560k	1-244-739-11		
6.2	1-244-620-11	62	1-244-644 11	620	1-244-668-11	6.2k	1-244-692-11	62k	1-244-716-11	620k	1-244-740-11		
6.8	1-244-621-11	68	1-244-645-11	680	1-244-669-11	6.8k	1-244-693-11	68k	1-244-717-11	680k	1-244-741-11		
7.5	1-244-622-11	75	1-244-646-11	750	1-244-670-11	7.5k	1-244-694-11	75k	1-244-718-11	750k	1-244-742-11		
8.2	1-244-623-11	82	1-244-647-11	820	1-244-671-11	8.2k	1-244-695-11	82k	1-244-719-11	820k	1-244-743-11		
9.1	1-244-624-11	91	1-244-648-11	910	1-244-672-11	9.1k	1-244-696-11	91k	1-244-720-11	910k	1-244-744-11		

HARDWARE NOMENCLATURE

Screw:



Nut, Washer, Retaining ring:



Reference Designation	Shape	Description	Remarks
SCREWS			
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		braizer-head screw	

Reference Designation	Shape	Description	Remarks
SELF-TAPPING SCREWS			
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
SET SCREWS			
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
NUT			
N		nut	
WASHERS			
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
RETAINING RINGS			
E		retaining ring	
G		grip-type retaining ring	