

XR-1800/1803/1804

SERVICE MANUAL

AEP Model

UK Model

E Model

XR-1800

East European Model

XR-1803

Saudi Arabia Model

XR-1804



Photo: XR-1804

Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MG-36SZ9-32

SPECIFICATIONS

Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.13 % (WRMS)
Frequency response	30 – 15,000 Hz
Signal-to-noise ratio	55 dB

Tuner section

FM

XR-1800: AEP, UK:

Tuning range	87.5 – 108.0 MHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	12 dBf
Selectivity	70 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	0.5% (stereo), 0.3% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	2 dB

XR-1800: E/1804:

Tuning range	FM tuning interval: 50 kHz/200 kHz switchable 87.5 – 108.0 MHz (at 50 kHz step) 87.5 – 107.9 MHz (at 200 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	12 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	60 dB (stereo), 65 dB (mono)
Harmonic distortion at 1 kHz	0.6% (stereo), 0.4% (mono)
Separation	35 dB at 1 kHz

Frequency response	30 – 15,000 Hz
Capture ratio	2 dB
XR-1803:	
Диапазон приема	65,0 – 74,0 МГц (шаг 30 кГц) 87,5 – 108,0 МГц (шаг 50 кГц)
Антенный вход	Гнездо внешней антенны
Промежуточная частота	10,7 МГц
Используемая чувствительность	12 дБф
Избирательность	70 дБ при 400 кГц
Отношение полезного сигнала к шуму	65 дБ (стерео), 68 дБ (моно)
Коэффициент гармоник на частоте 1 кГц	0,5% (стерео), 0,3% (моно)
Разделение	35 дБ при 1 кГц
Низкочастотный диапазон	30 – 15.000 кГц
Уровень	2 дБ

– Continued on next page –

XR-1800: AEP, UK Model/XR-1803

FM/MW/LW CASSETTE CAR STEREO

XR-1800: E Model

FM/AM CASSETTE CAR STEREO

XR-1804

FM/MW/SW CASSETTE CAR STEREO



SONY®

MW/LW (XR-1800: AEP, UK/1803)

Tuning range	MW:531 – 1,602 kHz LW:153 – 281 kHz
Antenna terminal	External antenna connector
Intermediate frequency	450 kHz
Sensitivity	MW:30 μ V LW:50 μ V

AM (XR-1800: E)

Tuning range	AM tuning interval: 9 kHz/10 kHz switchable 531 – 1,602 kHz (at 9 kHz step) 530 – 1,710 kHz (at 10 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	450 kHz
Sensitivity	30 μ V

MW/SW (XR-1804)

Tuning range	MW tuning interval: 9 kHz/10 kHz switchable 531 – 1,602 kHz (at 9 kHz step) 530 – 1,710 kHz (at 10 kHz step) SW tuning interval: SW1: 2,940 – 7,735 kHz SW2: 9,500 – 18,135 kHz (except for 10,140 – 11,575 kHz)
Antenna terminal	External antenna connector
Intermediate frequency	450 kHz
Sensitivity	30 μ V

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	35 W $\times$ 4 (at 4 ohms)

General

Output lead	Power antenna relay control lead
Tone controls	Bass $\pm$ 8 dB at 100 Hz Treble $\pm$ 8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 186 $\times$ 57 $\times$ 170 mm (w/h/d) not incl. projecting parts and controls
Mounting dimension	Approx. 182 $\times$ 53 $\times$ 155 mm (w/h/d) not incl. projecting parts and controls
Mass	Approx. 1.2 kg
Supplied accessories	Parts for installation and connections (1 set)

Design and specifications are subject to change without notice.

TABLE OF CONTENTS

1. GENERAL	
Button Locations	3
Setting the Clock	3
Installation	4
Connections	4
2. DISASSEMBLY	6
3. MECHANICAL ADJUSTMENTS	10
4. ELECTRICAL ADJUSTMENTS	
Tape Deck Section	10
Tuner Section	11
5. DIAGRAMS	
5-1. IC Pin Function Description	14
5-2. Note for Printed Wiring Boards and Schematic Diagrams	16
5-3. Printed Wiring Board – Main Section –	17
5-4. Schematic Diagram – Main Section (1/2) –	19
5-5. Schematic Diagram – Main Section (2/2) –	21
5-6. Printed Wiring Board – PANEL Section –	23
5-7. Schematic Diagram – PANEL Section –	23
6. EXPLODED VIEWS	26
7. ELECTRICAL PARTS LIST	32

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

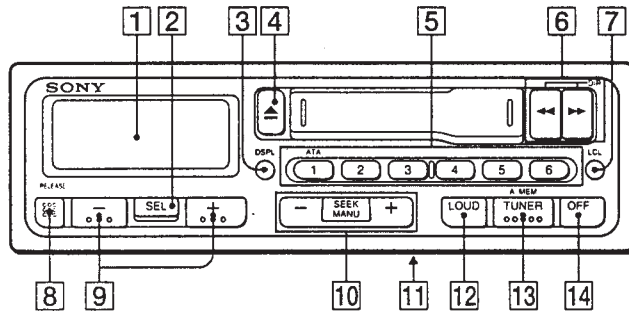
Notes on chip component replacement

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

SECTION 1 GENERAL

This section is extracted from instruction manual.

Button Locations



Refer to the pages in ● for details.

- | | |
|---|---|
| <p>1 Display window</p> <p>2 SEL (control mode select) button 5 6</p> <p>3 DSPL (display mode change/time set) button 5</p> <p>4 ▲ (eject) button 5</p> <p>5 During radio reception:
Preset number buttons 7</p> <p>During tape playback:
ATA (Automatic Tuner Activation) button 6</p> <p>6 ◀▶ (fast winding)/DIR (tape transport direction change) buttons 5 6</p> <p>7 LCL (local seek) button 6</p> | <p>8 RELEASE (front panel release) button 4 8</p> <p>9 - + (volume/bass/treble/balance/fader control) buttons 5 8</p> <p>10 SEEK/MANU button 6 7</p> <p>11 Frequency Select switch (located on the bottom of the unit) (XR-1800: E/1804)
See "Frequency Select Switch" in the Installation/Connections manual.</p> <p>12 LOUD (loudness) button 9</p> <p>13 TUNER/A MEM (radio on • band select/automatic memory) button 6 7</p> <p>14 OFF button 4</p> |
|---|---|

Setting the Clock

The clock has a 12-hour digital indication.

For example, setting it to 10:08

- 1 Display the time.
(Press the ^{DSPL} button during unit operation.)
- 2 Press the ^{DSPL} button for more than two seconds.



The hour digit blinks.

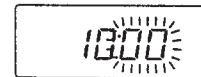
Set the hour digits.



(to go back) (to go forward)



- 3 Press the SEL button momentarily.



The minute digits blink.

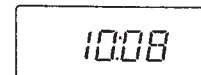
Set the minute digits.



(to go back) (to go forward)



- 4 Press the ^{DSPL} button momentarily.



The clock activates.

Note

The clock cannot be set unless the power is turned on. Set the clock after you turn on the radio, or during tape playback.

Installation

Precautions

- Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 20°.

How to Detach and Attach the Front Panel

Be sure to detach the front panel before you start installing the unit.

To detach

Press the RELEASE button to open up the front panel, then pull it out.

To attach

Align parts ④ and ⑤, and push the front panel until it clicks.

Installation

Précautions

- Choisir soigneusement l'emplacement de l'installation pour ne pas gêner la conduite.
- Éviter d'installer l'appareil là où il serait soumis à des températures élevées, comme en plein soleil ou à proximité d'une bouche d'air chaud, à de la poussière, de la saleté ou des vibrations violentes.
- Pour garantir un montage sûr, n'utiliser que le matériel fourni.

Réglage de l'angle de montage

Ajuster l'inclinaison à un angle inférieur à 20°.

Dépose et pose du panneau avant

Avant d'installer l'appareil, veiller à enlever le panneau avant.

Dépose

Appuyer sur la touche RELEASE avant d'ouvrir le panneau avant, puis le tirer vers vous.

Pose

Aligner les pièces ④ et ⑤ et pousser le panneau avant jusqu'à encastrement.

التركيب

تنبيهات إحتياطية

- قم باختيار موضع التركيب بعناية بحيث لا يؤثر الجهاز على وظائف القيادة العادية للسائق.
- تجنب تركيب الجهاز حيث يكون معرضاً لدرجات حرارة مرتفعة، مثل ضوء الشمس المباشر أو الهواء الساخن من الدفأة أو حيث يكون معرضاً للغيبار أو الاوساخ أو الاهتزاز الزائد.
- لا تستعمل سوى مستلزمات التركيب المجهزة ليتم التركيب بشكل آمن ومحكم.

ضبط زاوية التركيب

اضبط زاوية التركيب على أقل من ٢٠°.

كيفية نزع وتركيب اللوحة الامامية

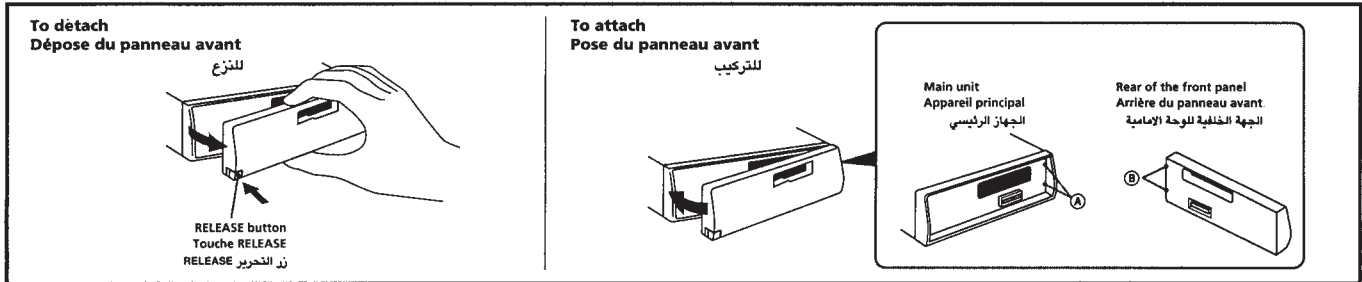
تأكد من نزع اللوحة الامامية قبل البدء بتركيب الجهاز.

للنزع

إضغط الزر RELEASE لفتح اللوحة الامامية واسحبها الى الخارج.

للتثبيت

قم بمحاذاة الجزء ④ مع الجزء ⑤ وادفع اللوحة الامامية الى ان تصدر عنها طقة.



Mounting Example

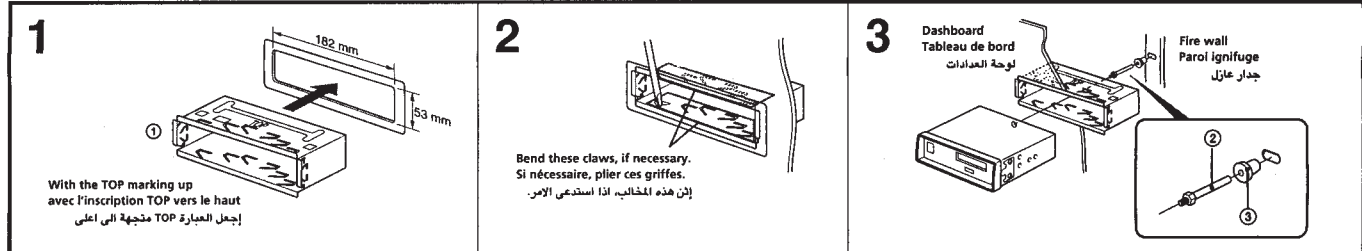
Installation in the dashboard

Exemple d'installation

Encastrement dans le tableau de bord

مثال للتركيب

التركيب في لوحة العدادات



Connections/Connexions/التوصيلات

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the yellow and red power input leads only after all other leads have been connected.
- Be sure to connect the red power input lead to the positive 12 V power terminal which is energized when the ignition key is in the accessory position.
- Run all ground wires to a common ground point.

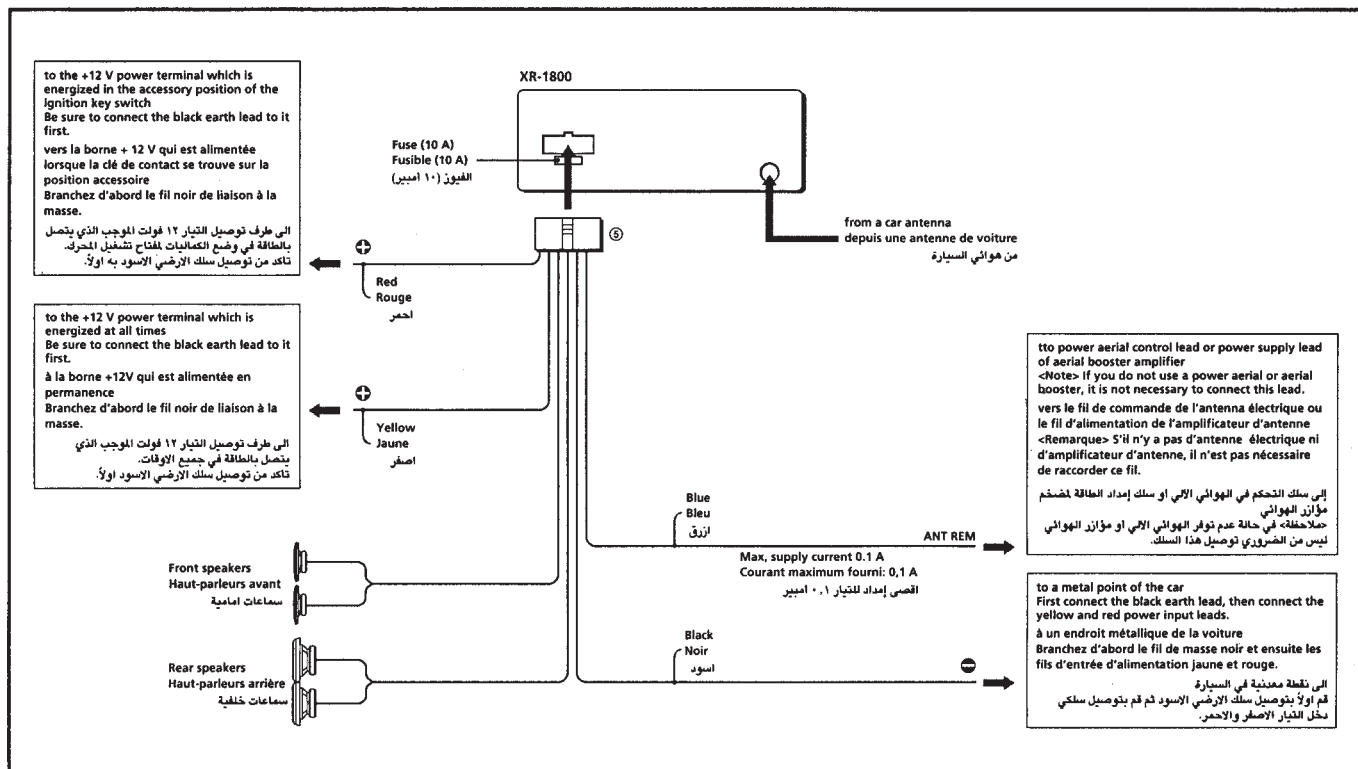
تنبيهات

- هذا الجهاز مصمم للتشغيل على تيار مباشر ١٢ فولت تيار سالب فقط.
- قبل عمل التوصيلات، إ فصل طرف توصيل الأرضي الخاص بطاري السيارة لتفادي حدوث تماس كهربائي.
- لا يتم توصيل سلكي دخل التيار الأصفر والأحمر إلا بعد الانتهاء من توصيل جميع الاسلاك الأخرى.
- تأكد من توصيل سلك دخل التيار الأحمر بطرف البطارية ١٢ فولت الموجب الذي يتصل بالطاقة عند كون مفتاح تشغيل المحرك في وضع الكمالبات.
- إ جعل جميع أسلاك التأسيس تتصل بنقطة تأسيس مشتركة.

Précautions

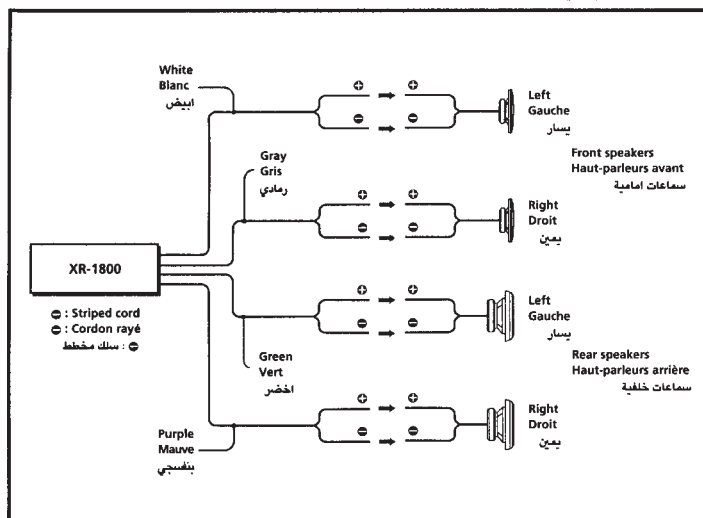
- Cet appareil est conçu pour fonctionner sur un courant continu de 12 V avec masse négative.
- Avant d'effectuer les raccordements, débranchez la borne de terre de la batterie du véhicule pour éviter tout court-circuit.
- Raccordez les fils jaune et rouge d'alimentation uniquement après avoir réalisé toutes les autres connexions.
- Raccordez le fil d'alimentation rouge à la borne positive de 12 V qui est alimentée quand la clé de contact est sur la position accessoire.
- Rassemblez tous les fils de terre en un point de masse commun.

Connections Example/Connexions de l'exemple/امثلة التوصيل



- ملاحظات حول أسلاك التحكم
- أسلاك التحكم في الهوائي (الزرق) يزود بإمداد تيار مباشر ١٢ فولت عند تشغيل الجهاز.
 - لا يمكن استعمال هوائي (الزرق) يزود بإمداد تيار مباشر ١٢ فولت عند تشغيل الجهاز.

Speaker Connections/Connexion des haut-parleurs/توصيل السماعات

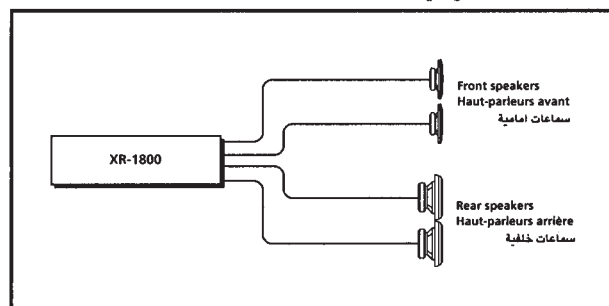


- Notes on speaker connection**
- Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.
 - Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.
 - Do not connect the speakers in parallel.
 - Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers. There fore, be sure to connect passive speakers to these terminals.

Remarques sur la connexion des haut-parleurs

- Utiliser des haut-parleurs avec une impédance de 4 à 8 ohms et qui peuvent supporter l'alimentation fournie sinon ils risquent d'être endommagés.
- Ne pas connecter les bornes du système de haut-parleur au châssis de la voiture et ne pas raccorder les bornes du haut-parleur droit aux bornes du haut-parleur gauche.
- Ne pas essayer de connecter les haut-parleurs en parallèle.
- Ne pas connecter d'enceintes acoustiques actives (avec amplificateurs intégrés) aux bornes d'enceintes de cet appareil pour éviter de les endommager. Veiller à raccorder des enceintes passives.

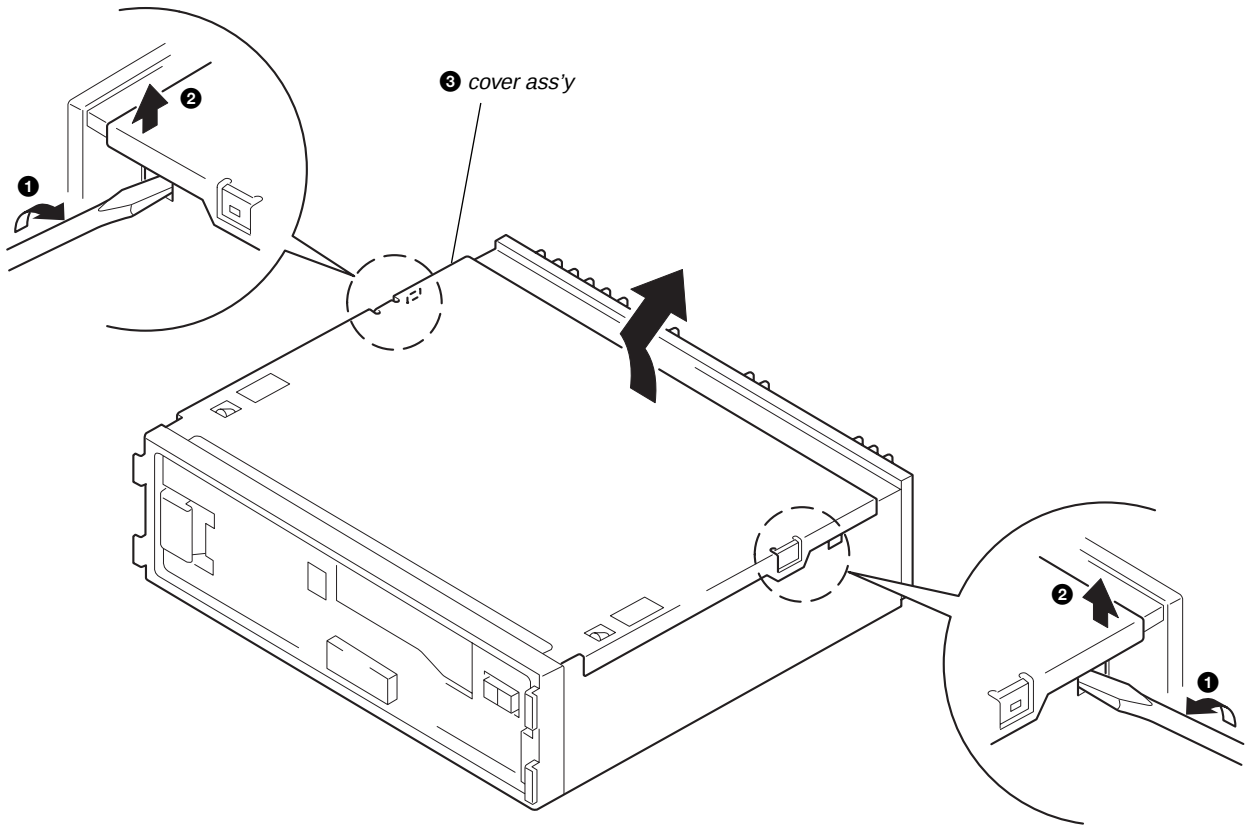
Connection Diagram/Schéma de connexions/مخطط التوصيل



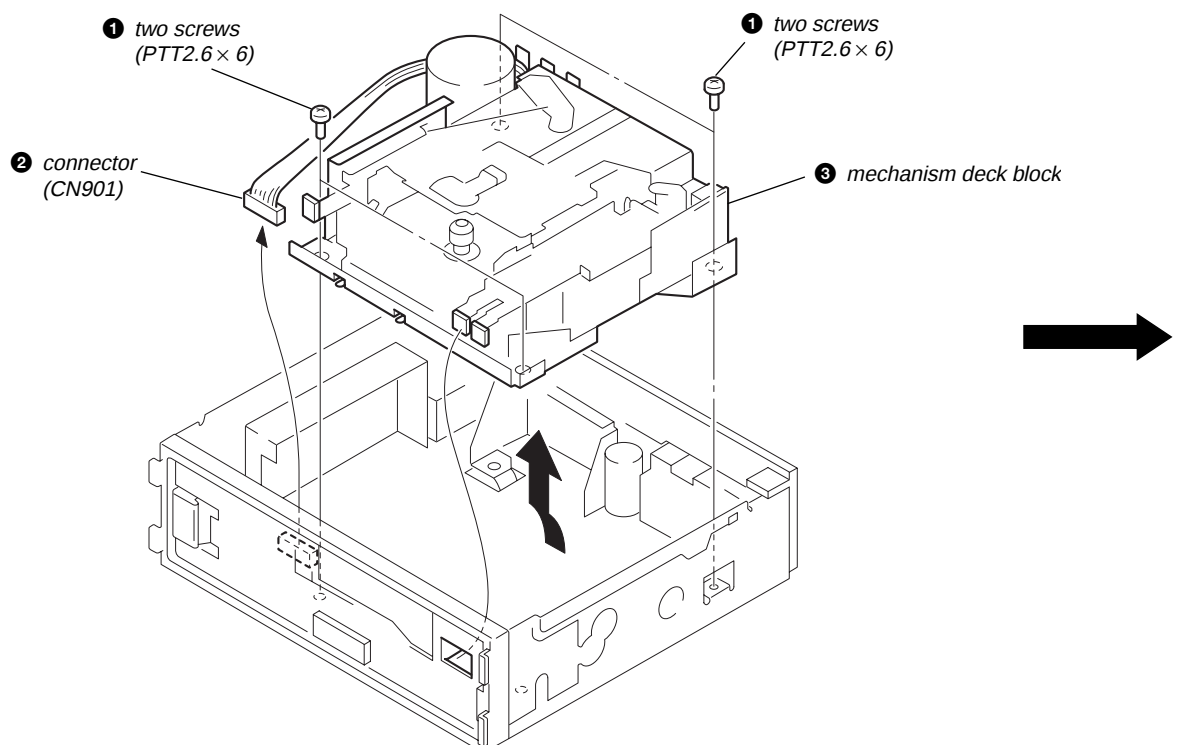
SECTION 2 DISASSEMBLY

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

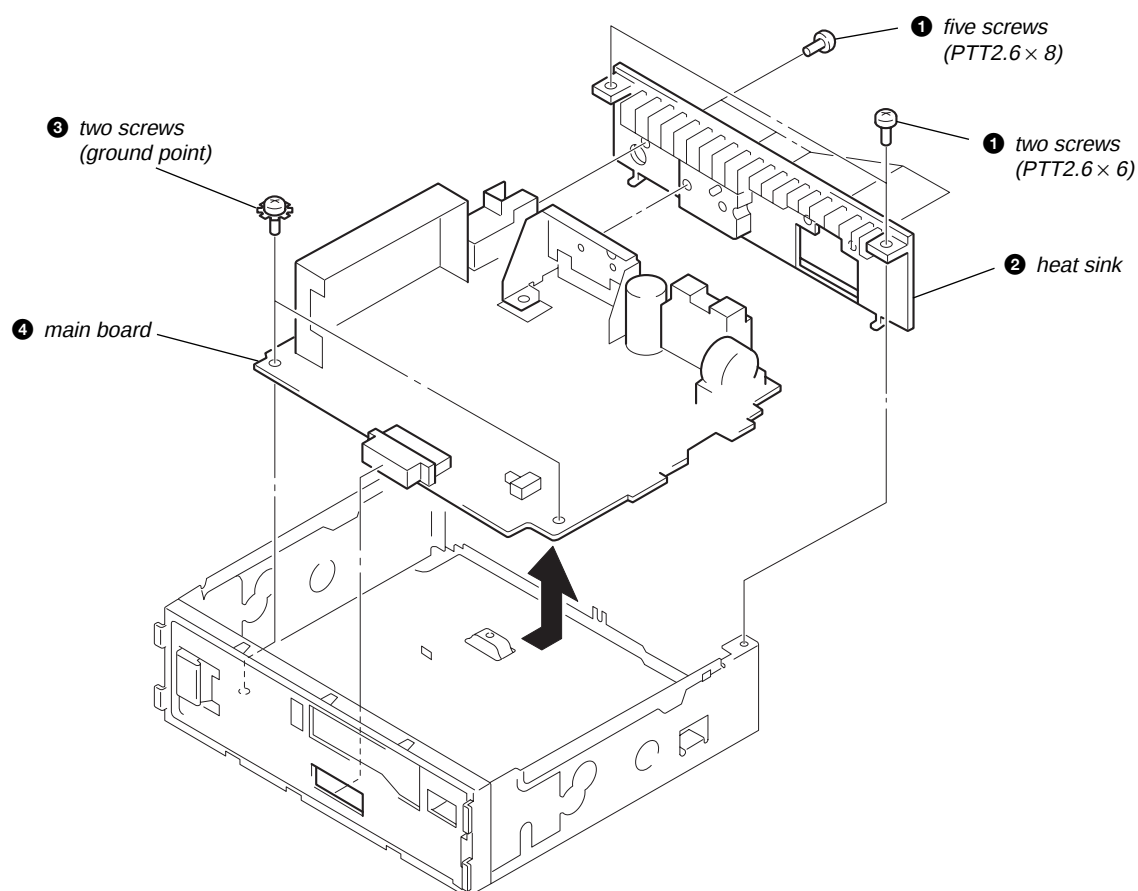
COVER ASS'Y



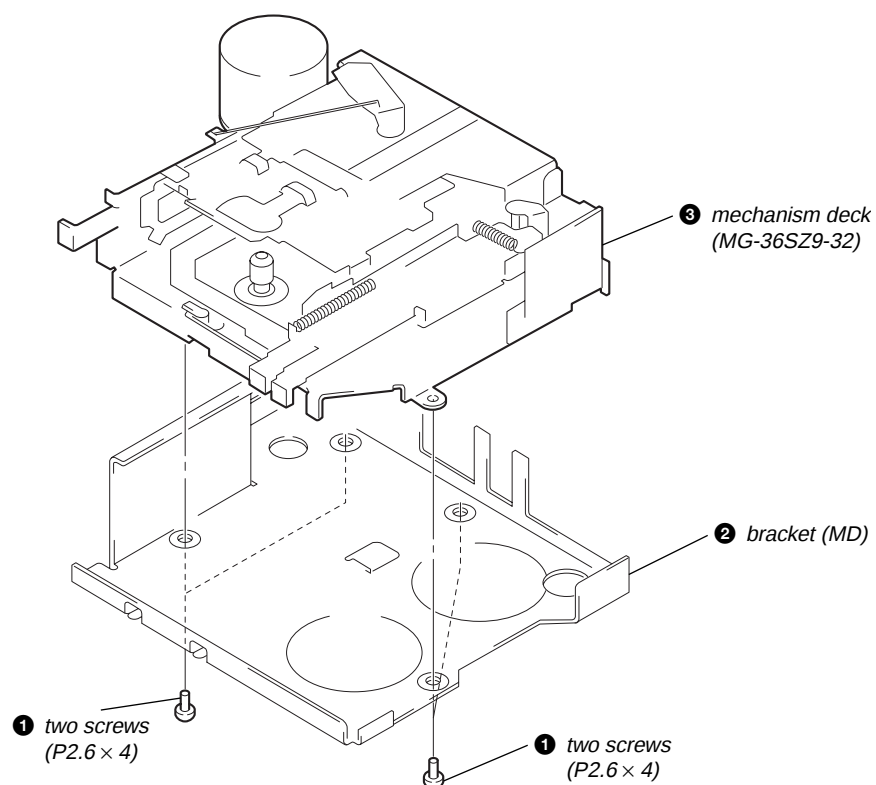
MECHANISM DECK BLOCK



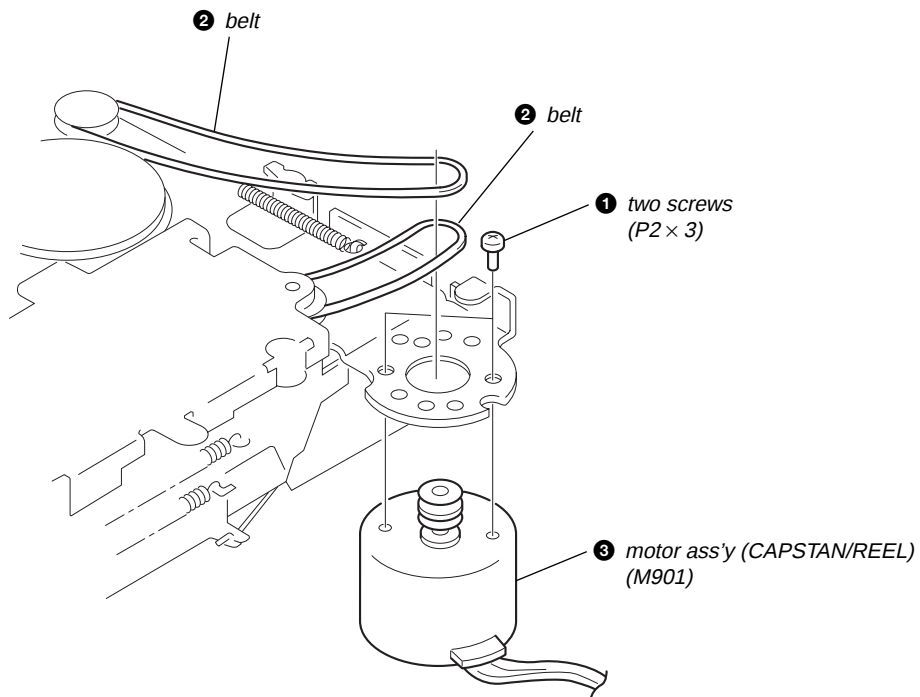
MAIN BOARD, HEAT SINK



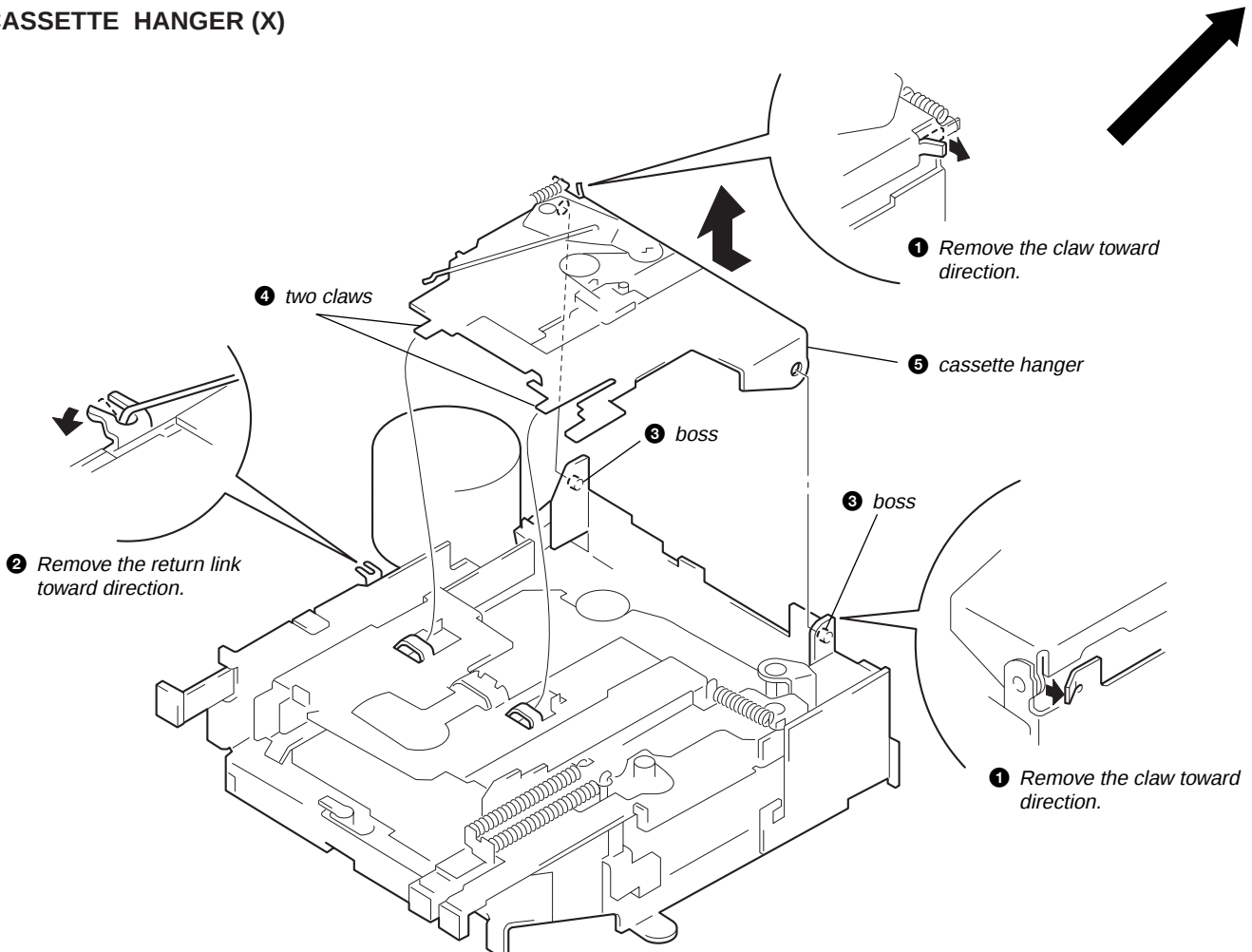
MECHANISM DECK (MG-36SZ9-32)



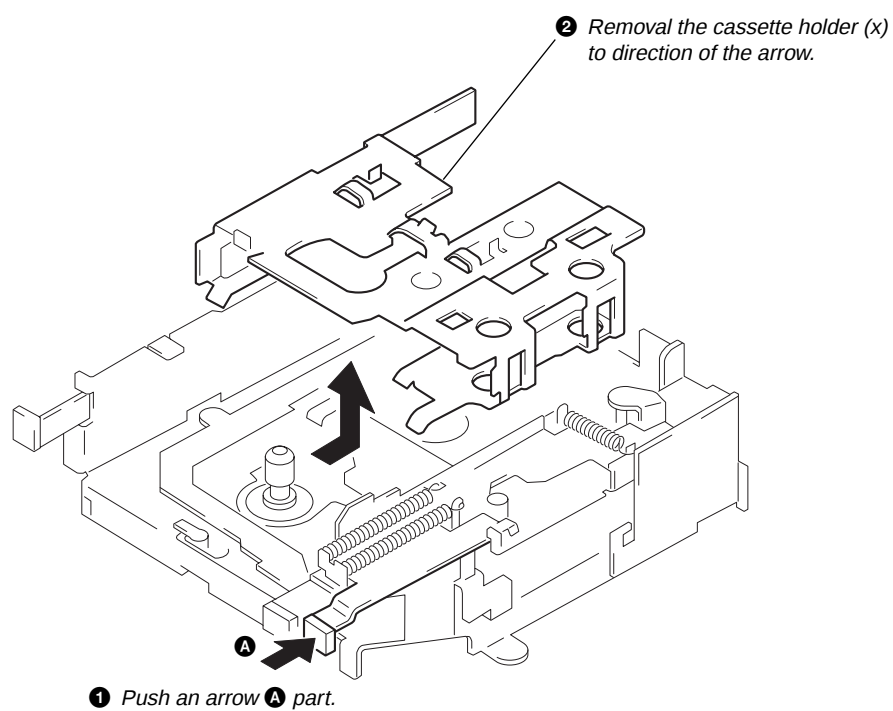
MOTOR ASS'Y (CAPSTAN/REEL) (M901)



CASSETTE HANGER (X)



CASSETTE HOLDER (X)



SECTION 3 MECHANICAL ADJUSTMENTS

- Clean the following parts with a denatured-alcohol-moistened swab:
 playback head pinch roller
 rubber belt capstan
 idler
- Demagnetize the playback head with a head demagnetizer.
- Do not use a magnetized screwdriver for the adjustments.
- The adjustments should be performed with the power supply voltage (14.4 V) unless otherwise noted.

•Torque Measurement

Mode	Torque Meter	Meter Reading
Forward	CQ-102C	25 – 55 g•cm (0.35 – 0.76 oz•inch)
Forward Back Tension	CQ-102C	1.5 – 4 g•cm (0.02 – 0.06 oz•inch)
Reverse	CQ-102RC	25 – 55 g•cm (0.35 – 0.76 oz•inch)
Reverse Back Tension	CQ-102RC	1.5 – 4 g•cm (0.02 – 0.06 oz•inch)
FF, REW	CQ-201B	50 – 150 g•cm (0.69 – 2.08 oz•inch)

•Tape Tension Measurement

Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 60 g
Reverse	CQ-403R	(more than 2.12 oz)

SECTION 4 ELECTRICAL ADJUSTMENTS

TAPE DECK SECTION

0 dB= 0.775 V

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

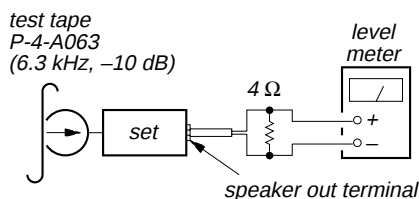
Test Tape

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

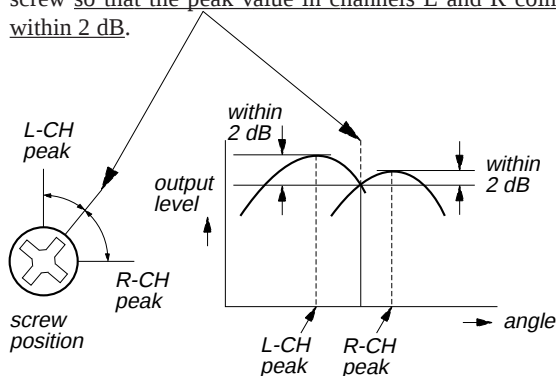
PB Head Azimuth Adjustment

Procedure:

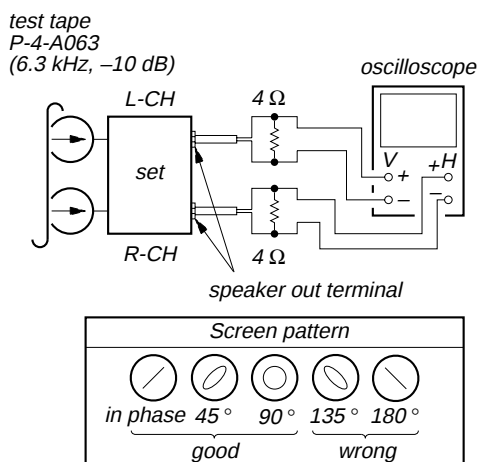
- Put the set into the FWD PB mode.



- Turn the screw and check the output peak value. Adjust the screw so that the peak value in channels L and R coincides within 2 dB.

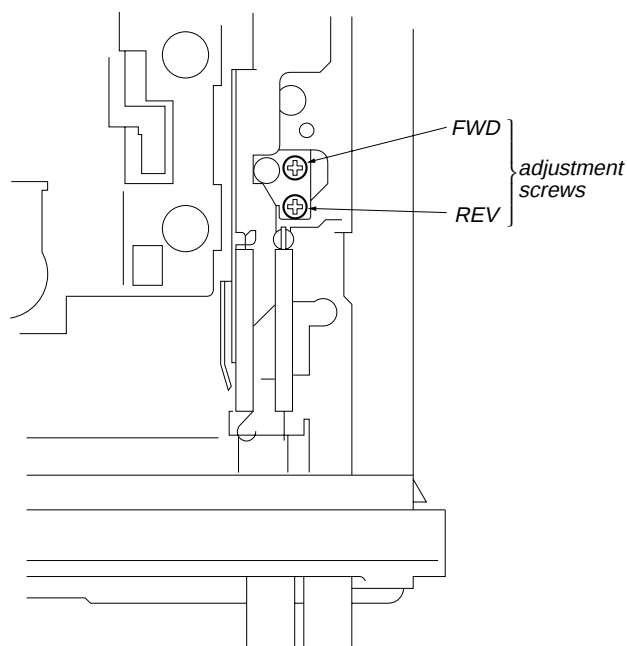


- Check the phase in the FWD PB mode.



- Repeat the above adjustment for the REV PB mode.
- Check that output level difference between FWD PB mode and REV PB mode is within 4 dB.

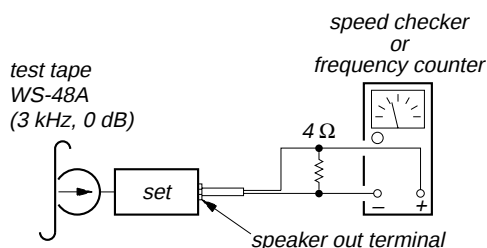
Adjustment Location: PB head



See the adjustment location from on page 13 for the adjustment.

Tape Speed Adjustment

Setting:



Procedure:

- Put the set into the FWD PB mode.
- Adjust adjustment resistor for inside capstan motor so that the reading on the speed checker or frequency counter becomes in specification.

Specification: Constant speed

Speed checker	Frequency counter
-2 to +3%	2,940 to 3,090 Hz

Adjustment Location: See page 13.

TUNER SECTION

XR-1800 E model, a tuner section is no adjustment.

0 dB=1 μ V

Cautions during repair

When the tuner unit is defective, replace it by a new one because its internal block is difficult to repair.

Note: Adjust the tuner section in the sequence shown below.

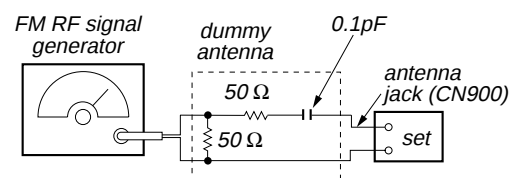
- FM Auto Scan/Stop Level Adjustment
- FM Noise Focus Adjustment
- FM Stereo Separation Adjustment
- MW Auto Scan/Stop Level Adjustment

FM Auto Scan/Stop Level Adjustment

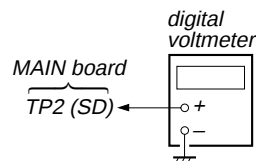
Setting:

TUNER button: FM 1

FREQUENCY SELECT switch: FM50 k (XR-1804 only)



Carrier frequency : 98.0 MHz
Output level : 28 dB (25.1 μ V)
Mode : mono
Modulation : 1 kHz, 22.5 kHz deviation (30%)



Procedure:

- Tune the set to 98.0 MHz.
- Connect the digital voltmeter to TP2 (SD) on MAIN board.
- Adjust RV2 on TU100 so that the reading on the digital voltmeter changes point from low to high.

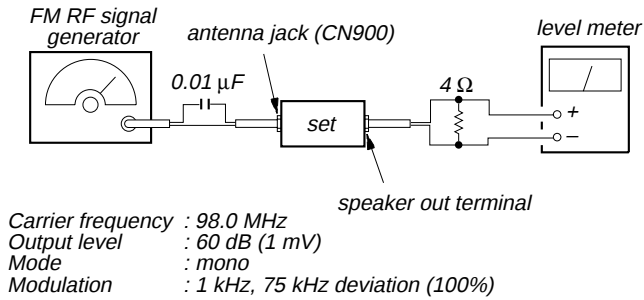
Adjustment Location: See page 13.

FM Noise Focus Adjustment (XR-1804 only)

Setting:

[TUNER] button: FM1

FREQUENCY SELECT switch: FM 50 k



Procedure:

1. Tune the 98.0 MHz.
2. The then output level is supposing that (A) dB.
3. Adjust with the volume RV3 on TU100 so that the output level is (A) -32 dB then signal generator input set to -20 dB.

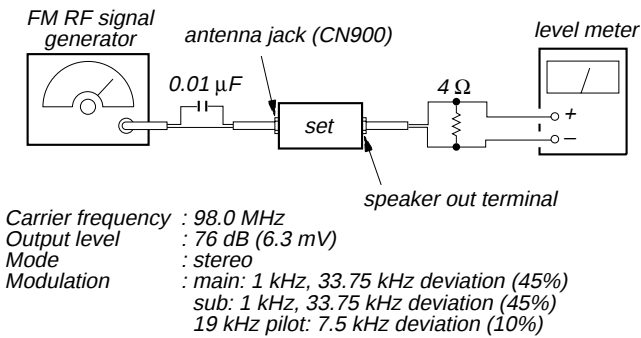
Adjustment Location: See page 13.

FM Stereo Separation Adjustment

Setting:

[TUNER] button: FM1

FREQUENCY SELECT switch : FM 50 k (XR-1804 only)



Procedure:

FM Stereo signal generator output channel	Level meter connection	Level meter reading (dB)
L-CH	L-CH	(A)
R-CH	L-CH	(B) Adjust RV4 on TU100 for minimum reading.
R-CH	R-CH	(C)
L-CH	R-CH	(D) Adjust RV4 on TU100 for minimum reading.

L-CH Stereo separation: (A)-(B)

R-CH Stereo separation: (C)-(D)

The separations of both channels should be equal.

Specification: Separation more than 26 dB

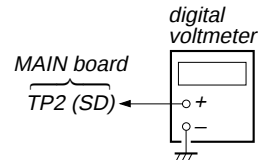
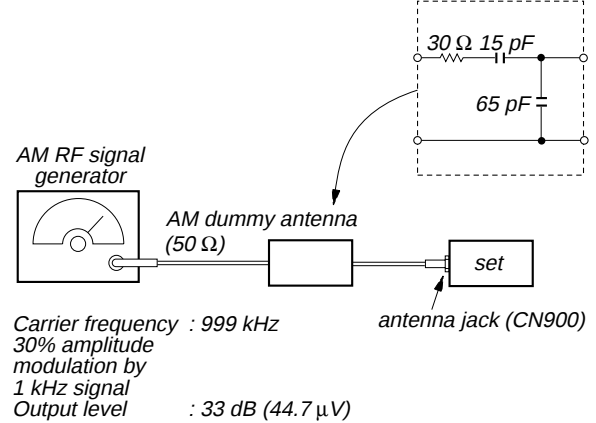
Adjustment Location: See page 13.

MW Auto Scan/Stop Level Adjustment

Setting:

[TUNER] button: MW

FREQUENCY SELECT switch: MW 9 k (XR-1804 only)

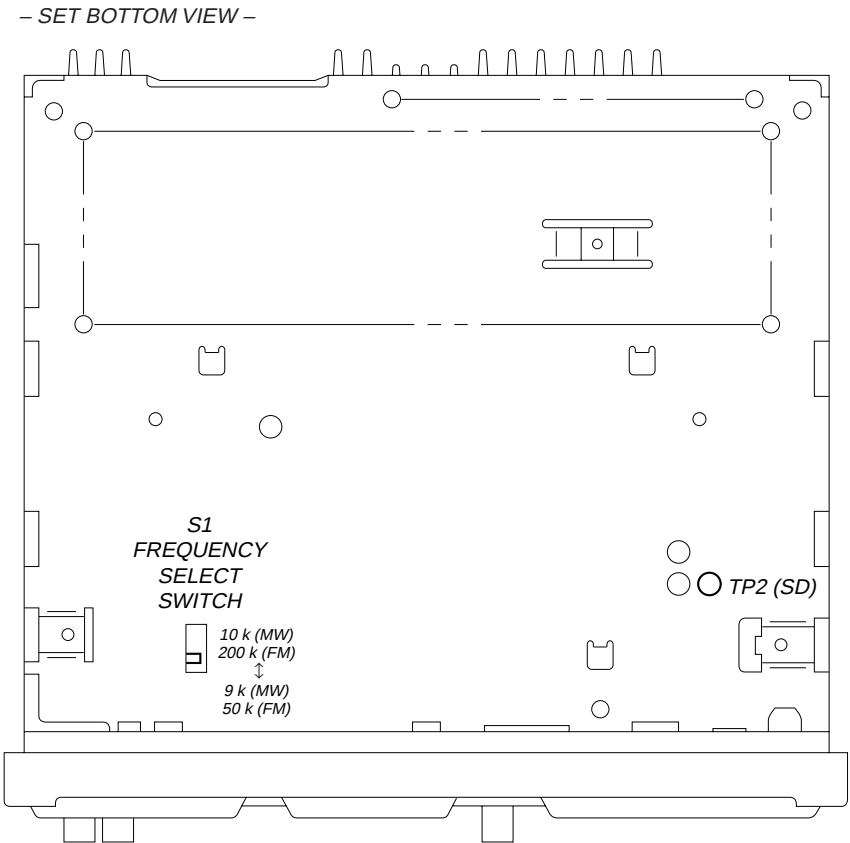
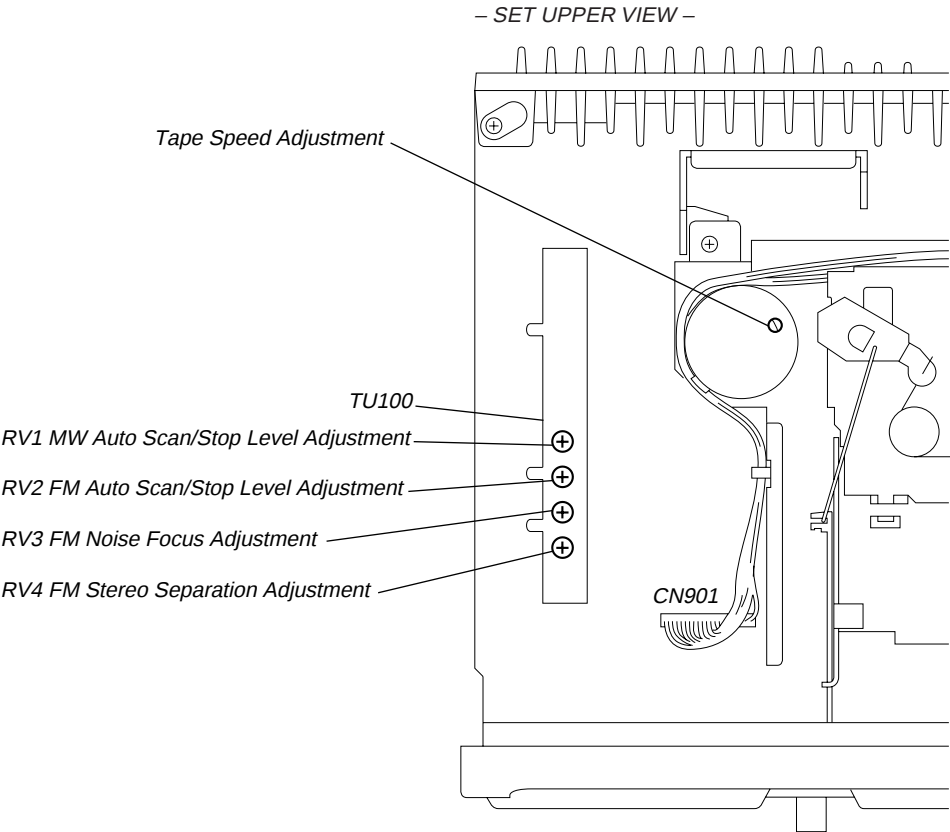


Procedure:

1. Tune the set to 999 kHz
2. Connect the digital voltmeter to TP2 (SD) on MAIN board.
3. Adjust RV1 on TU100 so that the reading on the digital voltmeter changes point from low to high.

Adjustment Location: See page 13.

Adjustment Location:



SECTION 5 DIAGRAMS

5-1. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC1 (SYSTEM CONTROLLER)

LC72322N-9400 (XR-1800), LC72322N-9399 (XR-1803), LC72322N-9412 (XR-1804)

Pin No.	Pin Name	I/O	Function
1	XIN	I	System clock input terminal (4.5 MHz)
2	TEST2	I	Connected to ground
3	NC	I	Not used (fixed at “H”)
4	AM-SD	I	AM signal meter voltage detection input from the FM/AM tuner unit (TU100) “H” active
5	FM-SD	I	FM signal meter voltage detection input from the FM/AM tuner unit (TU100) “H” active
6	<u>STEREO</u>	I	Stereo detection signal input from the FM/AM tuner unit (TU100) (Commonly used for stereo display input) FM stereo detection at input of “L”
7	<u>MOTOR</u>	O	Capstan/reel motor (M901) drive signal output “H”: motor on
8	<u>AMP-MUTE2</u>	O	Muting control signal output to the power amplifier (IC500) “L”: muting on
9	<u>MW/SW</u>	O	MW/SW selection signal output to the FM/AM tuner unit (TU100) “H”: MW, “L”: SW Used for the XR-1804 only
10	—	O	Not used (open)
11	BEEP	O	Beep sound signal output terminal “H” active
12	POWER-ON	O	Power on/off control signal output “H”: power on
13	ILL-ON	O	Power on/off control signal output for the liquid crystal display driver (IC900), illumination lamp and back light lamp “H”: power on
14	<u>N/R</u>	I	Tape direction switch (S901) input terminal “H”: forward side, “L”: reverse side
15	<u>TAPE-IN</u>	I	Tape in detection switch (S903) input terminal “L”: tape in
16	<u>FF-REW</u>	I	FF/REW detection switch (S902) input terminal “L”: FF/REW mode
17	K1	I	Key matrix return signal input terminal Not used (fixed at “L”)
18	K0	I	Key matrix return signal input terminal
19	AMP-ON	O	Standby on/off signal output to the power amplifier (IC500) “L”: standby, “H”: amp on
20	SEEK	O	Seek control signal output to the FM/AM tuner unit (TU100) “H” active Used for the XR-1800: E model only
21	<u>SEEK</u>	O	Seek control signal output to the FM/AM tuner unit (TU100) “L” active Used for the except XR-1800: E model
22	<u>LOCAL/DX</u>	O	Local/DX selection signal output to the FM/AM tuner unit (TU100) “L”: DX, “H”: local
23, 24	—	O	Not used (open)
25	T2	O	Key matrix scan signal output terminal Used for the XR-1800: E model and XR-1804
26	T1	O	Key matrix scan signal output terminal Not used (open)
27	T0	O	Key matrix scan signal output terminal Used for the XR-1800: AEP, UK models
28	VOL-CE	O	Chip enable signal output to the electrical volume (IC450) “H” active
29	VOL-DI	O	Serial data output to the electrical volume (IC450) “H” active
30	VOL-CL	O	Serial data transfer clock signal output to the electrical volume (IC450)
31	VDD	—	Power supply terminal (+5V)
32	<u>MUTE-REQ</u>	I	Muting request signal input terminal (“H” active) “L”: accessory on, “H”: accessory off
33	<u>BAND-KEY</u>	I	TUNER switch (S900) input terminal “L” is input when pressing the switch
34	<u>PANEL-IN</u>	I	Detects the removal of the attaching and removing type front panel block “L”: attaching
35	NC	I	Not used (fixed at “L”)
36 to 40	—	O	Not used (open)
41	MUTE	O	Audio muting on/off control signal output terminal “H”: muting on Not used (open)
42	—	O	Not used (open)
43	<u>AMP-MUTE</u>	O	Amp muting on/off control signal output terminal “L”: muting on Not used (open)
44	ANT-REM	O	Control signal output for the external power antenna and external amplifier “H” active
45 to 48	—	O	Not used (open)

Pin No.	Pin Name	I/O	Function
49	KS2	O	Key matrix scan signal output terminal
50	KS1	O	
51	KS0	O	
52	—	O	Not used (open)
53	LCD-CLK	O	Serial data transfer clock signal output to the liquid crystal display driver (IC900)
54	LCD-CE	O	Chip enable signal output to the liquid crystal display driver (IC900) “H” active
55	LCD-DATA	O	Serial data output to the liquid crystal display driver (IC900) “H” active
56	AM-ON	O	AM system power supply on/off control signal output terminal “H”: AM on
57	MONO	O	Not used (open)
58 to 60	—	O	Not used (open)
61	FM-ON	O	FM system power supply on/off control signal output terminal “H”: FM on
62	TUNER-ON	O	Tuner system power supply on/off control signal output terminal “H”: tuner on Not used (open)
63	$\overline{\text{MW/LW}}$	O	MW/LW selection signal output terminal “L”: MW, “H”: LW Not used (open)
64, 65	—	O	Not used (open)
66	NC	I	Not used (fixed at “L”)
67	$\overline{\text{CE}}$	I	Accessory switch on/off detection signal input terminal “H”: accessory on, “L”: accessory off (hold mode)
68	$\overline{\text{RESET}}$	I	System reset signal input terminal “L”: reset
69	KEY-IN	I	Key matrix return signal input terminal (A/D input)
70	IFIN	I	FM and AM intermediate frequency detection signal input from the FM/AM tuner unit (TU100)
71	NC	I	Not used (fixed at “L”)
72	$\overline{\text{BU-CHECK}}$	I	Battery detect signal input terminal
73	VDD	—	Power supply terminal (+5V)
74	FMIN	I	FM local oscillator input from the FM/AM tuner unit (TU100)
75	AMIN	I	AM local oscillator input from the FM/AM tuner unit (TU100)
76	VSS	—	Ground terminal
77	EO	O	Main charge-pump control signal output terminal
78	—	O	Not used (open)
79	TEST1	I	Connected to ground
80	XOUT	O	System clock output terminal (4.5 MHz)

5-2. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Schematic Diagram:

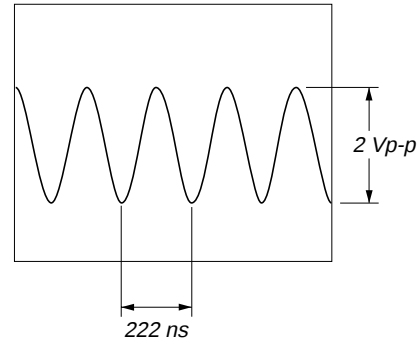
- All capacitors are in μF unless otherwise noted. pF: $\mu\mu\text{F}$
50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- Δ : internal component.
-  : nonflammable resistor.
-  : panel designation.
-  : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : FM
- () : MW
- << >> : SW (XR-1804 only)
- [] : TAPE PLAYBACK
- Voltages are taken with a VOM (Input impedance 10 M Ω).
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
-  : FM
-  : MW (LW/SW)
-  : TAPE PLAYBACK

Note on Printed Wiring Boards:

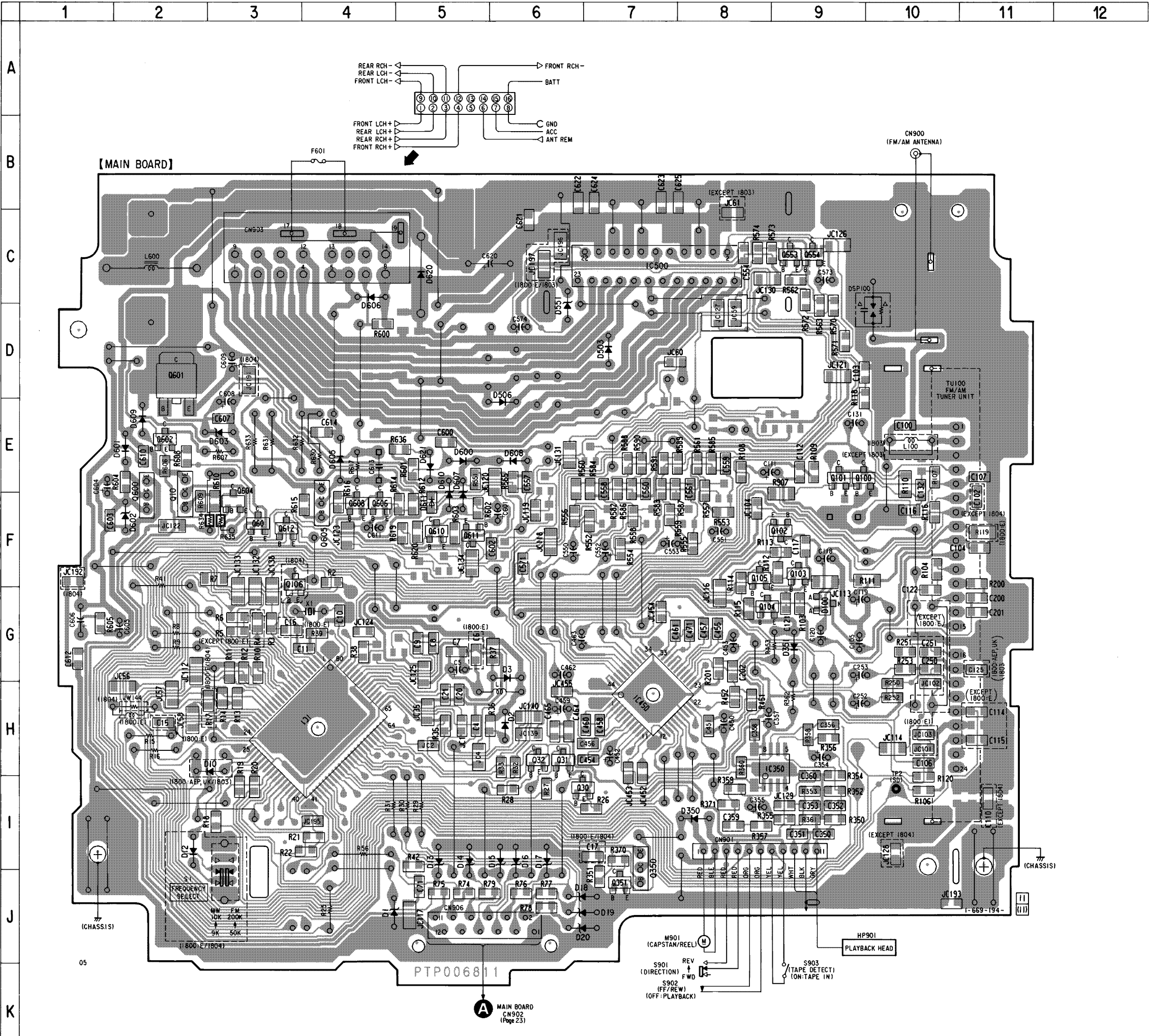
-  : parts extracted from the component side.
-  : parts extracted from the conductor side.
- Δ : internal component.
-  : Pattern from the side which enables seeing.

• Waveform

① IC1 ① (XIN)



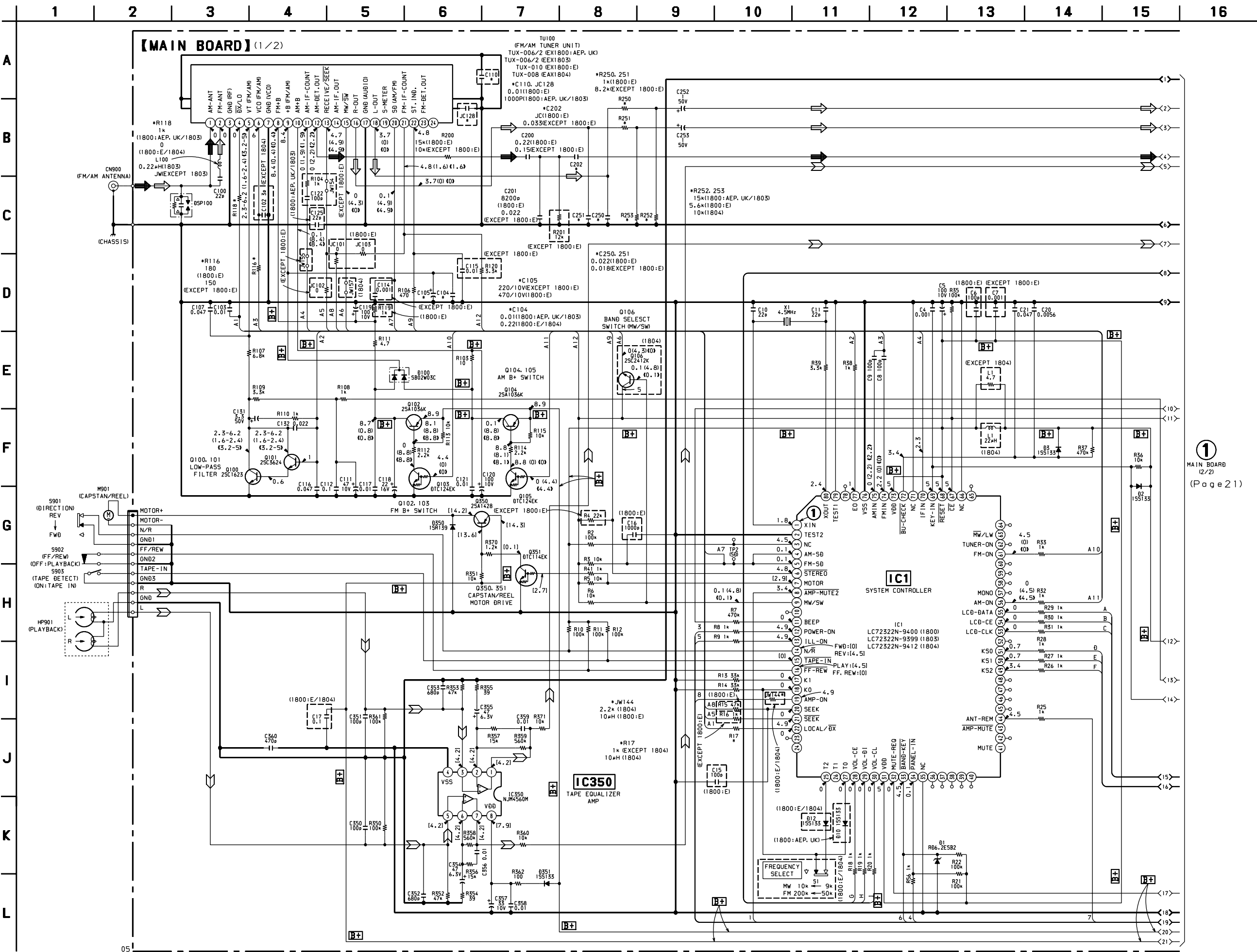
5-3. PRINTED WIRING BOARD - MAIN Section -



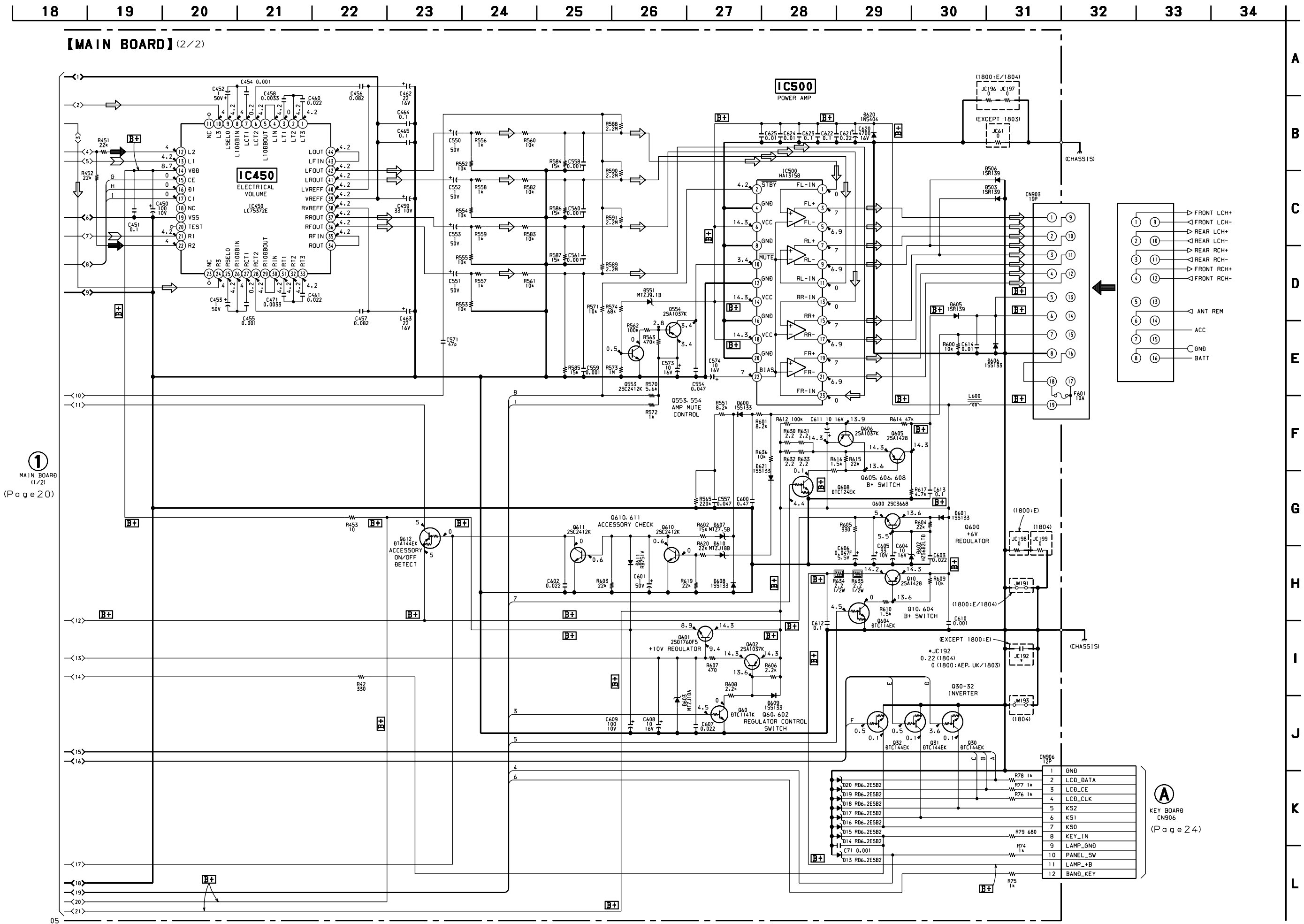
• Semiconductor Location

Ref. No.	Location
D1	J-4
D2	H-6
D3	G-6
D10	H-3
D12	I-2
D13	I-5
D14	I-5
D15	I-6
D16	I-6
D17	I-6
D18	I-6
D19	I-6
D20	I-6
D100	G-9
D350	I-8
D351	G-9
D503	D-7
D506	E-6
D551	D-6
D600	E-5
D601	E-2
D602	F-2
D603	E-3
D605	E-4
D606	C-4
D607	F-5
D608	E-6
D609	E-2
D610	F-5
D611	F-5
D620	C-5
D621	E-5
IC1	H-4
IC350	H-9
IC450	H-7
IC500	C-7
Q10	F-2
Q30	I-7
Q31	H-6
Q32	H-6
Q60	F-3
Q100	E-9
Q101	E-9
Q102	F-9
Q103	F-9
Q104	G-8
Q105	F-8
Q106	F-3
Q350	J-7
Q351	J-7
Q553	C-9
Q554	C-9
Q600	F-2
Q601	D-2
Q602	E-2
Q604	F-3
Q605	F-4
Q606	F-4
Q608	F-4
Q610	F-5
Q611	F-5
Q612	F-3

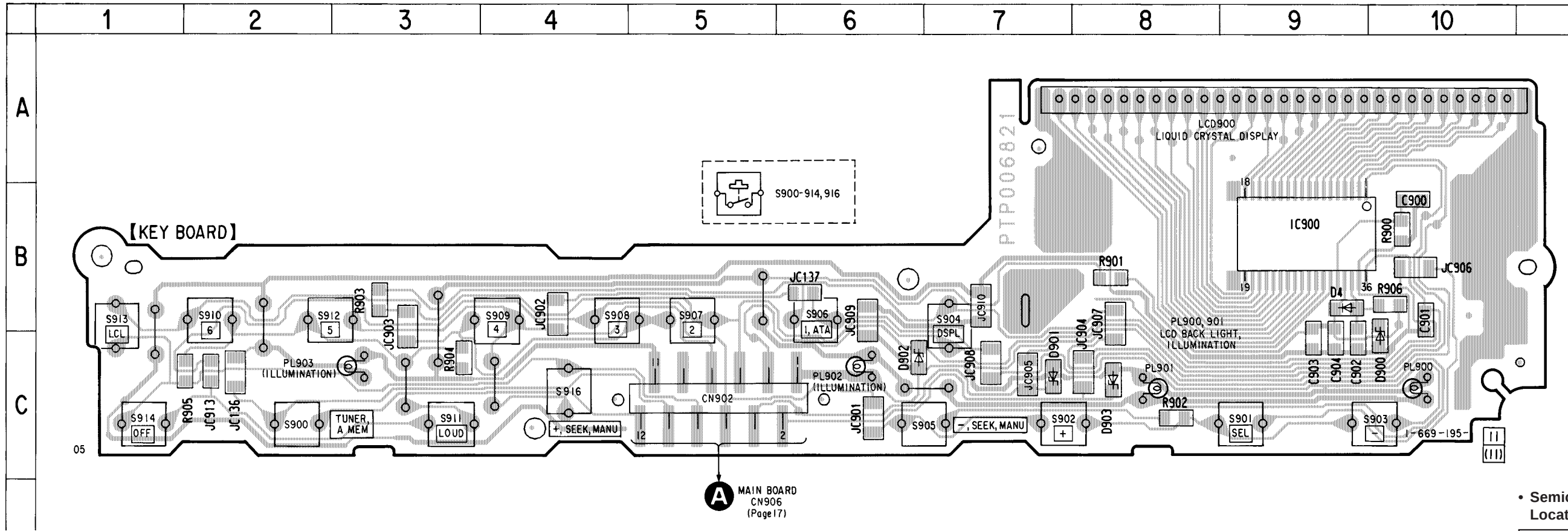
5-4. SCHEMATIC DIAGRAM – MAIN Section (1/2) – • See page 16 for Waveform.



5-5. SCHEMATIC DIAGRAM – MAIN Section (2/2) – • See page 27 for IC Block Diagram.



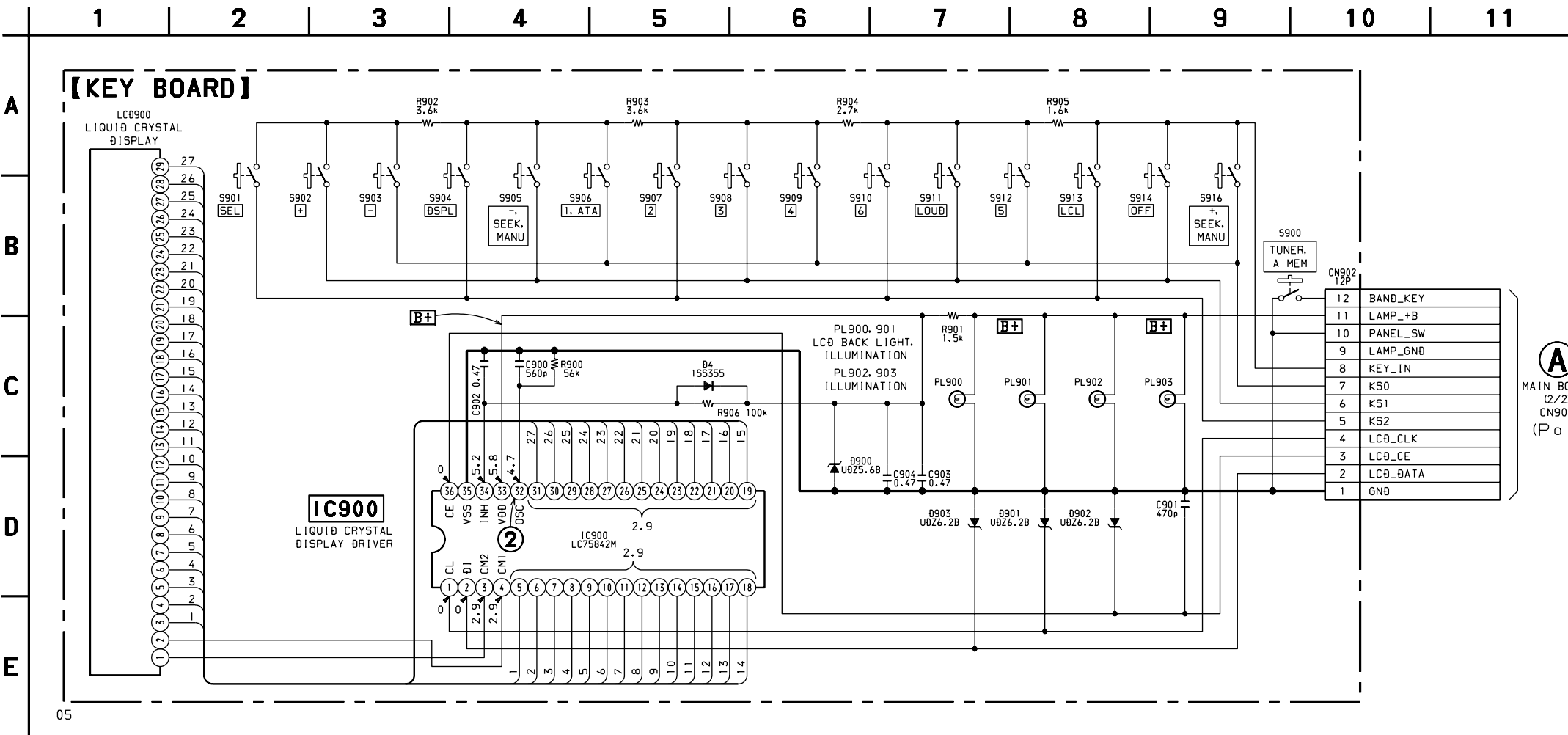
5-6. PRINTED WIRING BOARD – PANEL Section –



• Semiconductor Location

Ref. No.	Location
D4	B-9
D900	C-10
D901	C-7
D902	C-6
D903	C-8
IC900	B-9

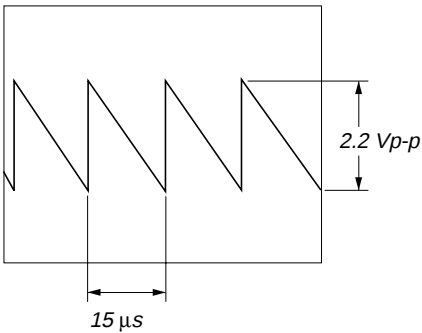
5-7. SCHEMATIC DIAGRAM – PANEL Section –



A
MAIN BOARD
(2/2)
CN902
(Page 22)

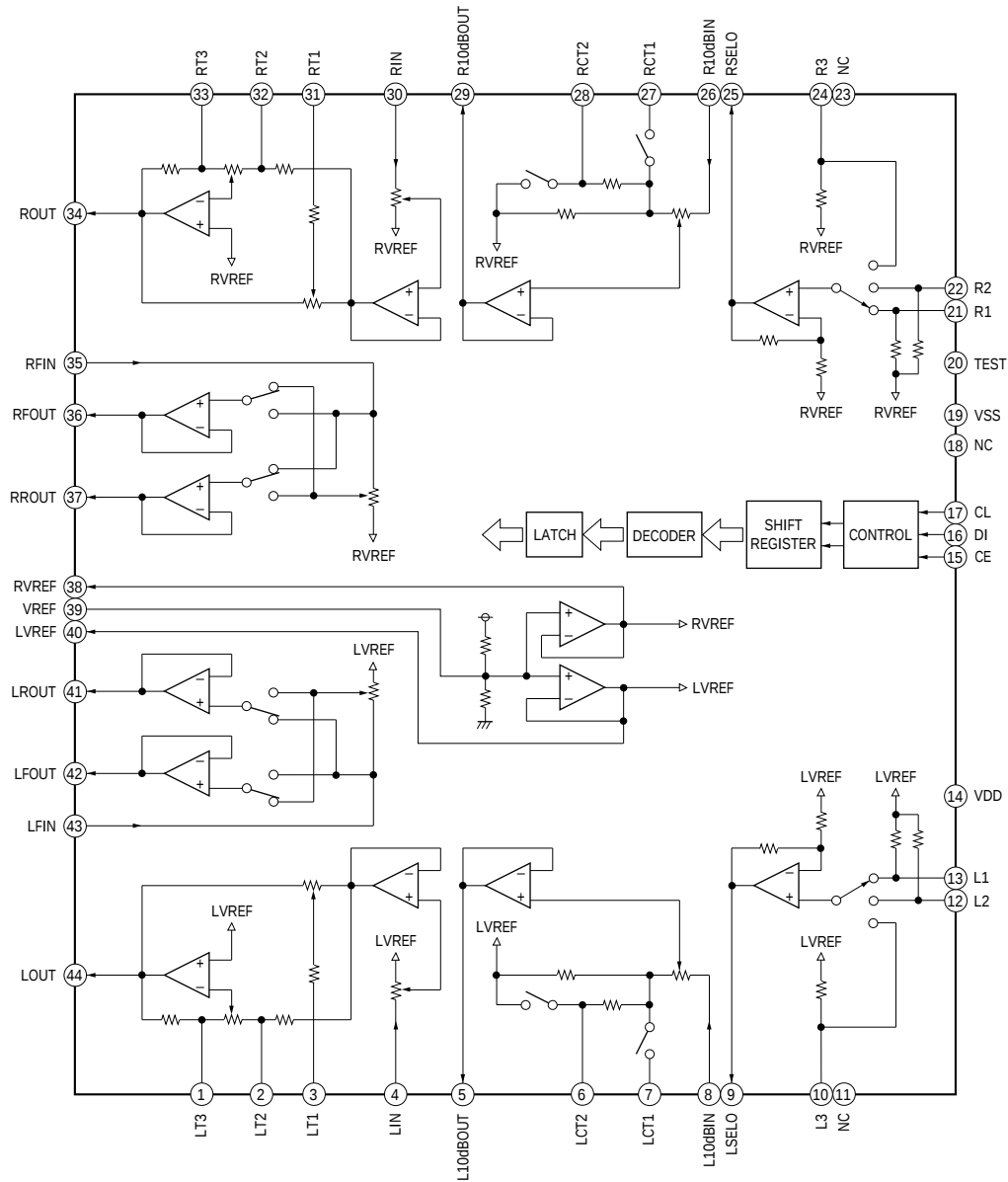
• Waveform

② IC900 ② (OSC)



• IC Block Diagram – MAIN Board –

IC450 LC75372E



SECTION 6

EXPLODED VIEWS

NOTE:

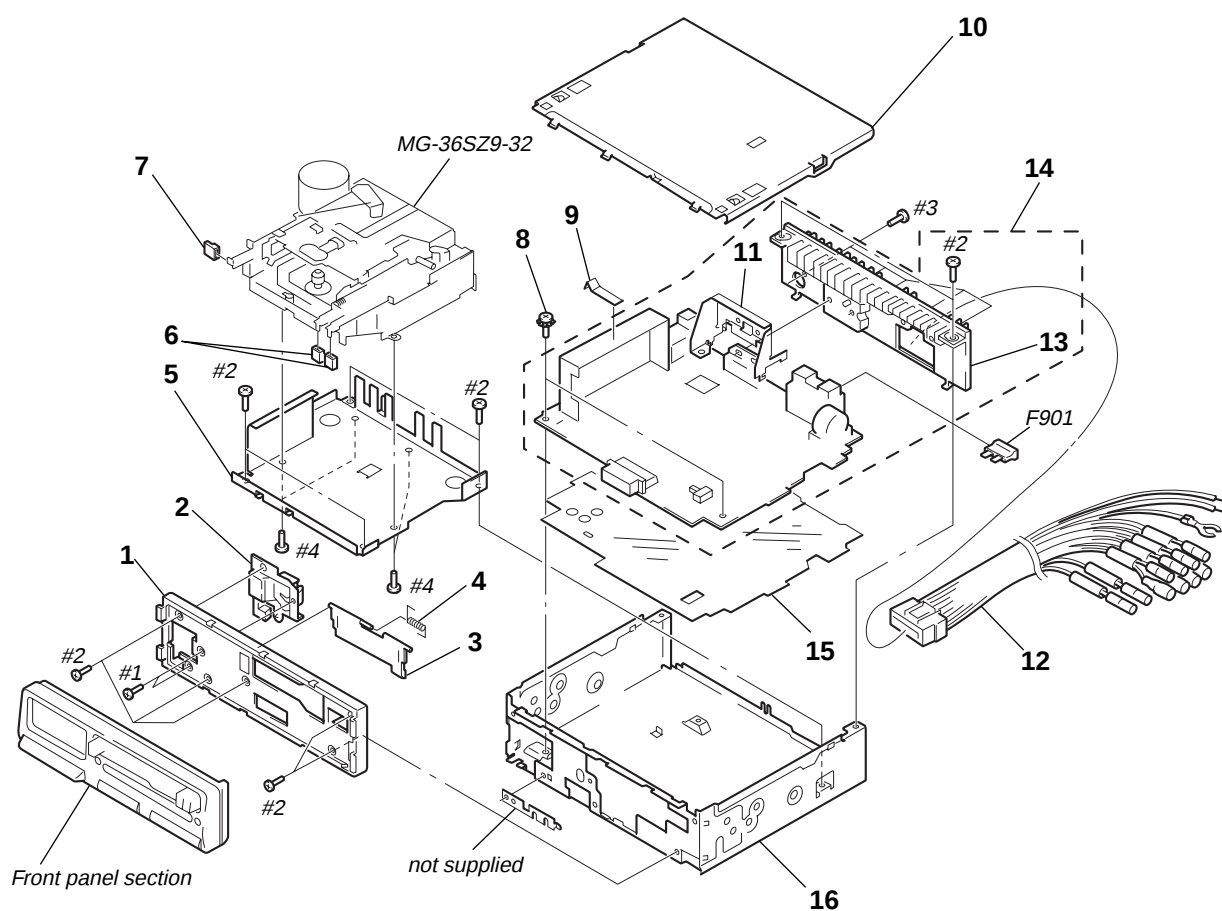
- XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) ... (RED)

↑
Parts Color

↑
Cabinet's Color

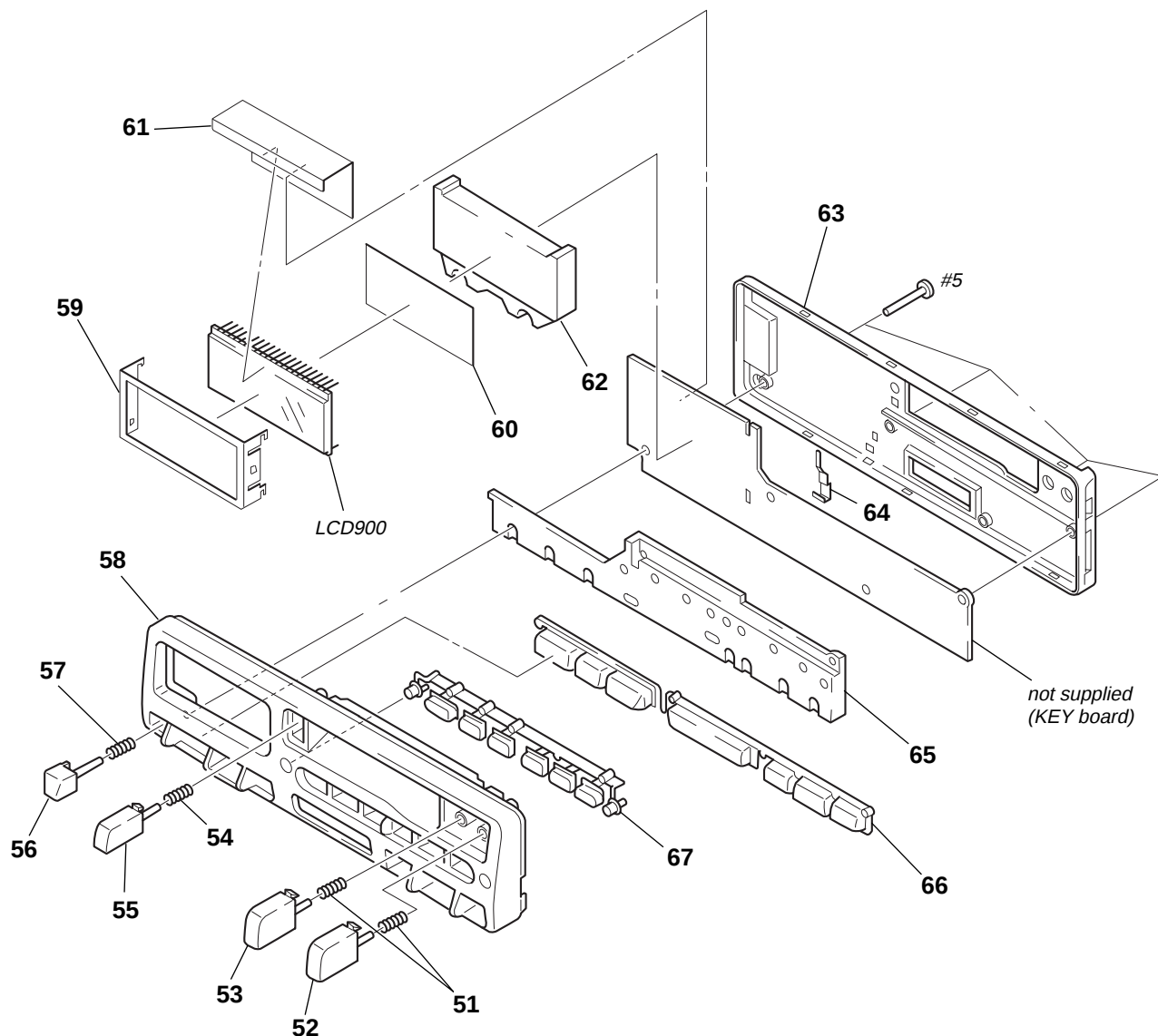
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of the electrical parts list.

(1) GENERAL SECTION



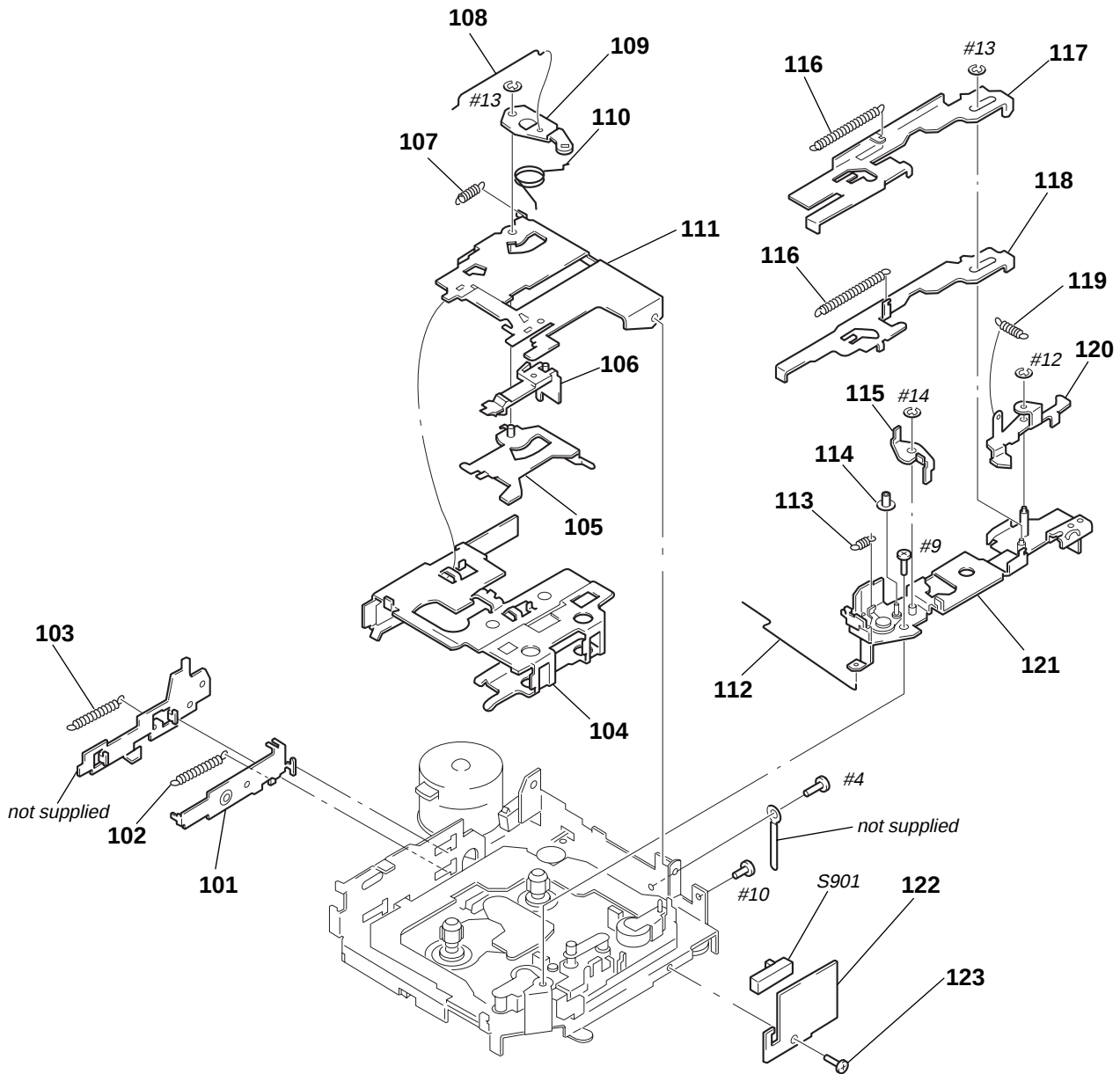
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
1	3-022-475-01	PANEL, SUB		* 10	X-3375-529-1	COVER ASSY	
2	X-3367-636-1	LOCK ASSY		* 11	3-022-470-01	BRACKET (IC)	
3	3-924-404-01	DOOR, CASSETTE (XR-1800: E)		12	1-776-207-41	CORD (WITH CONNECTOR) (POWER)	
3	3-924-404-11	DOOR, CASSETTE (XR-1800: AEP, UK/1803)		* 13	3-022-477-01	HEAT SINK	
3	3-924-404-41	DOOR, CASSETTE (XR-1804)		* 14	A-3313-751-A	MAIN BOARD, COMPLETE (XR-1800: E)	
4	3-377-892-01	SPRING (C DOOR), TORSION		* 14	A-3313-844-A	MAIN BOARD, COMPLETE (XR-1800: AEP, UK)	
* 5	3-022-479-01	BRACKET (MD)		* 14	A-3313-845-A	MAIN BOARD, COMPLETE (XR-1803)	
6	3-937-529-01	COVER (FF/REW)		* 14	A-3313-904-A	MAIN BOARD, COMPLETE (XR-1804)	
7	3-937-528-01	COVER (EJECT)		* 15	3-022-487-01	SHEET, INSULATING	
8	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT		* 16	3-022-476-01	CHASSIS, MAIN	
* 9	3-022-469-01	SPRING, GROUND		F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	

(2) FRONT PANEL SECTION



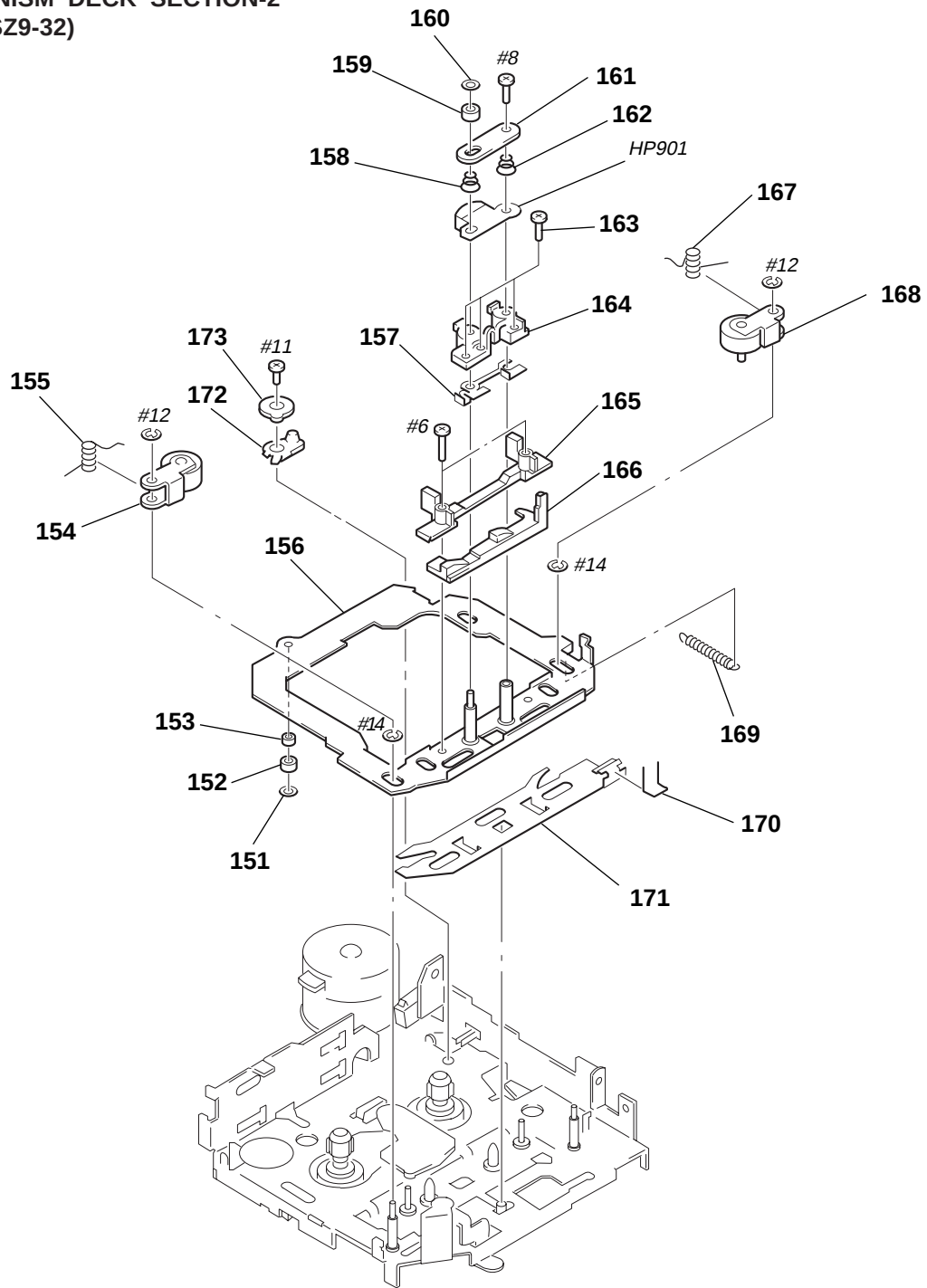
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	3-375-372-01	SPRING (F/R)		* 61	3-027-172-01	INSULATOR (L)	
52	3-022-485-01	BUTTON (FF) (▶▶)		* 62	3-022-482-01	PLATE (LCD), LIGHT GUIDE	
53	3-022-486-01	BUTTON (REW) (◀◀)		63	3-022-474-01	PANEL, FRONT BACK	
54	3-922-513-01	SPRING (EJECT), COMPRESSION		* 64	3-022-468-01	SPRING, GROUND	
55	3-022-483-01	BUTTON (EJECT) (▲)		* 65	3-022-478-01	PLATE, LIGHT GUIDE	
56	3-022-484-01	BUTTON (RELEASE)		66	3-022-480-01	BLOCK (A), BUTTON (-. SEL. +. -. SEEKMANU. +. LOUD. TUNER. OFF)	
57	3-922-514-01	SPRING (RELEASE), COMPRESSION		67	3-022-481-01	BLOCK (B), BUTTON (DSPL. 1. 2. 3. 4. 5. 6. LCL)	
58	3-022-473-01	PANEL, FRONT (XR-1800)		LCD900	1-803-137-11	DISPLAY PANEL, LIQUID CRYSTAL (XR-1800)	
58	3-022-473-11	PANEL, FRONT (XR-1803)		LCD900	1-803-138-11	DISPLAY PANEL, LIQUID CRYSTAL (XR-1804)	
58	3-022-473-21	PANEL, FRONT (XR-1804)		LCD900	1-803-139-11	DISPLAY PANEL, LIQUID CRYSTAL (XR-1803)	
* 59	3-022-471-01	PLATE (LCD), GROUND					
* 60	3-024-264-01	ILLUMINATOR					

(3) MECHANISM DECK SECTION-1
(MG-36SZ9-32)



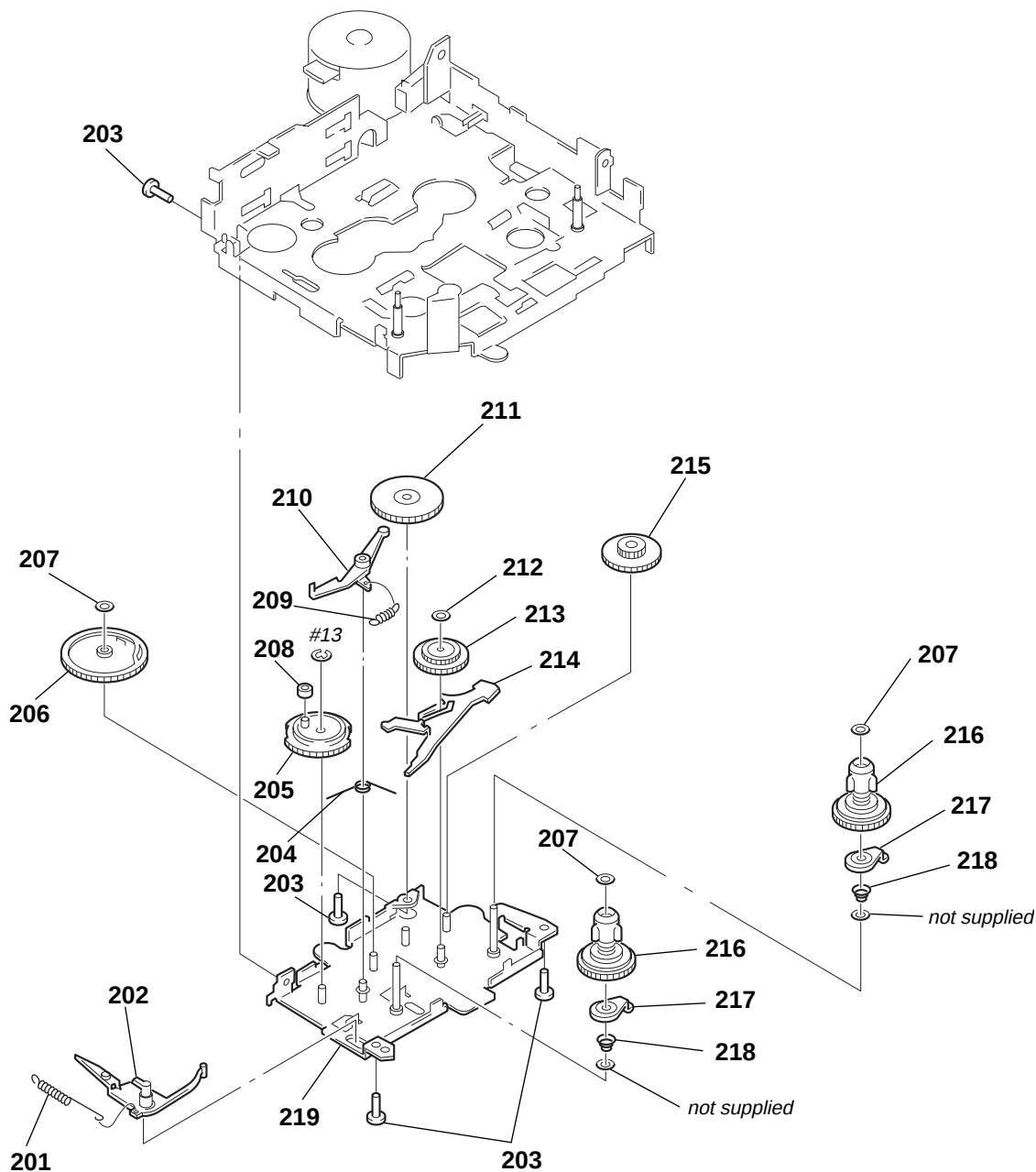
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-938-660-01	LEVER, EJECT		113	3-392-954-01	SPRING	
102	3-392-950-01	SPRING		114	3-392-994-01	ROLLER, PROGRAM	
103	3-392-951-01	SPRING		* 115	3-392-933-01	LEVER (B), CHANGE	
104	3-375-384-01	HOLDER (X), CASSETTE		116	3-392-948-01	SPRING	
* 105	3-392-921-01	LOCK ASSY, EJECT CAM		117	3-938-658-01	LEVER, FF	
106	3-392-972-01	HOOKER, TAPE		118	3-938-659-01	LEVER, REW	
107	3-392-953-01	SPRING		119	3-392-917-01	SPRING	
108	3-392-969-01	LINK, RETURN		* 120	3-392-935-01	ARM, LOCK	
* 109	3-392-932-01	PLATE, CENTER		* 121	3-372-242-01	BRACKET ASSY (D), LEVER	
110	3-392-961-01	SPRING (B)		122	3-392-970-01	CHASSIS, SWITCH	(DIRECTION SWITCH BOARD)
111	3-375-383-01	HANGER (X), CASSETTE					
112	3-372-243-01	LINK (B), SELECTOR		* 123	4-908-792-11	SCREW (B2)	
				S901	1-692-502-11	SWITCH, SLIDE (DIRECTION)	

(4) MECHANISM DECK SECTION-2
(MG-36SZ9-32)



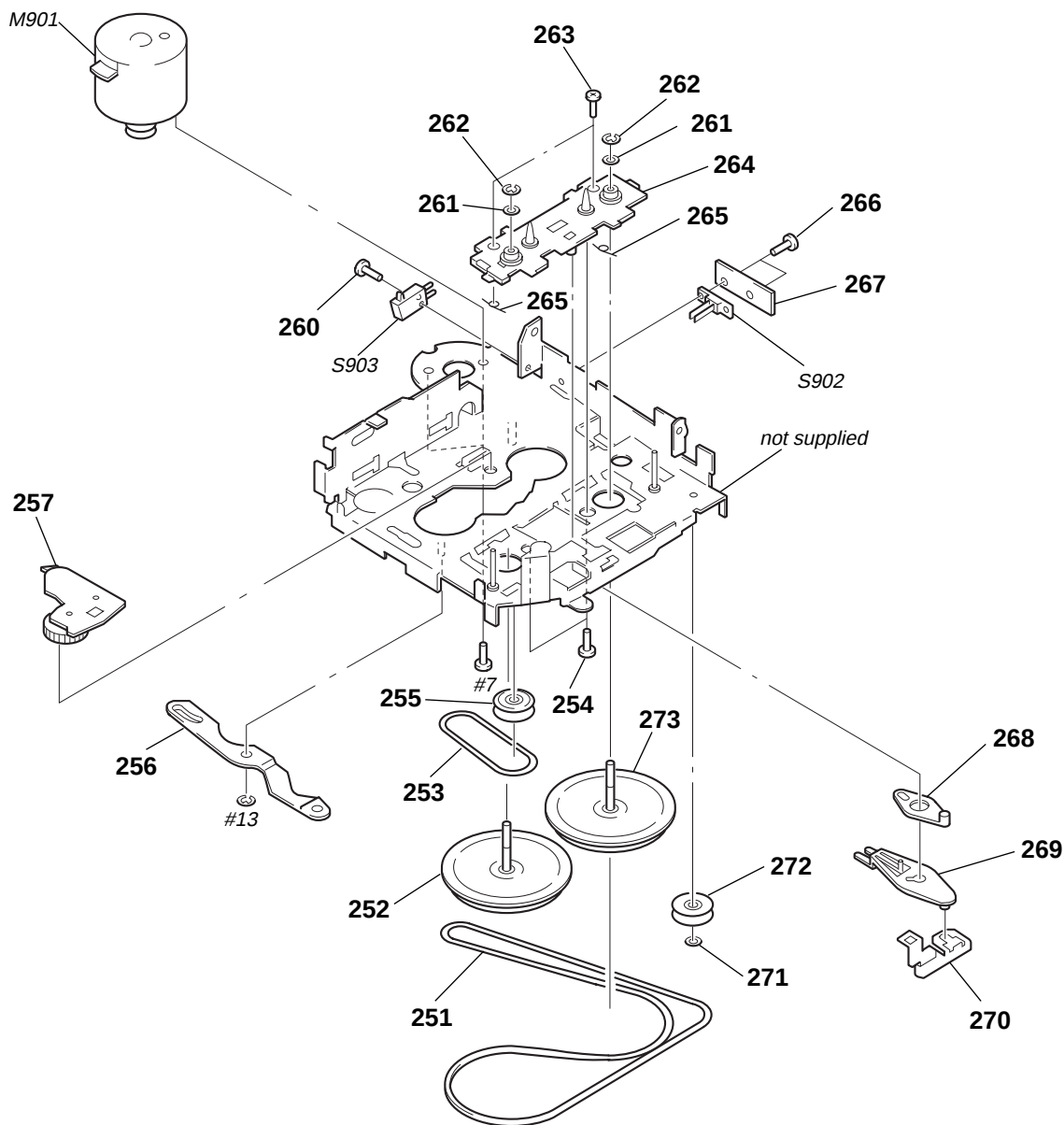
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	3-570-615-02	POLY-WASHER (DIA.1.2)		163	3-375-379-01	SCREW, AZIMUTH	
152	3-392-945-01	ROLLER (A), H.P		* 164	3-379-142-01	ARM (B), ADJUSTOR	
153	3-392-942-01	ROLLER (B), H.P		165	3-392-984-02	GUIDE, TAPE	
154	3-375-378-01	ARM (R) ASSY, PINCH		166	3-377-909-02	LINK (X), ADJUSTOR	
155	3-392-958-01	SPRING (R)		167	3-392-957-01	SPRING (F)	
* 156	3-392-975-05	PLATE ASSY (S), HEAD		168	3-375-377-01	ARM (F) ASSY, PINCH	
157	3-377-908-01	SHIM (X), ADJUSTOR		169	3-392-952-01	SPRING	
158	3-392-956-01	SPRING (A)		170	3-392-962-01	SPRING	
159	3-392-943-01	ROLLER, FF		* 171	3-392-919-01	ARM ASSY, F,R SELECTION	
160	3-676-387-00	POLY-SLIDER (DIA.1.6)		172	3-372-244-01	ARM (N), MUTE	
* 161	3-392-930-01	RETAINER, SPRING		* 173	3-397-427-01	COLLAR, MUTE ARM	
162	3-392-955-01	SPRING (A)		HP901	1-543-717-11	HEAD, MAGNETIC (PLAYBACK)	

(5) MECHANISM DECK SECTION-3
(MG-36SZ9-32)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-392-959-01	SPRING		211	3-392-937-01	GEAR (B)	
202	3-392-985-02	RATCHET		212	3-570-615-02	POLY-WASHER (DIA.1.2)	
* 203	4-908-792-11	SCREW (B2)		213	3-392-915-01	GEAR, IDLE	
204	3-392-960-01	SPRING		214	3-392-986-01	ARM, SENSOR	
205	3-392-987-01	GEAR, SELECTOR		215	3-392-936-01	GEAR (A)	
206	3-392-990-01	GEAR, DETECTION		216	3-376-196-01	SPINDLE ASSY (S), REEL	
207	3-676-387-00	POLY-SLIDER (DIA.1.6)		217	3-375-380-01	CAM ASSY, DETECTION	
208	3-392-944-01	COLLAR (SELECTOR GEAR)		218	3-370-619-01	SPRING, BACK TENSION	
209	3-375-131-01	SPRING, GEAR LOCK ARM		* 219	3-392-976-01	BASE ASSY, REEL	
210	3-392-989-02	ARM, GEAR LOCK					

(6) MECHANISM DECK SECTION-4
(MG-36SZ9-32)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	3-392-967-01	BELT, MAIN		265	3-392-963-01	SPRING (R)	
252	3-392-995-02	FLYWHEEL ASSY (BR)		266	3-318-204-91	SCREW (M1.7X4), TAPPING	
253	3-375-375-02	BELT (C), SUB		267	3-375-376-01	MUTE (PWB) (MUTE SWITCH BOARD)	
254	3-392-918-01	SCREW, EJECT HOOK		* 268	3-392-925-01	ARM (A) ASSY, F.R	
255	3-392-938-01	GEAR, PULLEY		* 269	3-392-939-01	ARM, FF	
* 256	3-392-979-01	LEVER, REVERSE		* 270	3-392-934-01	ARM (B), F.R	
257	3-392-916-01	ARM ASSY, TU GEAR		271	3-570-615-02	POLY-WASHER (DIA.1.2)	
260	3-318-203-11	SCREW (B1.7X6), TAPPING		272	3-392-941-01	PULLEY (A), IDLE	
261	3-701-437-11	POLY-SLIDER (A)		273	3-392-926-02	FLYWHEEL ASSY (BF)	
262	3-590-768-00	RING (A), E		M901	X-3364-496-1	MOTOR ASSY (CAPSTAN/REEL)	
263	3-318-204-81	SCREW (M1.7X3), TAPPING		S902	1-692-065-11	SWITCH, LEAF (FF/REW)	
* 264	3-375-381-01	BRACKET ASSY (X), CM		S903	1-554-790-21	SWITCH, POWER (TAPE DETECT)	

KEY

SECTION 7
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA. . : μ A. . uPA. . : μ PA. .
uPB. . : μ PB. . uPC. . : μ PC. .
uPD. . : μ PD. .
- CAPACITORS
uF: μ F
- COILS
uH: μ H

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		KEY BOARD *****				< LIQUID CRYSTAL DISPLAY >	
*	3-022-466-01	REFLECTOR		LCD900	1-803-137-11	DISPLAY PANEL, LIQUID CRYSTAL (XR-1800)	
*	3-022-471-01	PLATE (LCD), GROUND		LCD900	1-803-138-11	DISPLAY PANEL, LIQUID CRYSTAL (XR-1804)	
*	3-022-482-01	PLATE (LCD), LIGHT GUIDE		LCD900	1-803-139-11	DISPLAY PANEL, LIQUID CRYSTAL (XR-1803)	
*	3-024-264-01	ILLUMINATOR				< PILOT LAMP >	
		< CAPACITOR >		PL900	1-517-534-11	LAMP, PILOT (LCD BACK LIGHT, ILLUMINATION)	
C900	1-163-006-11	CERAMIC CHIP 560PF	10% 50V	PL901	1-517-534-11	LAMP, PILOT (LCD BACK LIGHT, ILLUMINATION)	
C901	1-163-133-00	CERAMIC CHIP 470PF	5% 50V				
C902	1-164-005-11	CERAMIC CHIP 0.47uF	25V	PL902	1-517-534-11	LAMP, PILOT (ILLUMINATION)	
C903	1-164-005-11	CERAMIC CHIP 0.47uF	25V	PL903	1-517-534-11	LAMP, PILOT (ILLUMINATION)	
C904	1-164-005-11	CERAMIC CHIP 0.47uF	25V			< RESISTOR >	
		< CONNECTOR >		R900	1-216-091-00	METAL CHIP 56K 5% 1/10W	
CN902	1-764-422-11	PLUG, CONNECTOR 12P		R901	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
		< DIODE >		R902	1-216-062-00	METAL CHIP 3.6K 5% 1/10W	
D4	8-719-988-62	DIODE 1SS355		R903	1-216-062-00	METAL CHIP 3.6K 5% 1/10W	
D900	8-719-977-03	DIODE DTZ5.6B		R904	1-216-059-00	METAL CHIP 2.7K 5% 1/10W	
D901	8-719-105-99	DIODE RD6.2M-B1		R905	1-216-054-00	RES,CHIP 1.6K 5% 1/10W	
D902	8-719-105-99	DIODE RD6.2M-B1		R906	1-216-097-00	RES,CHIP 100K 5% 1/10W	
D903	8-719-105-99	DIODE RD6.2M-B1				< SWITCH >	
		< IC >		S900	1-692-118-21	SWITCH, KEY BOARD (TUNER, A MEM)	
IC900	8-759-544-59	IC LC75842M		S901	1-692-118-21	SWITCH, KEY BOARD (SEL)	
		< SHORT >		S902	1-692-118-21	SWITCH, KEY BOARD (+)	
JC136	1-216-296-00	SHORT 0		S903	1-692-118-21	SWITCH, KEY BOARD (-)	
JC137	1-216-295-00	SHORT 0		S904	1-692-118-21	SWITCH, KEY BOARD (DSPL)	
JC901	1-216-296-00	SHORT 0					
JC902	1-216-296-00	SHORT 0		S905	1-692-118-21	SWITCH, KEY BOARD (-, SEEK, MANU)	
JC903	1-216-296-00	SHORT 0		S906	1-692-118-21	SWITCH, KEY BOARD (1, ATA)	
				S907	1-692-118-21	SWITCH, KEY BOARD (2)	
JC904	1-216-296-00	SHORT 0		S908	1-692-118-21	SWITCH, KEY BOARD (3)	
JC905	1-216-296-00	SHORT 0		S909	1-692-118-21	SWITCH, KEY BOARD (4)	
JC906	1-216-296-00	SHORT 0					
JC907	1-216-296-00	SHORT 0		S910	1-692-118-21	SWITCH, KEY BOARD (6)	
JC908	1-216-296-00	SHORT 0		S911	1-692-118-21	SWITCH, KEY BOARD (LOUD)	
				S912	1-692-118-21	SWITCH, KEY BOARD (5)	
JC909	1-216-296-00	SHORT 0		S913	1-692-118-21	SWITCH, KEY BOARD (LCL)	
JC910	1-216-296-00	SHORT 0		S914	1-692-118-21	SWITCH, KEY BOARD (OFF)	
JC913	1-216-295-00	SHORT 0		S916	1-692-118-21	SWITCH, KEY BOARD (+, SEEK, MANU)	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-3313-751-A	MAIN BOARD, COMPLETE (XR-1800: E)		C125	1-163-235-11	CERAMIC CHIP 22PF 5% 50V	
*	A-3313-844-A	MAIN BOARD, COMPLETE (XR-1800: AEP, UK)				(XR-1800: AEP, UK/1803)	
*	A-3313-845-A	MAIN BOARD, COMPLETE (XR-1803)		C131	1-126-162-11	ELECT 3.3uF 20% 50V	
*	A-3313-904-A	MAIN BOARD, COMPLETE (XR-1804)		C132	1-163-037-11	CERAMIC CHIP 0.022uF 10% 50V	
		*****		C200	1-164-489-11	CERAMIC CHIP 0.22uF 10% 16V	
						(XR-1800: E)	
*	3-022-470-01	BRACKET (IC)		C200	1-164-492-11	CERAMIC CHIP 0.15uF 10% 16V	
*	3-022-477-01	HEAT SINK				(EXCEPT XR-1800: E)	
	7-685-793-09	SCREW +PTT 2.6X8 (S)					
		< CAPACITOR/SHORT >		C201	1-163-020-00	CERAMIC CHIP 0.0082uF 10% 50V	
						(XR-1800: E)	
C4	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V		C201	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V	
C5	1-124-584-00	ELECT 100uF 20% 10V				(EXCEPT XR-1800: E)	
C6	1-163-251-11	CERAMIC CHIP 100PF 5% 50V		C202	1-115-185-11	CERAMIC CHIP 0.033uF 10% 50V	
		(XR-1800: E)				(EXCEPT XR-1800: E)	
C7	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V		C202	1-216-295-00	SHORT 0 (XR-1800: E)	
		(EXCEPT XR-1800: E)		C250	1-163-024-00	CERAMIC CHIP 0.018uF 10% 50V	
C8	1-163-251-11	CERAMIC CHIP 100PF 5% 50V				(EXCEPT XR-1800: E)	
C9	1-163-251-11	CERAMIC CHIP 100PF 5% 50V		C250	1-163-037-11	CERAMIC CHIP 0.022uF 10% 50V	
C10	1-163-235-11	CERAMIC CHIP 22PF 5% 50V				(XR-1800: E)	
C11	1-163-235-11	CERAMIC CHIP 22PF 5% 50V		C251	1-163-024-00	CERAMIC CHIP 0.018uF 10% 50V	
C15	1-163-251-11	CERAMIC CHIP 100PF 5% 50V				(EXCEPT XR-1800: E)	
		(XR-1800: E)		C251	1-163-037-11	CERAMIC CHIP 0.022uF 10% 50V	
C16	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V				(XR-1800: E)	
		(XR-1800: E)		C252	1-126-160-11	ELECT 1uF 20% 50V	
				C253	1-126-160-11	ELECT 1uF 20% 50V	
C17	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V		C350	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
		(XR-1800: E/1804)		C351	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C20	1-163-018-00	CERAMIC CHIP 0.0056uF 5% 50V		C352	1-163-137-00	CERAMIC CHIP 680PF 5% 50V	
C21	1-104-760-11	CERAMIC CHIP 0.047uF 10% 50V		C353	1-163-137-00	CERAMIC CHIP 680PF 5% 50V	
C71	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V		C354	1-126-154-11	ELECT 47uF 20% 6.3V	
C100	1-163-235-11	CERAMIC CHIP 22PF 5% 50V					
C102	1-163-220-11	CERAMIC CHIP 3PF 0.25PF 50V		C355	1-126-154-11	ELECT 47uF 20% 6.3V	
		(EXCEPT XR-1804)		C356	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C103	1-164-232-11	CERAMIC CHIP 0.01uF 50V		C357	1-124-229-00	ELECT 33uF 20% 10V	
C104	1-164-232-11	CERAMIC CHIP 0.01uF 50V		C358	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
		(XR-1800: AEP, UK/1803)		C359	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C104	1-164-489-11	CERAMIC CHIP 0.22uF 10% 16V					
		(XR-1800: E/1804)		C360	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C105	1-126-925-11	ELECT 470uF 20% 10V		C450	1-124-584-00	ELECT 100uF 20% 10V	
		(XR-1800: E)		C451	1-163-077-00	CERAMIC CHIP 0.1uF 10% 25V	
C105	1-126-934-11	ELECT 220uF 20% 10V				(EXCEPT XR-1800: E)	
		(EXCEPT XR-1800: E)		C451	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C106	1-163-251-11	CERAMIC CHIP 100PF 5% 50V				(XR-1800: E)	
C107	1-104-760-11	CERAMIC CHIP 0.047uF 10% 50V		C452	1-126-160-11	ELECT 1uF 20% 50V	
C110	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V		C453	1-126-160-11	ELECT 1uF 20% 50V	
		(XR-1800: AEP, UK/1803)		C454	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V	
C110	1-164-232-11	CERAMIC CHIP 0.01uF 10% 16V		C455	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V	
		(XR-1800: E)		C456	1-164-345-11	CERAMIC CHIP 0.082uF 10% 25V	
C111	1-124-589-11	ELECT 47uF 20% 16V		C457	1-164-345-11	CERAMIC CHIP 0.082uF 10% 25V	
C112	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V		C458	1-164-182-11	CERAMIC CHIP 0.0033uF 10% 50V	
C114	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V		C459	1-124-229-00	ELECT 33uF 20% 10V	
		(EXCEPT XR-1800: E)		C460	1-163-037-11	CERAMIC CHIP 0.022uF 10% 50V	
C115	1-164-232-11	CERAMIC CHIP 0.01uF 50V		C461	1-163-037-11	CERAMIC CHIP 0.022uF 10% 50V	
		(EXCEPT XR-1800: E)		C462	1-124-234-00	ELECT 22uF 20% 16V	
C116	1-104-760-11	CERAMIC CHIP 0.047uF 10% 50V		C463	1-124-234-00	ELECT 22uF 20% 16V	
C117	1-164-232-11	CERAMIC CHIP 0.01uF 10% 50V		C464	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C118	1-124-234-00	ELECT 22uF 20% 16V		C465	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C119	1-124-584-00	ELECT 100uF 20% 10V		C471	1-164-182-11	CERAMIC CHIP 0.0033uF 10% 50V	
C120	1-124-584-00	ELECT 100uF 20% 10V		C550	1-126-160-11	ELECT 1uF 20% 50V	
C121	1-164-232-11	CERAMIC CHIP 0.01uF 50V		C551	1-126-160-11	ELECT 1uF 20% 50V	
C122	1-163-251-11	CERAMIC CHIP 100PF 5% 50V		C552	1-126-160-11	ELECT 1uF 20% 50V	
		(EXCEPT XR-1800: E)		C553	1-126-160-11	ELECT 1uF 20% 50V	

MAIN

Ref. No.	Part No.	Description	Remark			
C554	1-104-760-11	CERAMIC CHIP	0.047uF	10%	50V	
C557	1-104-760-11	CERAMIC CHIP	0.047uF	10%	50V	
C558	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C559	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C560	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C561	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C571	1-163-243-11	CERAMIC CHIP	47PF	5%	50V	
C573	1-126-157-11	ELECT	10uF	20%	16V	
C574	1-126-157-11	ELECT	10uF	20%	16V	
C600	1-164-005-11	CERAMIC CHIP	0.47uF		25V	
C601	1-126-160-11	ELECT	1uF	20%	50V	
C602	1-163-037-11	CERAMIC CHIP	0.022uF	10%	50V	
C603	1-163-037-11	CERAMIC CHIP	0.022uF	10%	50V	
C604	1-126-157-11	ELECT	10uF	20%	16V	
C605	1-124-229-00	ELECT	33uF	20%	10V	
C606	1-125-701-11	DOUBLE LAYER	0.047F		5.5V	
C607	1-163-037-11	CERAMIC CHIP	0.022uF	10%	50V	
C608	1-126-157-11	ELECT	10uF	20%	16V	
C609	1-124-584-00	ELECT	100uF	20%	10V	
C610	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C611	1-126-157-11	ELECT	10uF	20%	16V	
C612	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C613	1-136-165-00	FILM	0.1uF	5%	50V	
C614	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C620	1-126-937-11	ELECT	4700uF	20%	16V	
C621	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V	
C622	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C623	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C624	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C625	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
< CONNECTOR >						
CN900	1-764-808-14	JACK (FM/AM ANTENNA)				
CN901	1-691-582-11	PIN, CONNECTOR (PC BOARD) 11P				
CN903	1-774-701-11	PIN, CONNECTOR 16P				
CN906	1-764-423-11	PIN, CONNECTOR 12P				
< DIODE >						
D1	8-719-109-93	DIODE RD6.2ES2				
D2	8-719-991-33	DIODE 1SS133T-77				
D3	8-719-991-33	DIODE 1SS133T-77				
D10	8-719-991-33	DIODE 1SS133T-77 (XR-1800: AEP, UK)				
D12	8-719-991-33	DIODE 1SS133T-77 (XR-1800: E/1804)				
D13	8-719-109-93	DIODE RD6.2ES2				
D14	8-719-109-93	DIODE RD6.2ES2				
D15	8-719-109-93	DIODE RD6.2ES2				
D16	8-719-109-93	DIODE RD6.2ES2				
D17	8-719-109-93	DIODE RD6.2ES2				
D18	8-719-109-93	DIODE RD6.2ES2				
D19	8-719-109-93	DIODE RD6.2ES2				
D20	8-719-109-93	DIODE RD6.2ES2				
D100	8-719-991-65	DIODE SB02W03C				
D350	8-719-970-02	DIODE 1SR139-400				
D351	8-719-991-33	DIODE 1SS133T-77				
D503	8-719-970-02	DIODE 1SR139-400				
D506	8-719-970-02	DIODE 1SR139-400				
D551	8-719-929-15	DIODE MTZJ-T-77-9.1B				
D600	8-719-991-33	DIODE 1SS133T-77				

Ref. No.	Part No.	Description	Remark			
D601	8-719-991-33	DIODE 1SS133T-77				
D602	8-719-024-32	DIODE HZS6B2LTD				
D603	8-719-048-54	DIODE MTZJ-T-77-10A				
D605	8-719-970-02	DIODE 1SR139-400				
D606	8-719-991-33	DIODE 1SS133T-77				
D607	8-719-921-63	DIODE MTZJ-7.5B				
D608	8-719-991-33	DIODE 1SS133T-77				
D609	8-719-991-33	DIODE 1SS133T-77				
D610	8-719-110-49	DIODE RD18ES-B2				
D611	8-719-060-48	DIODE RB751V-40TE-17				
D620	8-719-049-38	DIODE 1N5404TU				
D621	8-719-991-33	DIODE 1SS133T-77				
< COMPOSITION CIRCUIT BLOCK >						
DSP100	1-519-504-11	GAP, DISCHARGE				
< IC >						
IC1	8-759-536-09	IC LC72322N-9400 (XR-1800)				
IC1	8-759-536-10	IC LC72322N-9399 (XR-1803)				
IC1	8-759-537-14	IC LC72322N-9412 (XR-1804)				
IC350	8-759-745-64	IC NJM4560M				
IC450	8-759-368-11	IC LC75372E				
IC500	8-759-490-48	IC HA13158				
< SHORT/CAPACITOR >						
JC1	1-216-295-00	SHORT	0			
JC2	1-216-295-00	SHORT	0			
JC4	1-216-296-00	SHORT	0			
JC35	1-216-296-00	SHORT	0			
JC56	1-216-296-00	SHORT	0			
JC57	1-216-296-00	SHORT	0			
JC58	1-216-296-00	SHORT	0			
JC59	1-216-296-00	SHORT	0			
JC60	1-216-295-00	SHORT	0			
JC61	1-216-295-00	SHORT	0 (EXCEPT XR-1803)			
JC101	1-216-295-00	SHORT	0 (XR-1800: E)			
JC102	1-216-295-00	SHORT	0 (EXCEPT XR-1800: E)			
JC103	1-216-295-00	SHORT	0 (XR-1800: E)			
JC104	1-216-295-00	SHORT	0			
JC112	1-216-296-00	SHORT	0			
JC113	1-216-296-00	SHORT	0			
JC114	1-216-296-00	SHORT	0			
JC116	1-216-296-00	SHORT	0			
JC117	1-216-296-00	SHORT	0			
JC118	1-216-296-00	SHORT	0			
JC119	1-216-295-00	SHORT	0			
JC120	1-216-296-00	SHORT	0			
JC121	1-216-296-00	SHORT	0			
JC122	1-216-296-00	SHORT	0			
JC123	1-216-296-00	SHORT	0			
JC124	1-216-295-00	SHORT	0			
JC125	1-216-296-00	SHORT	0			
JC126	1-216-296-00	SHORT	0			
JC127	1-216-296-00	SHORT	0			
JC128	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
(XR-1800: AEP, UK/1803)						

Ref. No.	Part No.	Description	Remark				Ref. No.	Part No.	Description	Remark			
JC128	1-164-232-11	CERAMIC CHIP	0.01uF	10%	50V	(XR1800: E)	Q611	8-729-620-06	TRANSISTOR	2SC3052-EF			
JC129	1-216-295-00	SHORT	0				Q612	8-729-027-38	TRANSISTOR	DTA144EKA-T146			
JC130	1-216-296-00	SHORT	0						< RESISTOR >				
JC131	1-216-296-00	SHORT	0				JW144	1-216-057-00	CARBON	2.2K	5%	1-10	(XR-1804)
JC132	1-216-296-00	SHORT	0				R2	1-216-097-00	RES,CHIP	100K	5%	1/10W	
JC133	1-216-296-00	SHORT	0				R3	1-216-073-00	METAL CHIP	10K	5%	1/10W	
JC134	1-216-296-00	SHORT	0				R4	1-216-081-00	METAL CHIP	22K	5%	1/10W	
JC138	1-216-296-00	SHORT	0										(EXCEPT XR-1800: E)
JC139	1-216-296-00	SHORT	0				R5	1-216-073-00	METAL CHIP	10K	5%	1/10W	
JC140	1-216-296-00	SHORT	0				R6	1-216-073-00	METAL CHIP	10K	5%	1/10W	
JC191	1-216-296-00	SHORT	0	(XR-1804)			R7	1-216-262-00	RES,CHIP	470K	5%	1/8W	
JC192	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V	(XR-1804)	R8	1-249-417-11	CARBON	1K	5%	1/4W	
JC192	1-216-295-00	SHORT	0	(XR-1800: AEP, UK/1803)			R9	1-249-417-11	CARBON	1K	5%	1/4W	
JC193	1-216-295-00	SHORT	0				R10	1-216-097-00	RES,CHIP	100K	5%	1/10W	
JC195	1-216-295-00	SHORT	0				R11	1-216-097-00	RES,CHIP	100K	5%	1/10W	
JC196	1-216-296-00	SHORT	0	(XR-1800: E)			R12	1-216-097-00	RES,CHIP	100K	5%	1/10W	
JC197	1-216-296-00	SHORT	0	(XR-1800: E)			R13	1-216-085-00	METAL CHIP	33K	5%	1/10W	
JC198	1-216-295-00	SHORT	0	(XR-1800: E)			R14	1-216-085-00	METAL CHIP	33K	5%	1/10W	
JC199	1-216-295-00	SHORT	0	(XR-1804)			R15	1-247-871-11	CARBON	47K	5%	1/4W	
JC452	1-216-295-00	SHORT	0										(XR-1800: E)
JC453	1-216-295-00	SHORT	0				R16	1-249-417-11	CARBON	1K	5%	1/4W	
JC454	1-216-295-00	SHORT	0										(EXCEPT XR-1800: E)
JC455	1-216-295-00	SHORT	0				R17	1-216-049-11	RES,CHIP	1K	5%	1/10W	
		< COIL/RESISTOR >											(XR-1800: E)
JW144	1-410-509-31	MICRO INDUCTOR	10uH	(XR-1800: E)			R17	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
L1	1-249-389-11	CARBON	4.7	5%	1/4W	(EXCEPT 1804)	R18	1-216-049-11	RES,CHIP	1K	5%	1/10W	
L1	1-410-513-11	MICRO INDUCTOR	22uH	(XR-1804)			R19	1-216-049-11	RES,CHIP	1K	5%	1/10W	
L100	1-410-312-11	INDUCTOR	0.22uH	(XR-1803)			R20	1-216-049-11	RES,CHIP	1K	5%	1/10W	
L600	1-411-669-21	COIL, CHOKE					R21	1-216-097-00	RES,CHIP	100K	5%	1/10W	
		< TRANSISTOR >					R22	1-216-097-00	RES,CHIP	100K	5%	1/10W	
Q10	8-729-205-95	TRANSISTOR	2SA1428-Y				R25	1-249-417-11	CARBON	1K	5%	1/4W	
Q30	8-729-901-05	TRANSISTOR	DTC144EK				R26	1-216-049-11	RES,CHIP	1K	5%	1/10W	
Q31	8-729-901-05	TRANSISTOR	DTC144EK				R27	1-216-049-11	RES,CHIP	1K	5%	1/10W	
Q32	8-729-901-05	TRANSISTOR	DTC144EK				R28	1-216-049-11	RES,CHIP	1K	5%	1/10W	
Q60	8-729-027-44	TRANSISTOR	DTC114TKA-T146				R29	1-249-417-11	CARBON	1K	5%	1/4W	
Q100	8-729-120-28	TRANSISTOR	2SC1623-L5L6				R30	1-249-417-11	CARBON	1K	5%	1/4W	
Q101	8-729-107-43	TRANSISTOR	2SC3624-L18				R31	1-249-417-11	CARBON	1K	5%	1/4W	
Q102	8-729-901-98	TRANSISTOR	2SA1036K-R				R32	1-216-049-11	RES,CHIP	1K	5%	1/10W	
Q103	8-729-027-52	TRANSISTOR	DTC124EKA-T146				R33	1-216-049-11	RES,CHIP	1K	5%	1/10W	
Q104	8-729-901-98	TRANSISTOR	2SA1036K-R				R35	1-216-097-00	RES,CHIP	100K	5%	1/10W	
Q105	8-729-027-52	TRANSISTOR	DTC124EKA-T146				R36	1-208-806-11	METAL CHIP	10K	0.5%	1/10W	
Q106	8-729-620-06	TRANSISTOR	2SC3052-EF (XR-1804)				R37	1-216-262-00	RES,CHIP	470K	5%	1/8W	
Q350	8-729-205-95	TRANSISTOR	2SA1428-Y				R38	1-216-049-11	RES,CHIP	1K	5%	1/10W	
Q351	8-729-900-53	TRANSISTOR	DTC114EK				R39	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
Q553	8-729-620-06	TRANSISTOR	2SC3052-EF				R41	1-249-417-11	CARBON	1K	5%	1/4W	
Q554	8-729-216-22	TRANSISTOR	2SA1162-G				R42	1-216-037-00	METAL CHIP	330	5%	1/10W	
Q600	8-729-035-33	TRANSISTOR	2SC3668-OY-TPF2				R56	1-249-417-11	CARBON	1K	5%	1/4W	
Q601	8-729-921-48	TRANSISTOR	2SD1760F5-TRPQR				R74	1-216-049-11	RES,CHIP	1K	5%	1/10W	
Q602	8-729-216-22	TRANSISTOR	2SA1162-G				R75	1-216-049-11	RES,CHIP	1K	5%	1/10W	
Q604	8-729-900-53	TRANSISTOR	DTC114EK				R76	1-216-049-11	RES,CHIP	1K	5%	1/10W	
Q605	8-729-205-95	TRANSISTOR	2SA1428-Y				R77	1-216-049-11	RES,CHIP	1K	5%	1/10W	
Q606	8-729-216-22	TRANSISTOR	2SA1162-G				R78	1-216-049-11	RES,CHIP	1K	5%	1/10W	
Q608	8-729-027-52	TRANSISTOR	DTC124EKA-T146				R79	1-216-045-00	METAL CHIP	680	5%	1/10W	
Q610	8-729-620-06	TRANSISTOR	2SC3052-EF				R103	1-216-001-00	METAL CHIP	10	5%	1/10W	
							R104	1-216-049-11	RES,CHIP	1K	5%	1/10W	

MAIN

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
			(EXCEPT XR-1800: E)			R370	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R106	1-216-041-00	METAL CHIP	470	5%	1/10W	R371	1-216-073-00	METAL CHIP	10K	5%	1/10W
R107	1-216-069-00	METAL CHIP	6.8K	5%	1/10W						
R108	1-216-049-11	RES,CHIP	1K	5%	1/10W	R451	1-216-081-00	METAL CHIP	22K	5%	1/10W
R109	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R452	1-216-081-00	METAL CHIP	22K	5%	1/10W
						R453	1-249-393-11	CARBON	10	5%	1/4W
R110	1-216-198-00	RES,CHIP	1K	5%	1/8W	R551	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R111	1-216-142-00	RES,CHIP	4.7	5%	1/8W	R552	1-216-073-00	METAL CHIP	10K	5%	1/10W
R112	1-216-057-00	METAL CHIP	2.2K	5%	1/10W						
R113	1-216-073-00	METAL CHIP	10K	5%	1/10W	R553	1-216-073-00	METAL CHIP	10K	5%	1/10W
R114	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R554	1-216-073-00	METAL CHIP	10K	5%	1/10W
						R555	1-216-073-00	METAL CHIP	10K	5%	1/10W
R115	1-216-073-00	METAL CHIP	10K	5%	1/10W	R556	1-216-049-11	RES,CHIP	1K	5%	1/10W
R116	1-216-029-00	METAL CHIP	150	5%	1/10W	R557	1-216-049-11	RES,CHIP	1K	5%	1/10W
			(EXCEPT XR-1800: E)								
R116	1-216-031-00	RES,CHIP	180	5%	1/10W	R558	1-216-049-11	RES,CHIP	1K	5%	1/10W
			(XR-1800: E)			R559	1-216-049-11	RES,CHIP	1K	5%	1/10W
R118	1-216-049-11	RES,CHIP	1K	5%	1/10W	R560	1-216-073-00	METAL CHIP	10K	5%	1/10W
			(XR-1800: AEP, UK/1803)			R561	1-216-073-00	METAL CHIP	10K	5%	1/10W
R118	1-216-295-00	SHORT	0 (XR-1800: E/1804)			R562	1-216-097-00	RES,CHIP	100K	5%	1/10W
R119	1-216-198-00	RES,CHIP	1K	5%	1/8W	R563	1-216-113-00	METAL CHIP	470K	5%	1/10W
			(XR-1800: E)			R565	1-216-105-00	RES,CHIP	220K	5%	1/10W
R120	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	R570	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
			(EXCEPT XR-1800: E)			R571	1-216-073-00	METAL CHIP	10K	5%	1/10W
R200	1-216-073-00	METAL CHIP	10K	5%	1/10W	R572	1-216-049-11	METAL CHIP	1K	5%	1/10W
			(EXCEPT XR-1800: E)								
R200	1-216-077-00	METAL CHIP	15K	5%	1/10W	R573	1-216-121-00	RES,CHIP	1M	5%	1/10W
			(XR-1800: E)			R574	1-216-093-00	METAL CHIP	68K	5%	1/10W
R201	1-216-075-00	METAL CHIP	12K	5%	1/10W	R582	1-216-073-00	METAL CHIP	10K	5%	1/10W
			(EXCEPT XR-1800: E)			R583	1-216-073-00	METAL CHIP	10K	5%	1/10W
						R584	1-216-077-00	METAL CHIP	15K	5%	1/10W
R250	1-216-049-11	RES,CHIP	1K	5%	1/10W						
			(XR-1800: E)			R585	1-216-077-00	METAL CHIP	15K	5%	1/10W
R250	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	R586	1-216-077-00	METAL CHIP	15K	5%	1/10W
			(EXCEPT XR-1800: E)			R587	1-216-077-00	METAL CHIP	15K	5%	1/10W
R251	1-216-049-11	RES,CHIP	1K	5%	1/10W	R588	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
			(XR-1800: E)			R589	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R251	1-216-071-00	METAL CHIP	8.2K	5%	1/10W						
			(EXCEPT XR-1800: E)			R590	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R252	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	R591	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
			(XR-1800: E)			R600	1-216-073-00	METAL CHIP	10K	5%	1/10W
						R601	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R252	1-216-073-00	METAL CHIP	10K	5%	1/10W	R602	1-216-077-00	METAL CHIP	15K	5%	1/10W
			(XR-1804)								
R252	1-216-077-00	METAL CHIP	15K	5%	1/10W	R603	1-216-081-00	METAL CHIP	22K	5%	1/10W
			(XR-1800: AEP, UK/1803)			R604	1-216-081-00	METAL CHIP	22K	5%	1/10W
R253	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	R605	1-216-037-00	METAL CHIP	330	5%	1/10W
			(XR-1800: E)			R606	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R253	1-216-073-00	METAL CHIP	10K	5%	1/10W	R607	1-249-413-11	CARBON	470	5%	1/4W
			(XR-1804)								
R253	1-216-077-00	METAL CHIP	15K	5%	1/10W	R608	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
			(XR-1800: AEP, UK/1803)			R609	1-216-073-00	METAL CHIP	10K	5%	1/10W
						R610	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R350	1-216-097-00	RES,CHIP	100K	5%	1/10W	R612	1-216-097-00	RES,CHIP	100K	5%	1/10W
R351	1-216-073-00	METAL CHIP	10K	5%	1/10W	R614	1-216-089-00	RES,CHIP	47K	5%	1/10W
R352	1-216-089-00	RES,CHIP	47K	5%	1/10W						
R353	1-216-089-00	RES,CHIP	47K	5%	1/10W	R615	1-216-081-00	METAL CHIP	22K	5%	1/10W
R354	1-216-015-00	METAL CHIP	39	5%	1/10W	R616	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
						R617	1-247-847-11	CARBON	4.7K	5%	1/4W
R355	1-216-015-00	METAL CHIP	39	5%	1/10W	R619	1-216-081-00	METAL CHIP	22K	5%	1/10W
R356	1-216-077-00	METAL CHIP	15K	5%	1/10W	R620	1-216-081-00	METAL CHIP	22K	5%	1/10W
R357	1-216-077-00	METAL CHIP	15K	5%	1/10W						
R358	1-216-115-00	METAL CHIP	560K	5%	1/10W	R630	1-249-385-11	CARBON	2.2	5%	1/6W
R359	1-216-115-00	METAL CHIP	560K	5%	1/10W	R631	1-249-385-11	CARBON	2.2	5%	1/6W
						R632	1-249-385-11	CARBON	2.2	5%	1/6W
R360	1-216-073-00	METAL CHIP	10K	5%	1/10W	R633	1-249-385-11	CARBON	2.2	5%	1/6W
R361	1-216-097-00	RES,CHIP	100K	5%	1/10W	R634	1-249-478-11	CARBON	2.2	5%	1/2W
R362	1-247-807-31	CARBON	100	5%	1/4W						

Ref. No.	Part No.	Description			Remark
R635	1-249-478-11	CARBON	2.2	5%	1/2W
R636	1-216-073-00	METAL CHIP	10K	5%	1/10W
R907	1-216-296-00	SHORT	0		
< SWITCH >					
S1	1-571-478-11	SWITCH, SLIDE (FREQUENCY SELECT)			(XR-1800: E/1804)
< TUNER UNIT >					
TU100	A-3282-019-A	TUX-008 (EA) (FM/AM TUNER UNIT)			(XR-1804)
TU100	A-3282-029-A	TUX-006/2 (E) (FM/AM TUNER UNIT)			(XR-1800: AEP, UK)
TU100	A-3282-031-A	TUX-006/2 (EE) (FM/AM TUNER UNIT)			(XR-1803)
TU100	A-3282-034-A	TUX-010 (E) (FM/AM TUNER UNIT)			(XR-1800: E)
< VIBRATOR >					
X1	1-567-713-11	VIBRATOR, CRYSTAL (4.5MHz)			

MISCELLANEOUS					

12	1-776-207-41	CORD (WITH CONNECTOR) (POWER)			
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)			
HP901	1-543-717-11	HEAD, MAGNETIC (PLAYBACK)			
M901	X-3364-496-1	MOTOR ASSY (REEL/CAPSTAN)			
S901	1-692-502-11	SWITCH, SLIDE (DIRECTION)			
S902	1-692-065-11	SWITCH, LEAF (FF/REW)			
S903	1-554-790-21	SWITCH, POWER (TAPE DETECT)			

ACCESSORIES & PACKING MATERIALS					

3-862-558-11	MANUAL, INSTRUCTION (ENGLISH, SPANISH, CHINESE) (XR-1800: E)				
3-862-558-21	MANUAL, INSTRUCTION (ENGLISH, ARABIC) (XR-1804)				
3-862-558-31	MANUAL, INSTRUCTION (HUNGARIAN, RUSSIAN) (XR-1803)				
3-862-558-41	MANUAL, INSTRUCTION (ENGLISH, SPANISH, PORTUGUESE, CZECH, ARABIC) (XR-1800: AEP, UK)				
3-862-559-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH, CHINESE) (XR-1800: E)				
3-862-559-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, ARABIC) (XR-1804)				
3-862-559-31	MANUAL, INSTRUCTION, INSTALL (HUNGARIAN, RUSSIAN) (XR-1803)				
3-862-559-41	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH, PORTUGUESE, CZECH, ARABIC) (XR-1800: AEP, UK)				
3-862-559-51	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH, ITALIAN, CZECH, TURKISH) (XR-1800: AEP, UK)				

Ref. No.	Part No.	Description	Remark

HARDWARE LIST			

#1	7-621-772-10	SCREW +B 2X4	
#2	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#3	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#4	7-685-790-01	SCREW +PTT 2.6X4 (S)	
#5	7-685-106-19	TPG +P 2X10, TYPE 2, NON-SLIT	
#6	7-627-553-88	SCREW, PRECISION +P 2X7	
#7	7-621-255-15	SCREW +P 2X3	
#8	7-621-255-20	SCREW +P 2X4	
#9	7-685-781-09	SCREW +PTT 2X4 (S)	
#10	7-621-555-10	SCREW +K 2X3	
#11	7-621-591-00	SCREW +K 2X4	
#12	7-624-102-04	STOP RING 1.5, TYPE -E	
#13	7-624-104-04	STOP RING 2.0, TYPE -E	
#14	7-624-118-01	RING, RETAINING E-2.5	

PARTS FOR INSTALLATION AND CONNECTIONS

501	X-3367-691-1	FRAME ASSY, FITTING
502	X-3366-405-1	SCREW ASSY (EXT), FITTING
503	X-3371-913-1	SCREW ASSY (J)
504	1-776-207-41	CORD (WITH CONNECTOR) (POWER)
505	1-775-543-11	CORD, GROUND (XR-1800: E)
506	3-018-384-01	COLLAR

