

# XR-1790

## SERVICE MANUAL

US Model  
Canadian Model  
E Model



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

### SPECIFICATIONS

#### AUDIO POWER SPECIFICATIONS (US model)

##### POWER OUTPUT AND TOTAL HARMONIC DISTORTION

13 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 1% total harmonic distortion.

#### 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

Tuning range **US and Canadian models:**  
87.5 - 107.9 MHz  
**E model:**  
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 9 dBf  
Selectivity 75 dB at 400 kHz  
Signal-to-noise ratio 65 dB (stereo),  
68 dB (mono)

Harmonic distortion at 1 kHz  
0.7% (stereo),  
0.4% (mono)

Separation 35 dB at 1 kHz  
Frequency response 30 - 15,000 Hz

##### AM

Tuning range **US and Canadian models:**  
530 - 1,710 kHz  
**E model:**  
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  $\mu$ V

#### Power amplifier section

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

- Continued on next page -

## FM/AM CASSETTE CAR STEREO



# SONY®

## 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 × 57 × 176 mm (7 <sup>3</sup> / <sub>8</sub> × 2 <sup>1</sup> / <sub>4</sub> × 7 in.) (w/h/d) not incl. projecting parts and controls
Mounting dimension	Approx. 182 × 53 × 163 mm (7 <sup>1</sup> / <sub>4</sub> × 2 <sup>1</sup> / <sub>8</sub> × 6 <sup>1</sup> / <sub>2</sub> in.) (w/h/d) not incl. projecting parts and controls
Mass	Approx. 1.2 kg (2 lb. 10 oz.)
Supplied accessories	Parts for installation and connections (1 set)

*Design and specifications are subject to change without notice.*

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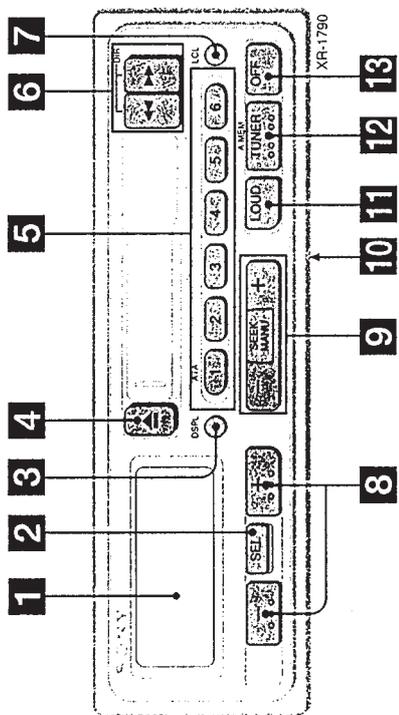
### Flexible Circuit Board Repairing

- 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.

Location of controls



Refer to the pages for further details.

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

Getting Started

Setting the clock

The clock has a 12-hour digital indication.

For example, setting it to 10:08

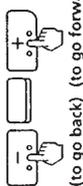
- 1 Display the time.  
(Press the <sup>DISP</sup> button during unit operation.)

- 2 Press the <sup>DISP</sup> button for more than two seconds.



The hour digit blinks.

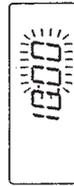
Set the hour digits.



(to go back) (to go forward)



- 3 Press the <sup>SEL</sup> button momentarily.

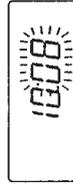


The minute digits blink.

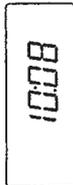
Set the minute digits.



(to go back) (to go forward)



- 4 Press the <sup>DISP</sup> 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 (US, Canadian)

## Precautions

- Choose the installing location carefully so that the unit will not interfere with driving.
- Avoid installing the unit where it would be subject to high temperatures, such as 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 safe and secure installation.

### Mounting angle adjustment

Adjust the mounting angle to less than 20°.

# Installation

## Précautions

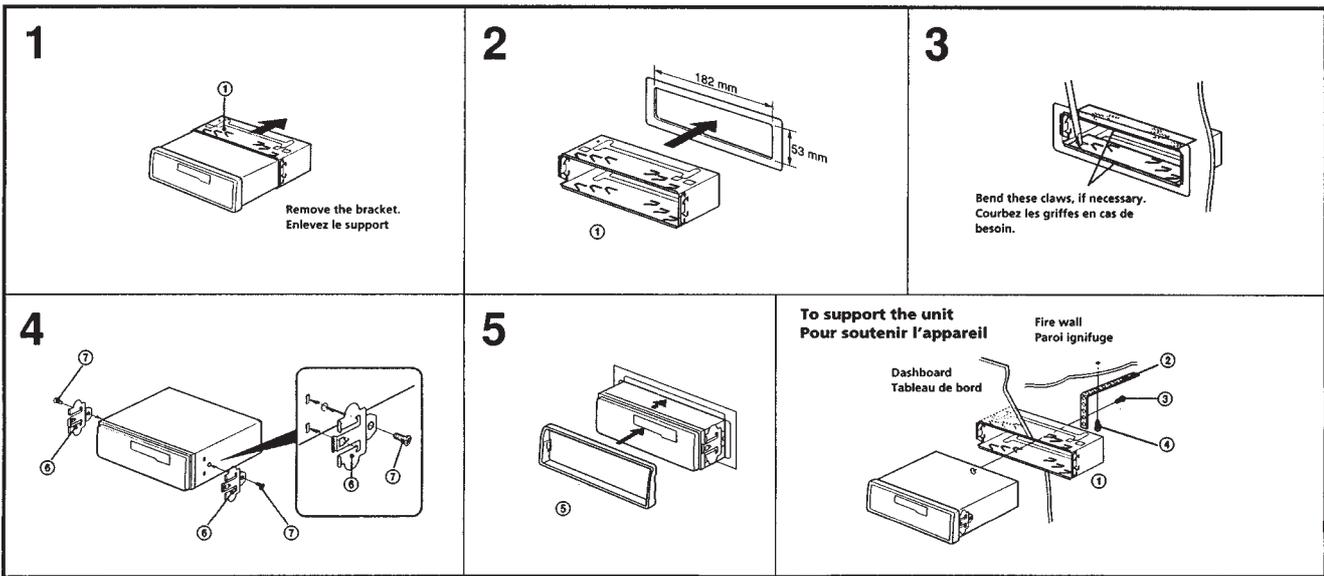
- Choisir soigneusement l'emplacement de l'installation, pour que l'appareil ne gêne pas la conduite.
- Éviter d'installer l'appareil dans un endroit exposé à des températures élevées, comme en plein soleil ou à proximité d'une bouche d'air chaud, ou dans un endroit exposé à de la poussière, de la saleté 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°.

## Mounting example

Installing in the dashboard

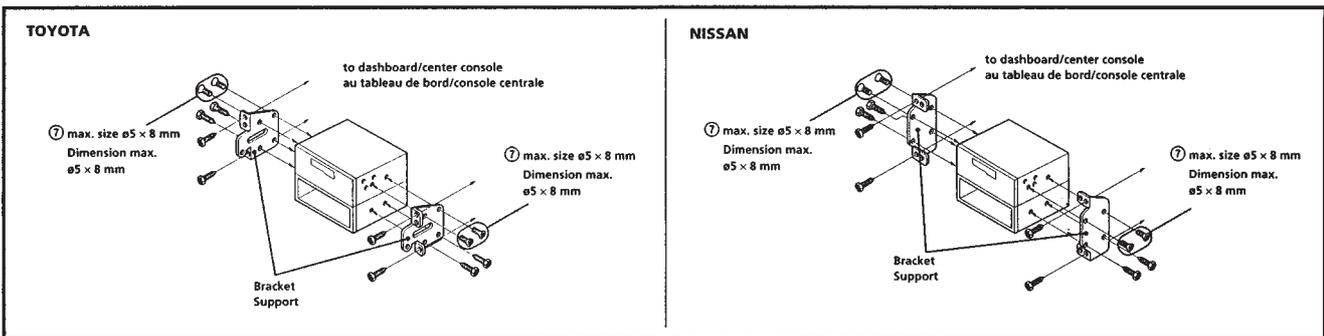


## Mounting the unit in a Japanese car

This unit may not be installed in some makes of cars. In this case, consult your nearest Sony dealer.

## Installation de l'appareil dans une voiture japonaise

Cet appareil ne peut pas être installé dans certaines voitures. Consultez, dans ce cas, votre revendeur Sony.



**Note**  
To prevent malfunction, install only with the supplied screws ⑦.

**Remarque**  
Pour éviter tout mauvais fonctionnement, utilisez uniquement les vis ⑦ pour le montage.

# Installation (E)

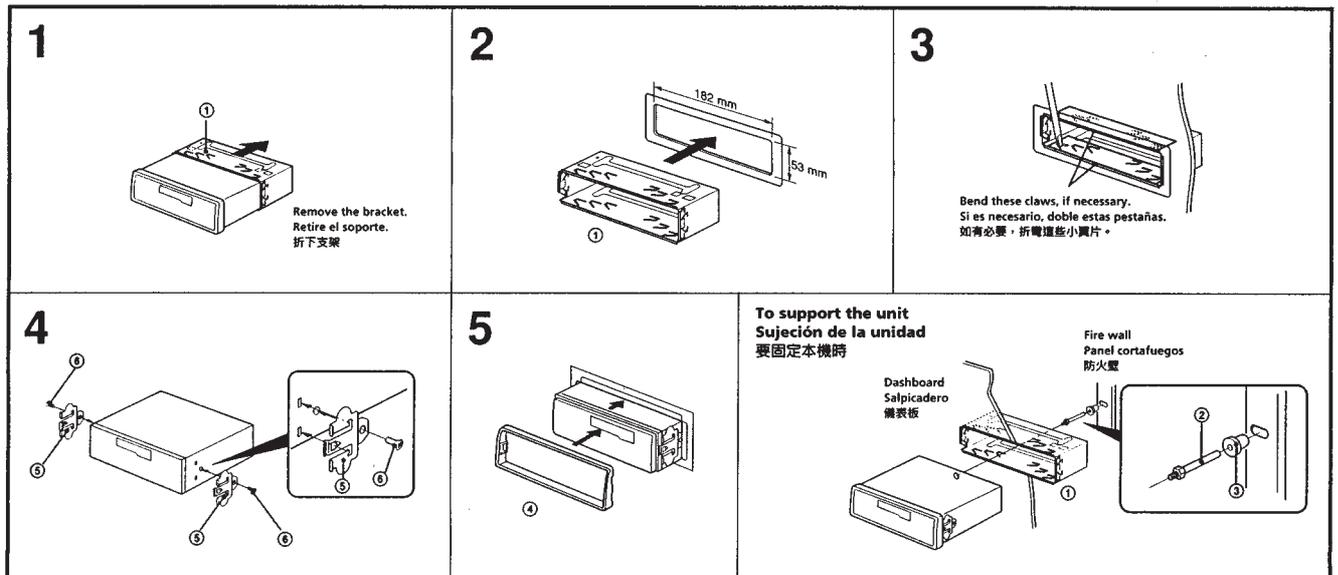
## Precautions

- Choose the installing 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°.

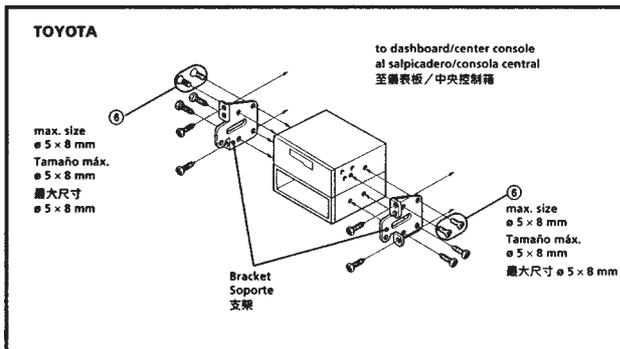
## Mounting example

Installing in the dashboard



## Mounting the unit in a Japanese car

You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your Sony dealer.



**Note**  
To prevent malfunction, install only with the supplied screws ⑧.

# Instalación

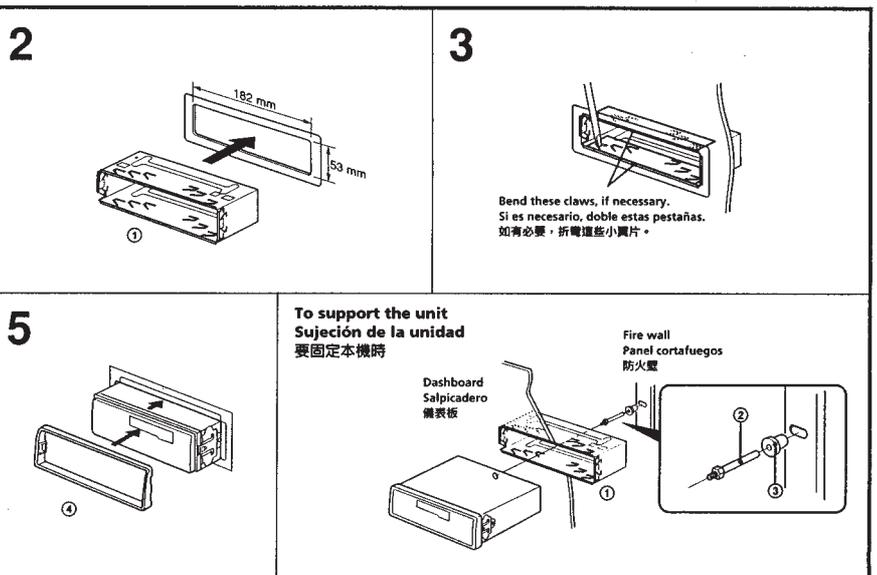
## Precauciones

- Elija cuidadosamente el lugar de instalación de forma que la unidad no impida la conducción.
- Evite instalar la unidad donde pueda quedar sometida a altas temperaturas, como a la luz solar directa o al aire caliente de calefacción, o a polvo, suciedad, o vibraciones excesivas.
- Para realizar una instalación segura y firme, emplee solamente la ferretería de montaje suministrada.

**Ajuste del ángulo de montaje**  
Ajuste el ángulo de montaje a menos de 20°.

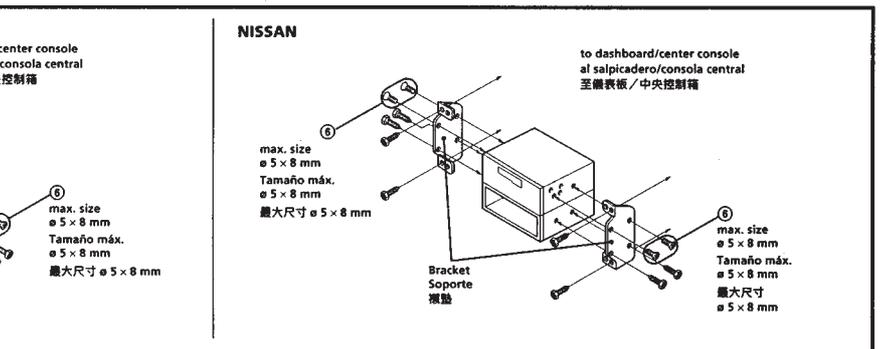
## Ejemplo de montaje

Instalación en el salpicadero



## Montaje de la unidad en un automóvil japonés

Usted no podrá instalar esta unidad en algunos automóviles japoneses. En tal caso, consulte a su proveedor Sony.



**Nota**  
Para evitar que se produzcan fallos, realice la instalación solamente con los tornillos suministrados ⑧.

# 安裝

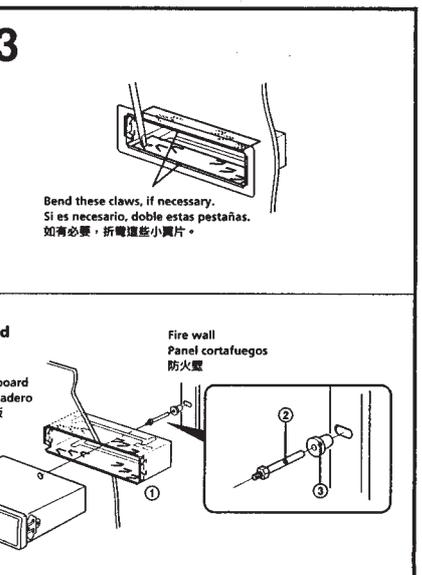
## 使用前須知事項

- 本機請放在不妨礙司機駕駛之處。
- 避免把本機放在高溫之處，如陽光直接照射、暖氣機前，或灰塵極多，靜亂或易受震動等地方。
- 為了安全起見，安裝時請使用附屬的安裝道具。

**安裝角度之調整**  
請在20度以內調整安裝角度。

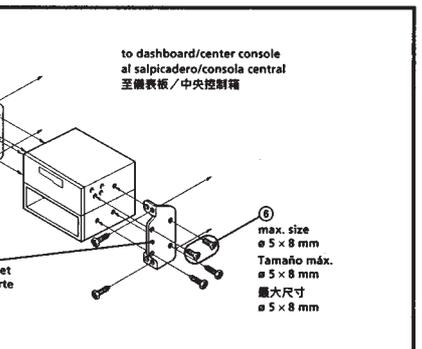
## 安裝例子

安裝於儀表板上時



## 要安裝於日本汽車裡時

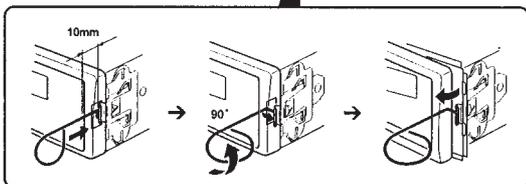
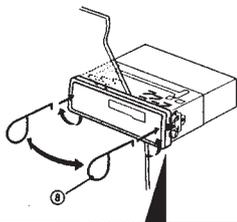
有的日本產汽車不能安裝本機，此時，請向離貴處最近的SONY經銷店查詢。



**註**  
為防止發生意外事故，安裝時只能使用附屬的螺絲 ⑧。

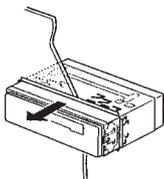
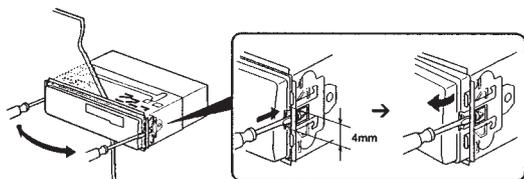
## Removing the unit Extracción de la unidad 拆卸本機

- 1** Insert the supplied tool ① between the unit and the frame, and rotate 90° to release the hidden mounting spring. Repeat on the opposite side and remove the frame.  
Inserte la herramienta ① suministrada entre la unidad y el marco, y gire 90° para soltar el resorte de montaje oculto. Repita esta operación en el lado opuesto y extraiga el marco.  
將提供的工具 ① 插入本機和機框之間，並旋轉 90° 以解除隱藏的安裝彈簧扣。在相對應的另一邊重復上述操作，然後拆下機框。



- 2** Insert a flathead screwdriver between the bracket and mounting spring. Gently pry the spring toward the unit while pulling the unit out a little. Repeat on the opposite side and remove the unit.

Inserte un destornillador de cabeza perdida entre la abrazadera y el resorte de montaje. Haga palanca suavemente en el resorte hacia la unidad, mientras tira ligeramente de la unidad al mismo tiempo. Repita esta operación en el lado opuesto y extraiga la unidad.  
將平頭螺絲刀插入支架和安裝彈簧扣之間。在將本機稍微拉出時，將彈簧扣朝本機體方面輕撬起。在相對應的另一邊重復上述操作，然後拆下本機。



## Connections/Conexiones/線路之連接

### 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.

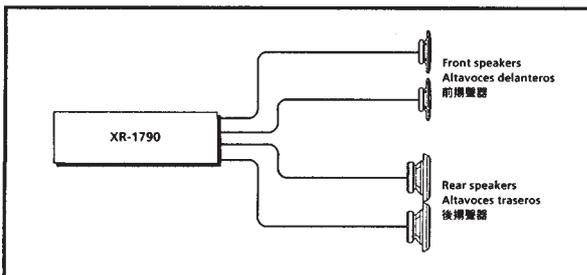
### 注意

- 本機只可使用負極接地 12 V 直流電操作。
- 連接以前，先拔去汽車電池的接地端子，以免發生短路。
- 紅色及黃色電源輸入導線必須等所有電線都連接完畢以後才可連接。
- 紅色電源輸入導線請連接到汽車發動機點火鑰匙被轉在輔助位置時才通電的正 12 V 電源端子。
- 所有地線都必需連接到同一接地點才行。

### Precauciones

- Esta unidad ha sido diseñada para alimentarse con 12 V CC, negativo a masa, solamente.
- Antes de realizar las conexiones, desconecte el terminal de puesta a masa de la batería del automóvil a fin de evitar cortocircuitos.
- Conecte los cables conectores de alimentación amarillo y rojo solamente después de haber conectado los demás.
- Cerciórese de conectar el cable conector de alimentación rojo a un terminal de 12 V positivo que se energice al poner la llave de encendido en la posición para accesorios.
- Conecte todos los conductores de puesta a masa a un punto común.

### Connection diagram/Diagrama de conexiones/線路連接方塊圖



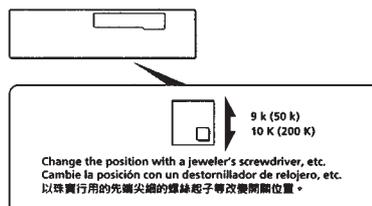
### Frequency select switch (E model) 頻率選擇開關

The AM (FM) tuning interval is factory-set to the 9K (50K) position. If the frequency allocation system of your country is based on 10 kHz (200 kHz) interval, set the switch on the bottom of the unit to the 10K (200K) position before making connections.

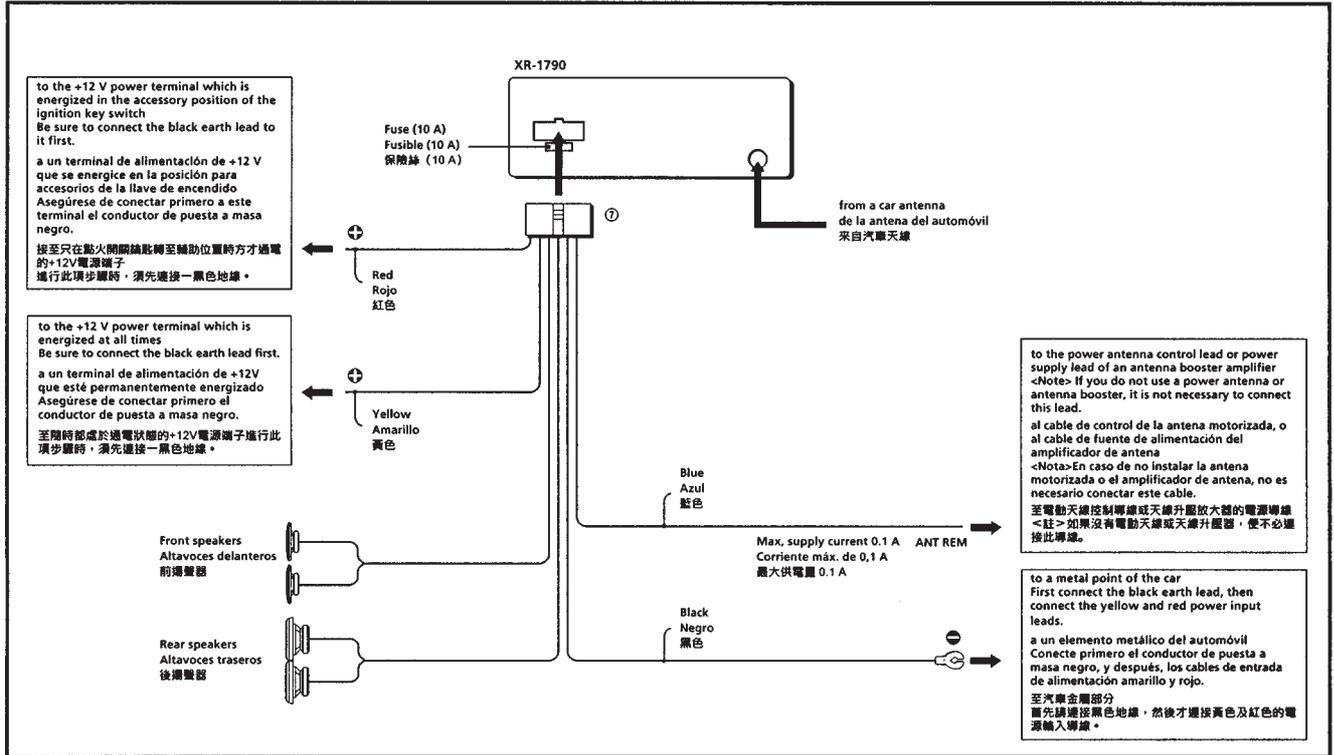
本裝置的 AM (FM) 調諧區間在出廠以前被設定在 "9 K (50 K)" 位置上。若貴國的頻率分配系統是以 "10 kHz (200 kHz)" 為基礎的，連接以前請先把本機機底的選擇開關設定在 "10 K (200 K)" 之處。

### Selector de frecuencia

El intervalo de sintonía de AM (FM) ha sido ajustado en fábrica a la posición 9K (50K). Si el sistema de asignación de frecuencias de su país se basa en el intervalo de 10 kHz (200 kHz), ponga este selector, situado en la base de la unidad, en la posición 10K (200K) antes de realizar las conexiones.



**Connection example/Ejemplo de conexiones/線路之連接圖例**



to the +12 V power terminal which is energized in the accessory position of the ignition key switch  
Be sure to connect the black earth lead to it first.  
a un terminal de alimentación de +12 V que se energice en la posición para accesorios de la llave de encendido  
Asegúrese de conectar primero a este terminal el conductor de puesta a masa negro.  
接至只在點火開關鑰匙轉至輔助位置時方才通電的+12V電源端子  
進行此項步驟時，須先連接一黑色地線。

to the +12 V power terminal which is energized at all times  
Be sure to connect the black earth lead first.  
a un terminal de alimentación de +12 V que esté permanentemente energizado  
Asegúrese de conectar primero el conductor de puesta a masa negro.  
至隨時都處於通電狀態的+12V電源端子進行此項步驟時，須先連接一黑色地線。

to the power antenna control lead or power supply lead of an antenna booster amplifier  
<Note> If you do not use a power antenna or antenna booster, it is not necessary to connect this lead.  
al cable de control de la antenna motorizada, o al cable de fuente de alimentación del amplificador de antenna  
<Nota> En caso de no instalar la antenna motorizada o el amplificador de antenna, no es necesario conectar este cable.  
至電動天線控制導線或天線升壓放大器的電源導線  
<註> 如果沒有電動天線或天線升壓器，便不必連接此導線。

to a metal point of the car  
First connect the black earth lead, then connect the yellow and red power input leads.  
a un elemento metálico del automóvil  
Conecte primero el conductor de puesta a masa negro, y después, los cables de entrada de alimentación amarillo y rojo.  
至汽車金屬部分  
首先請連接黑色地線，然後才連接黃色及紅色的電源輸入導線。

**Notes on the control leads**

- The power antenna control lead (blue) supplies 12V DC when you turn on the unit.
- A power antenna without relay box cannot be used with this unit.

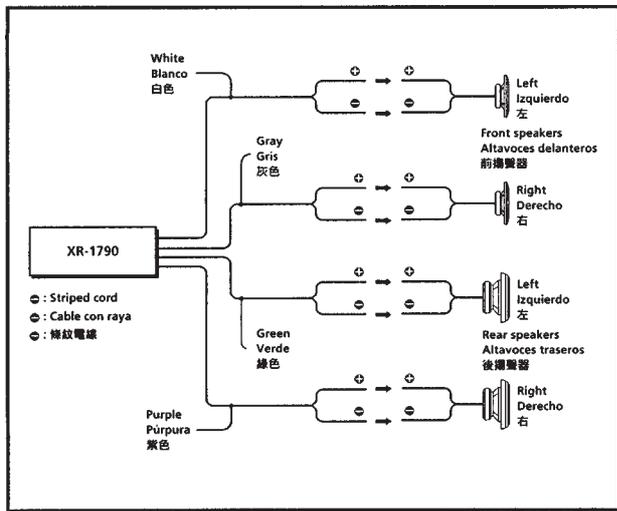
**Notas sobre conductores de control**

- El conductor de control de la antenna motorizada (azul) suministrará +12 V CC cuando conecte la alimentación de la unidad.
- Con esta unidad no podrá emplearse una antenna motorizada desprovista de caja de relé.

**控制導線須知**

- 當您打開機器時，電動天線的停制導線（藍色）即可發生12VDC電流。
- 不帶繼電器箱的電動天線是不能用於本機的。

**Speaker connections/Conexión de los altavoces/揚聲器之連接**



- 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. Therefore, be sure to connect passive speakers to these terminals.

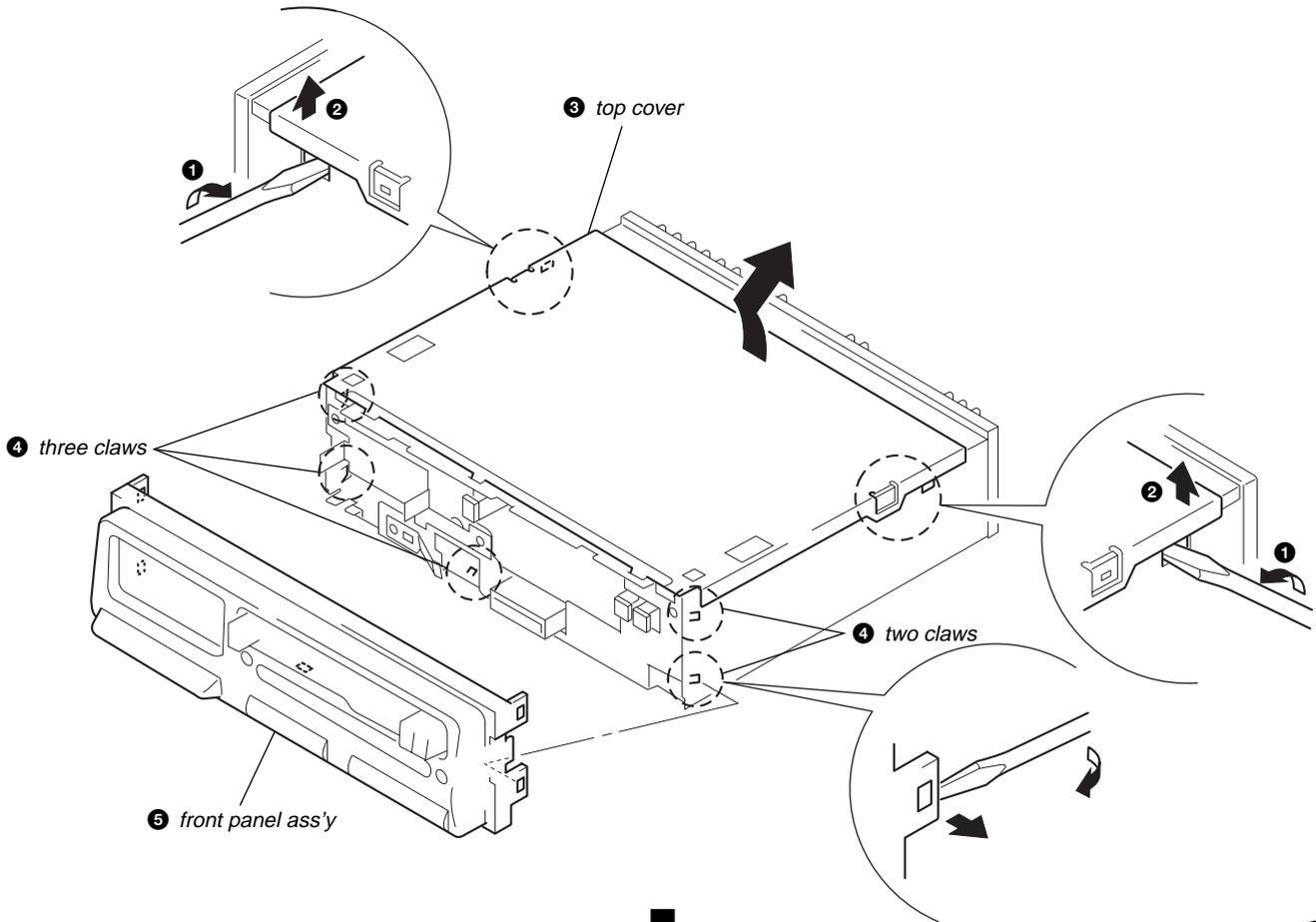
- Notas sobre la conexión de los altavoces**
- Emplee altavoces con una impedancia de 4 a 8 ohmios, y con la capacidad máxima de potencia adecuada. De lo contrario, los altavoces podrían dañarse.
  - No conecte los terminales del sistema de altavoces al chasis del automóvil, ni los del altavoz derecho a los del izquierdo.
  - No intente conectar los altavoces en paralelo.
  - No conecte altavoces activos (con amplificador)

- 連接揚聲器時的注意事項**
- 揚聲器請使用阻值為4到8Ω之間，並具有適合本機使用的電容值者。否則會損壞揚聲器。
  - 不可把揚聲器端子連接到汽車底盤，也不可把左揚聲器和右揚聲器相連接。
  - 揚聲器不可平行的連接。
  - 不可連接有源揚聲器（內裝有放大器）至本機的揚聲器端子，否則會損壞有源揚聲器。這些端子只能連接無源揚聲器。

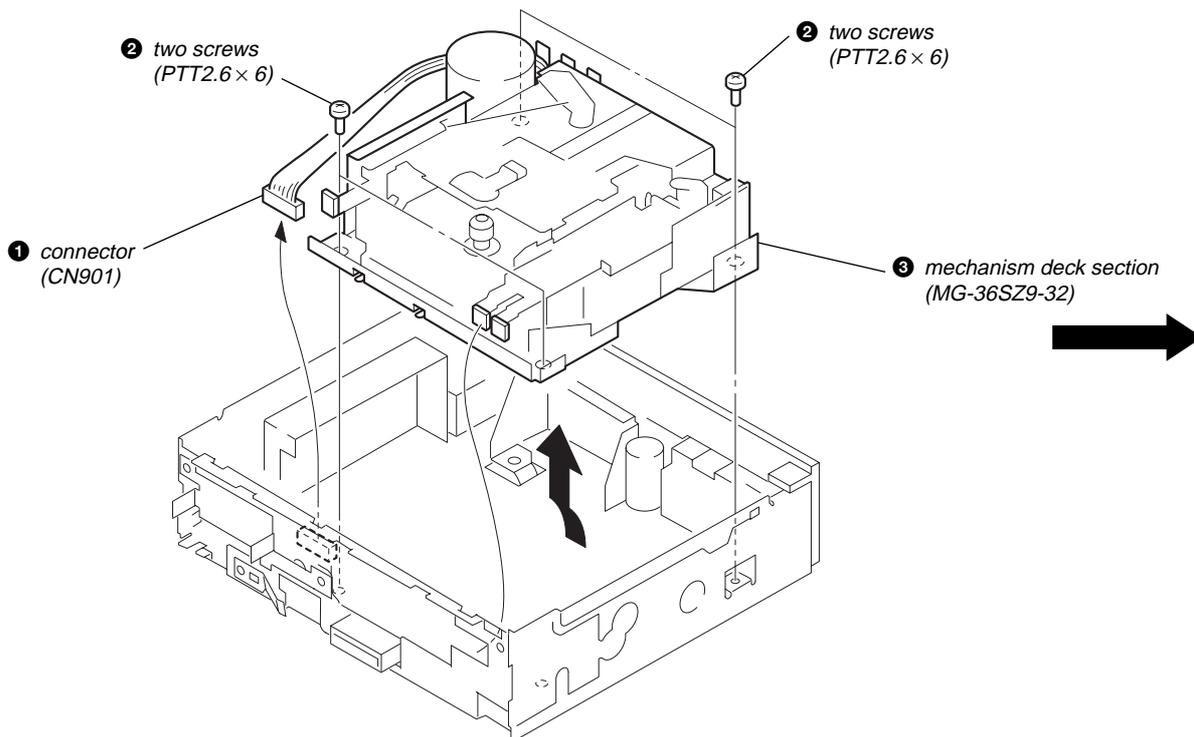
## SECTION 2 DISASSEMBLY

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

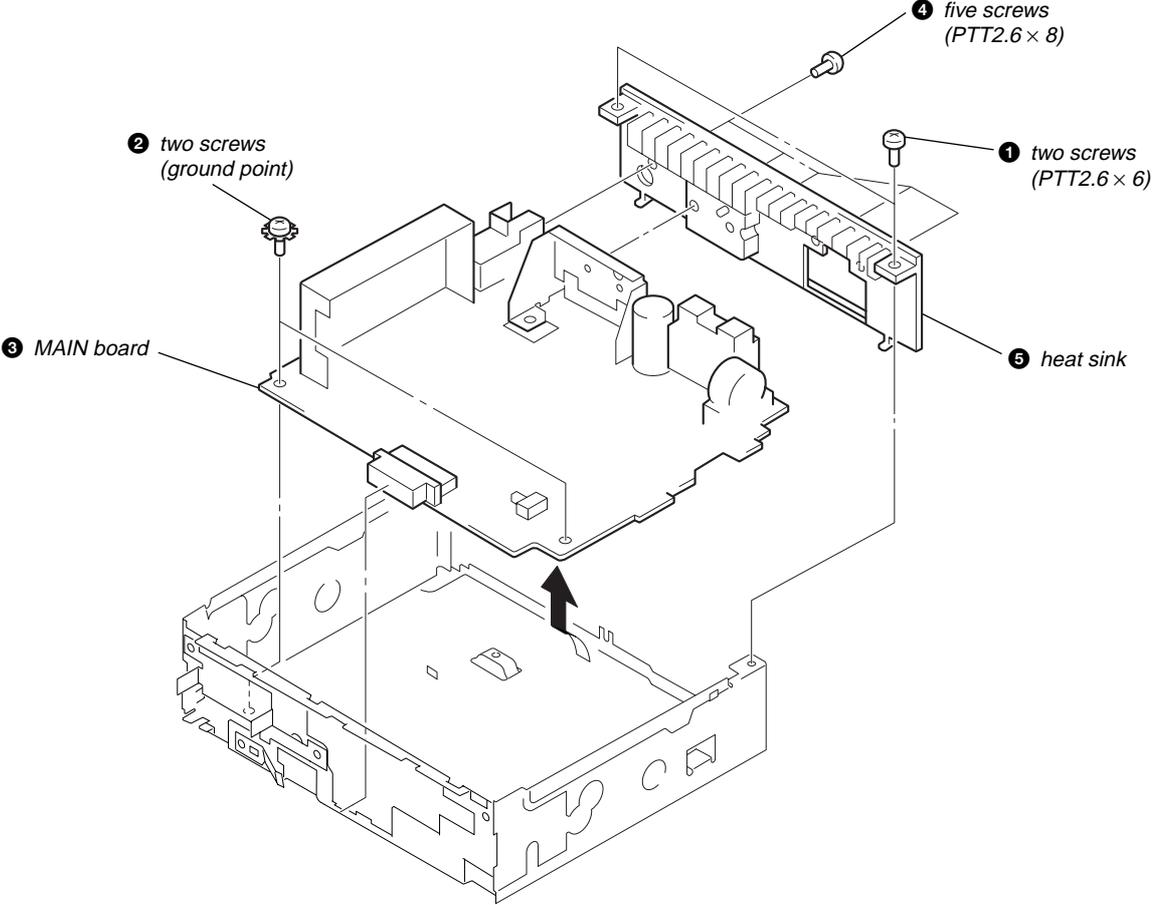
### FRONT PANEL ASS'Y



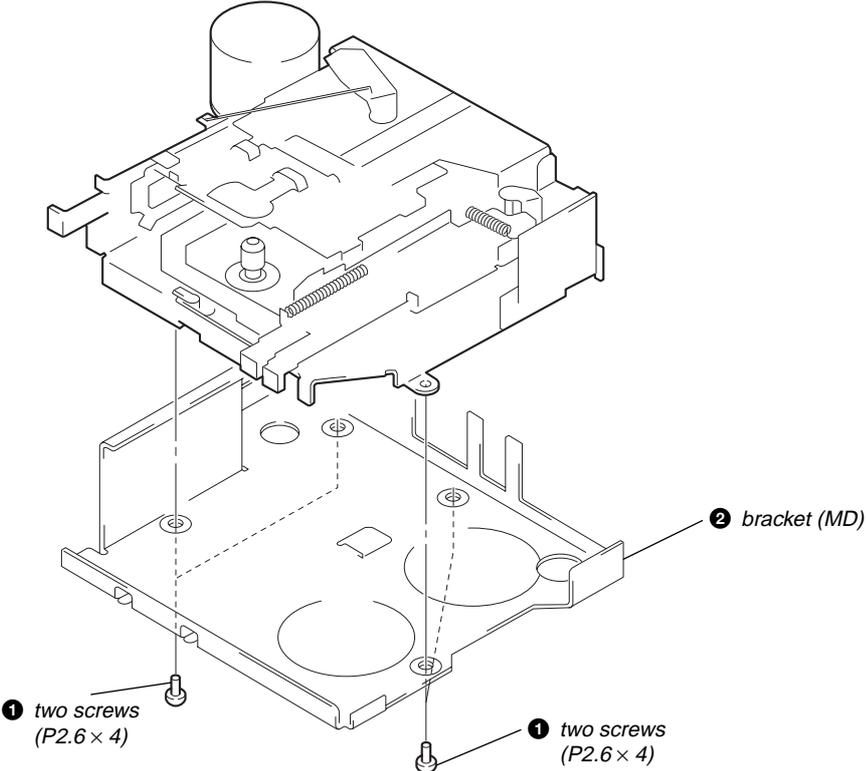
### MECHANISM DECK SECTION (MG-36SZ9-32)



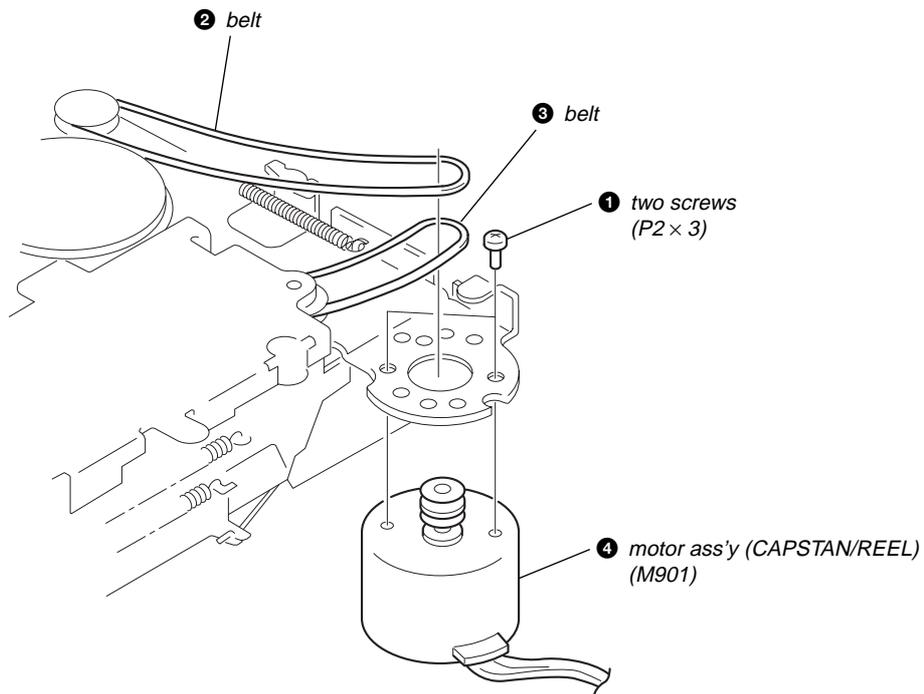
**MAIN BOARD, HEAT SINK**



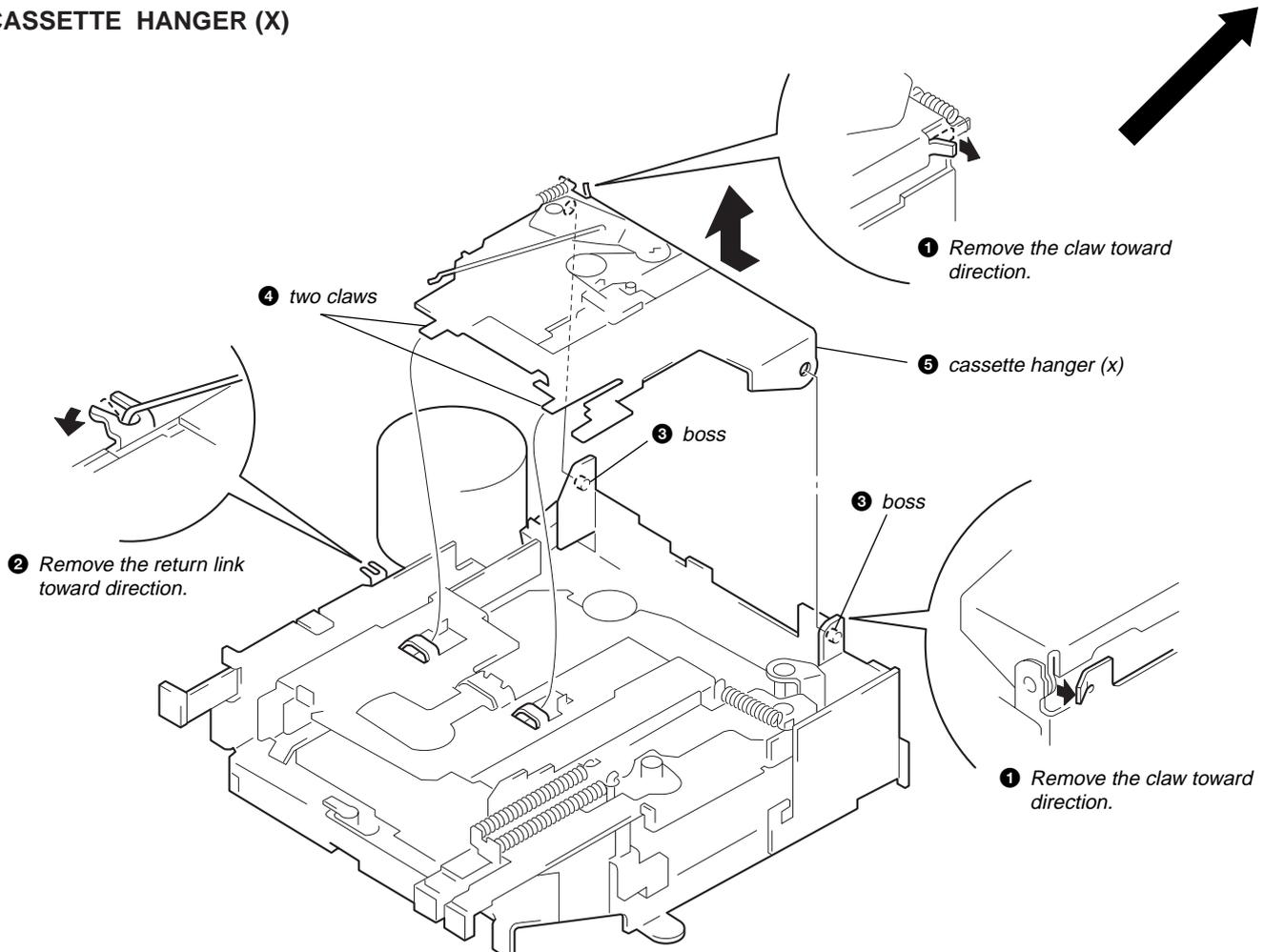
**BRACKET (MD)**



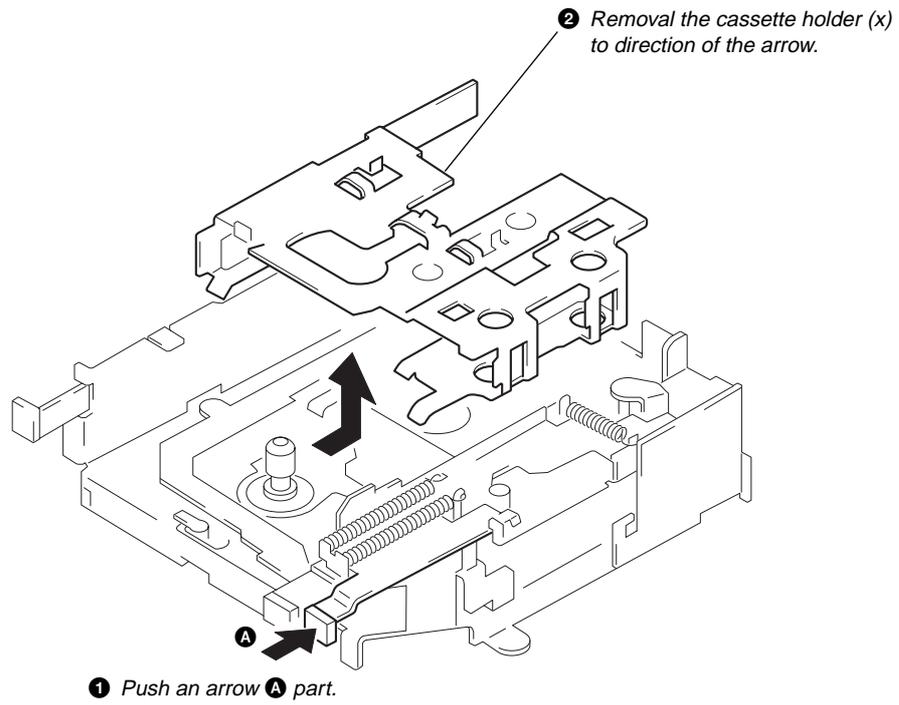
## MOTOR ASS'Y (CAPSTAN/REEL) (M901)



## CASSETTE HANGER (X)



## CASSETTE HOLDER (X)



## SECTION 3 MECHANICAL ADJUSTMENTS

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

playback head	pinch roller
rubber belt	capstan
idler	
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. 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

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

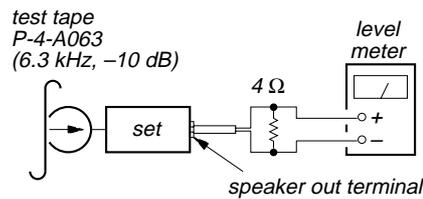
### Test Tape

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

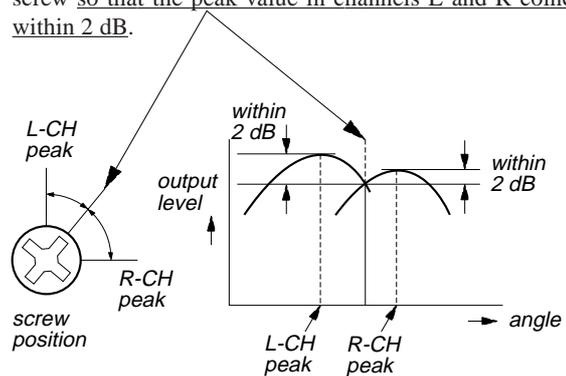
### PB Head Azimuth Adjustment

#### Procedure:

1. Put the set into the FWD PB mode.

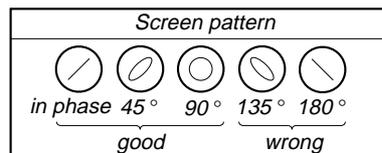
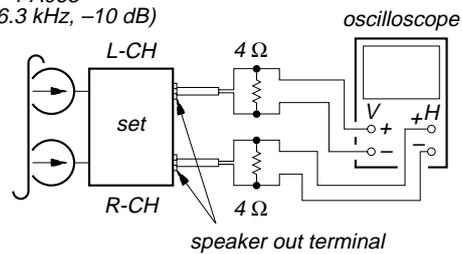


2. Turn the screw and check the output peak value. Adjust the screw so that the peak value in channels L and R coincides within 2 dB.



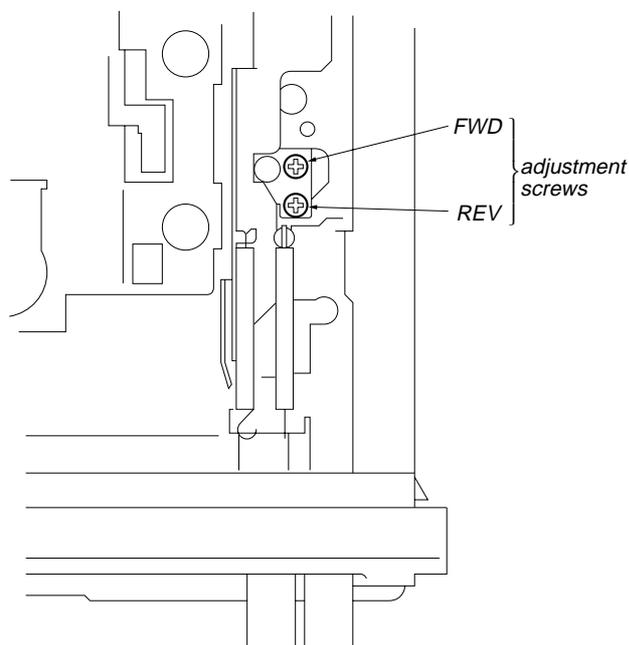
3. Check the phase in the FWD PB mode.

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



- 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.

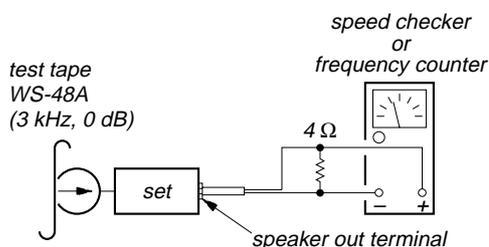
**Adjustment Location:** PB head



See the adjustment location from on page 15 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 15.

### TUNER SECTION

0 dB=1 μV

On E model, the tuner section has no adjustments.

#### 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.

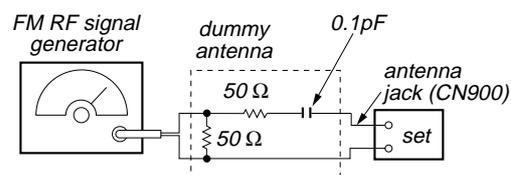
- FM Auto Scan/Stop Level Adjustment
- FM Stereo Separation Adjustment
- AM Auto Scan/Stop Level Adjustment

#### FM Auto Scan/Stop Level Adjustment

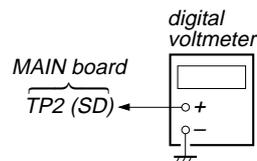
**Setting:**

**TUNER** button: FM 1

FREQUENCY SELECT switch: FM50 k (E model only)



Carrier frequency : 98.0 MHz  
 Output level : 28 dB (25.1 μV)  
 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.

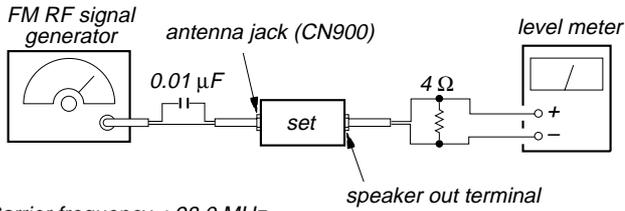
**Adjustment Location:** See page 15.

## FM Stereo Separation Adjustment

### Setting:

[TUNER] button: FM1

FREQUENCY SELECT switch: FM 50 k (E model only)



Carrier frequency : 98.0 MHz  
 Output level : 76 dB (6.3 mV)  
 Mode : stereo  
 Modulation : main: 1 kHz, 33.75 kHz deviation (45%)  
 sub: 1 kHz, 33.75 kHz deviation (45%)  
 19 kHz pilot: 7.5 kHz deviation (10%)

### Procedure:

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

L-CH Stereo separation: Ⓐ-Ⓑ

R-CH Stereo separation: Ⓒ-Ⓓ

The separations of both channels should be equal.

**Specification:** Separation more than 26 dB

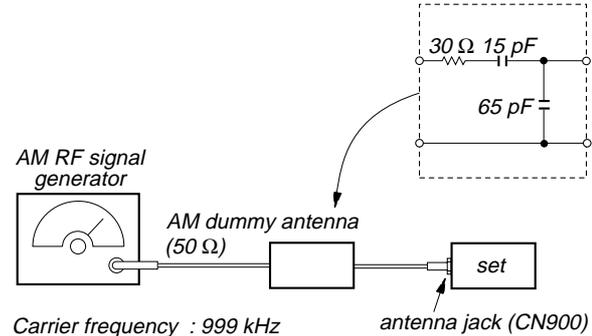
**Adjustment Location:** See page 15.

## AM Auto Scan/Stop Level Adjustment

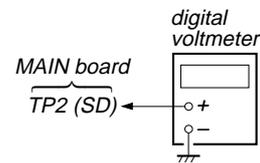
### Setting:

[TUNER] button: AM

FREQUENCY SELECT switch: AM 9 k (E model only)



Carrier frequency : 999 kHz  
 30% amplitude modulation by 1 kHz signal  
 Output level : 33 dB (44.7 μV)

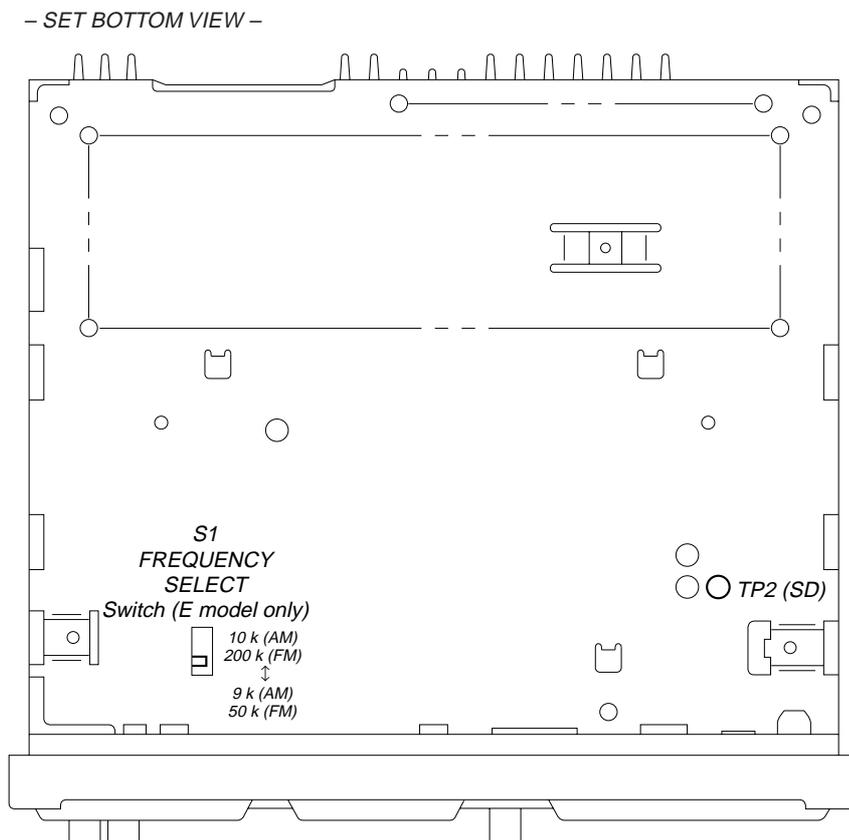
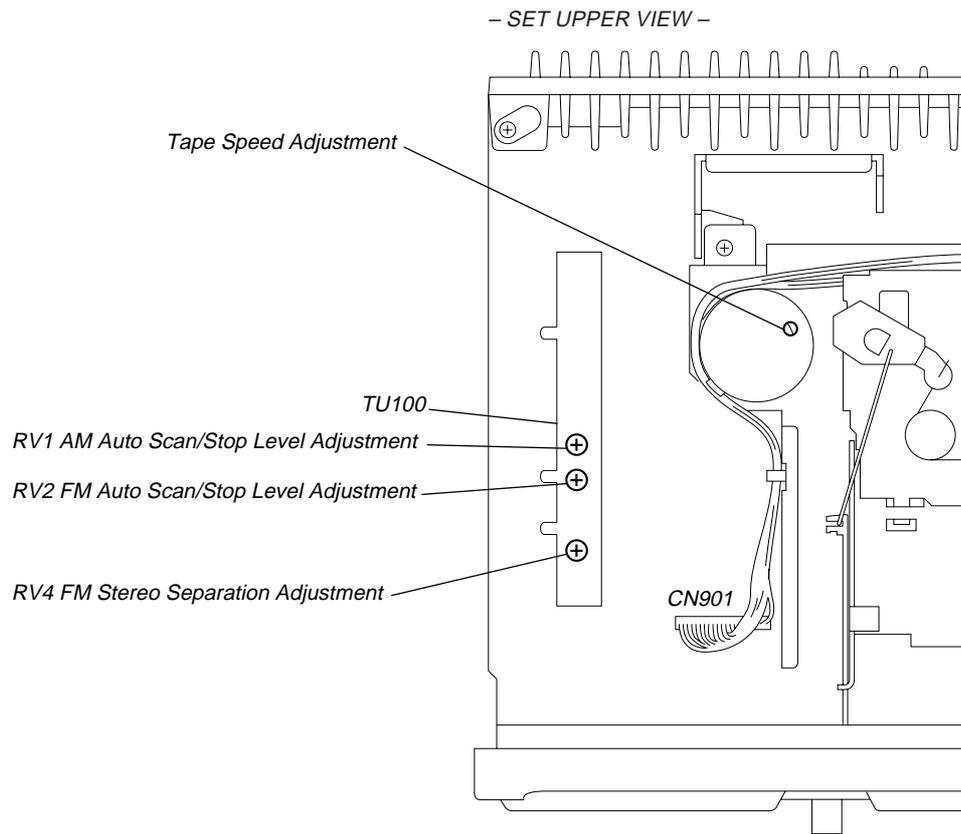


### Procedure:

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 15.

**Adjustment Location:**



## SECTION 5 DIAGRAMS

### 5-1. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

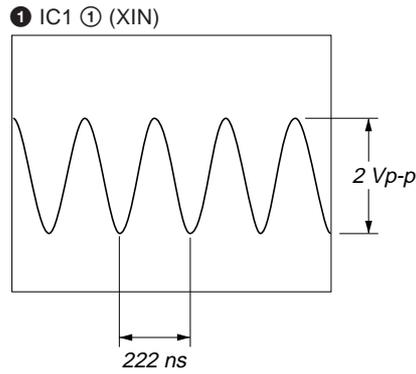
**Note on Printed Wiring Board:**

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

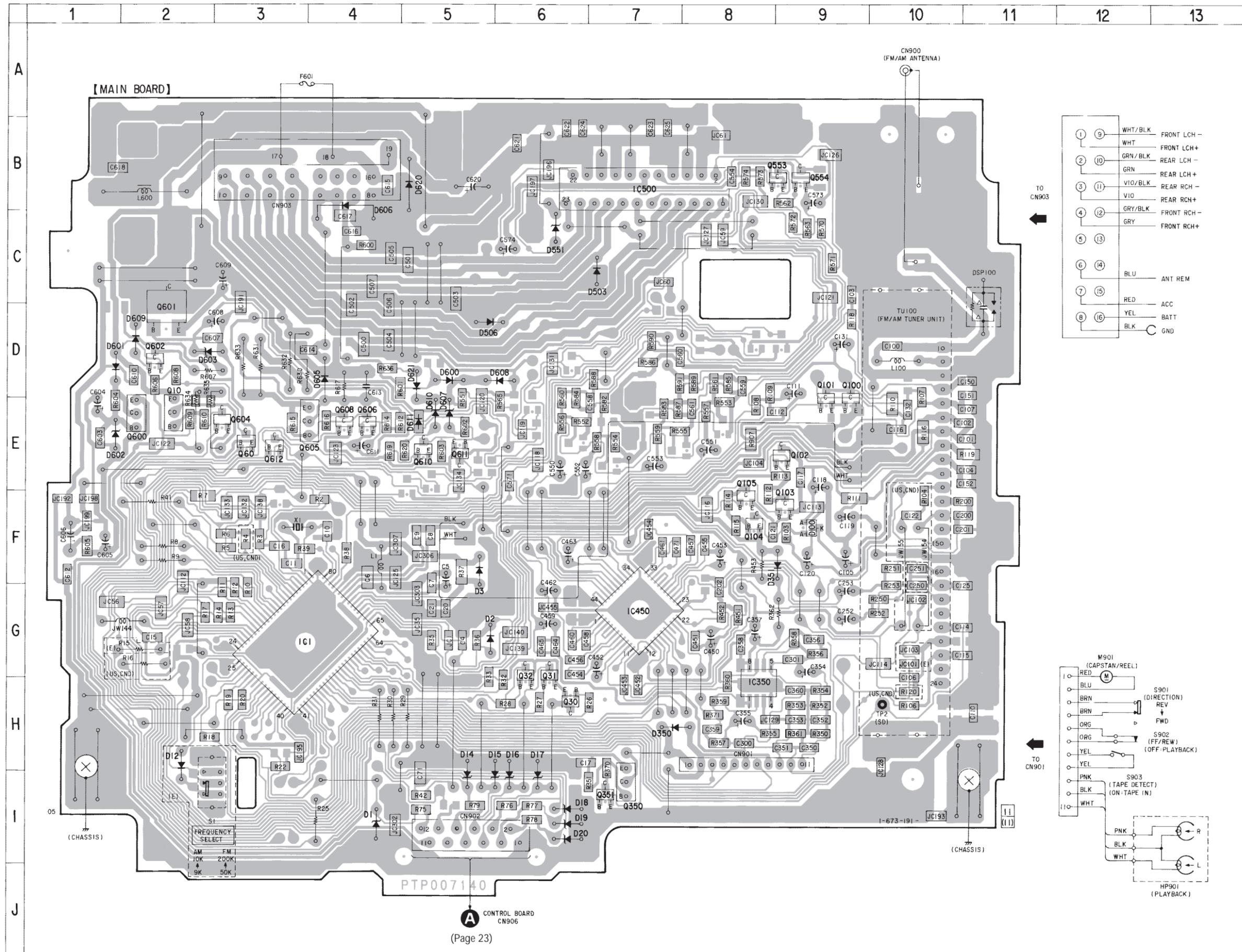
**Note on Schematic Diagram:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{pF}$   
50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4 W$  or less unless otherwise specified.
-  : 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  
(       ) : AM  
[       ] : TAPE PLAYBACK
- Voltages are taken with a VOM (Input impedance 10 M $\Omega$ ).  
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  
 : AM  
 : TAPE PLAYBACK

• **Waveform**

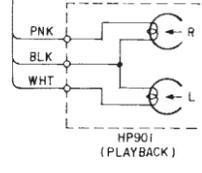
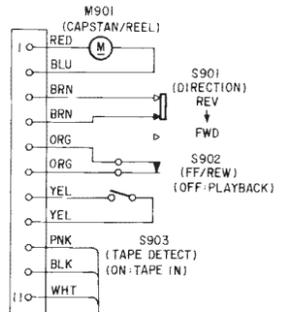
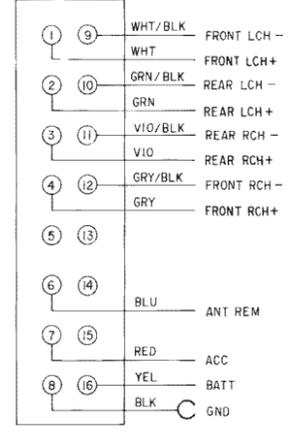


5-2. PRINTED WIRING BOARD - MAIN Section -



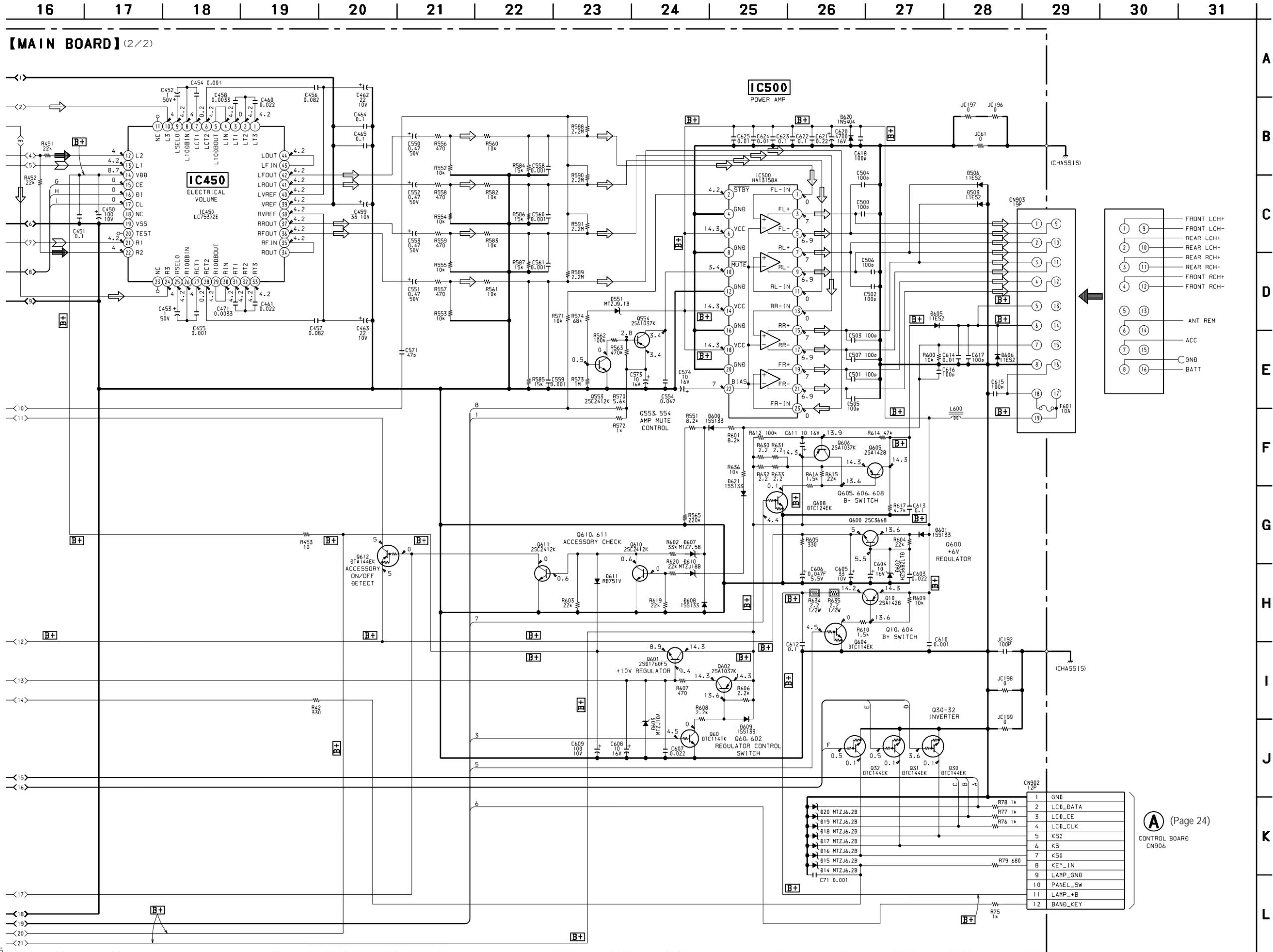
• Semiconductor Location

Ref. No.	Location
D1	I-4
D2	G-5
D3	F-5
D12	H-2
D14	I-5
D15	I-6
D16	I-6
D17	I-6
D18	I-6
D19	I-6
D20	I-6
D100	F-9
D350	H-7
D351	F-9
D503	C-7
D506	D-5
D551	C-6
D600	D-5
D601	D-1
D602	E-1
D603	D-2
D605	D-4
D606	B-4
D607	E-5
D608	D-6
D609	D-2
D610	E-5
D611	E-5
D620	B-5
D621	D-5
IC1	G-4
IC350	H-8
IC450	G-7
IC500	B-7
Q10	E-2
Q30	H-6
Q31	G-6
Q32	G-6
Q60	E-3
Q100	E-9
Q101	E-9
Q102	E-9
Q103	F-9
Q104	F-8
Q105	F-8
Q350	I-7
Q351	I-7
Q553	B-9
Q554	B-9
Q600	E-2
Q601	D-2
Q602	D-2
Q604	E-3
Q605	E-4
Q606	E-4
Q608	E-4
Q610	E-5
Q611	E-5
Q612	E-3



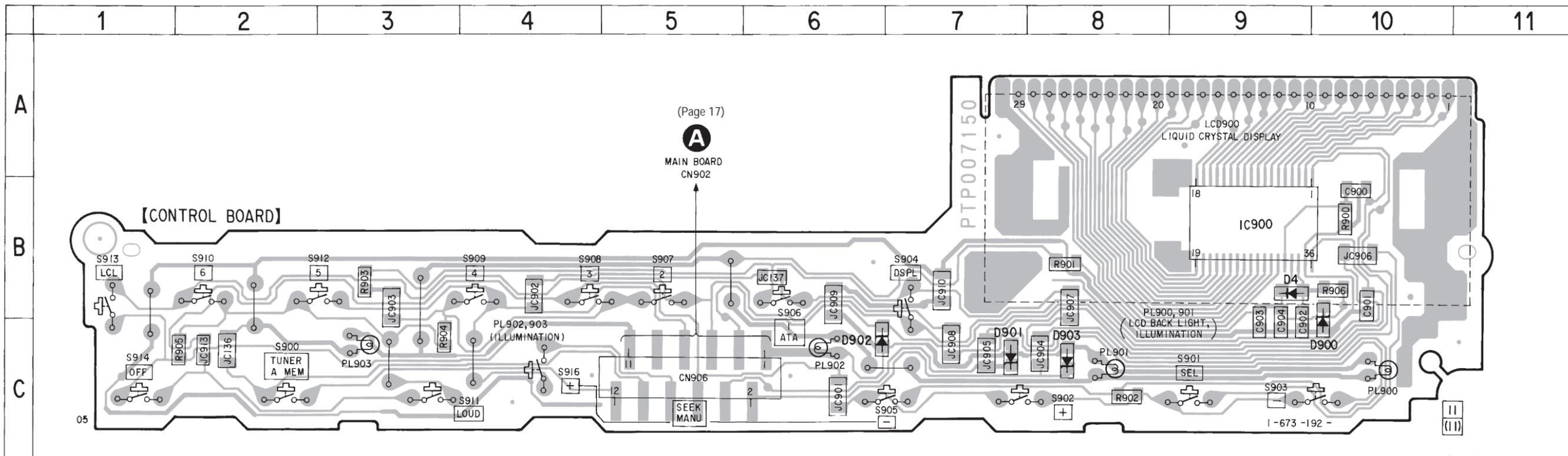


5-4. SCHEMATIC DIAGRAM – MAIN Section (2/2) – • See page 25 for IC Block Diagram.



(Page 24)  
CONTROL BOARD  
CN906

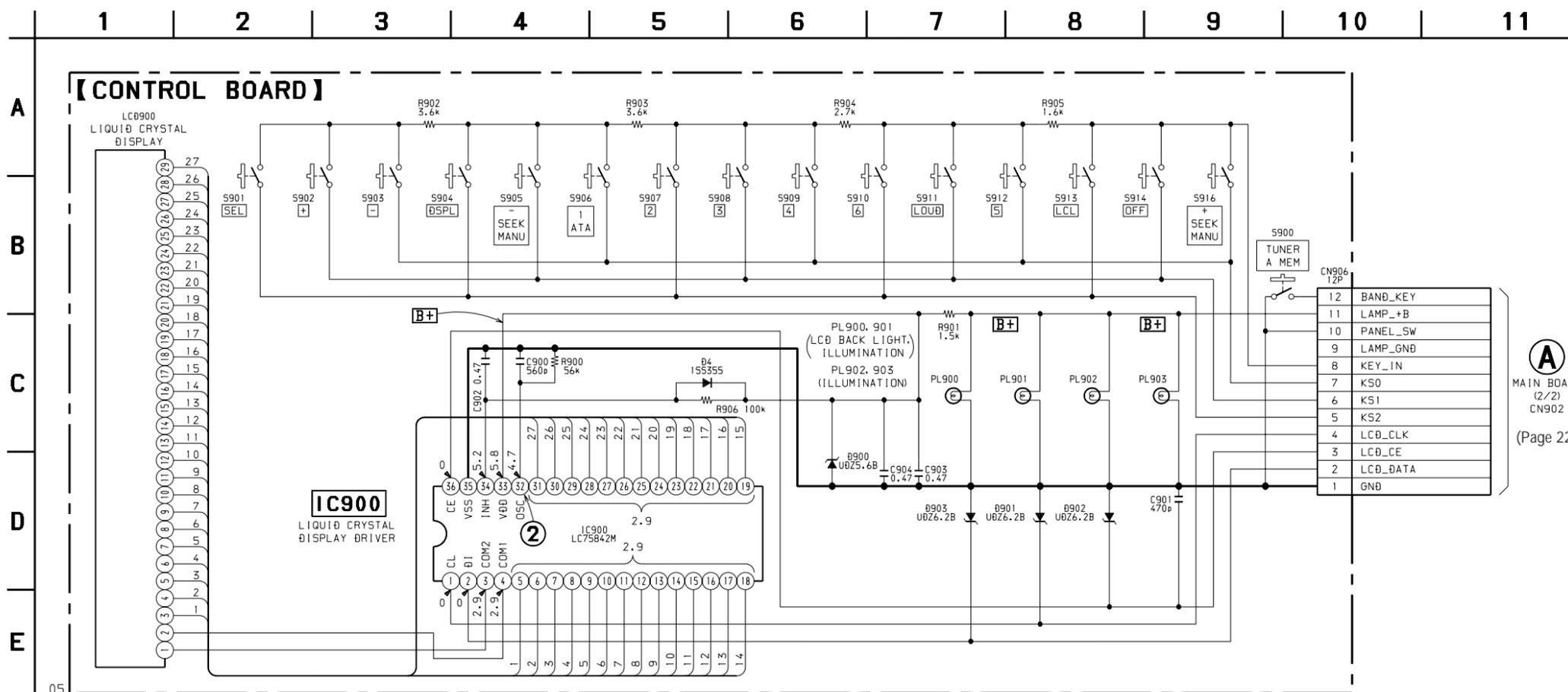
5-5. PRINTED WIRING BOARD – PANEL Section –



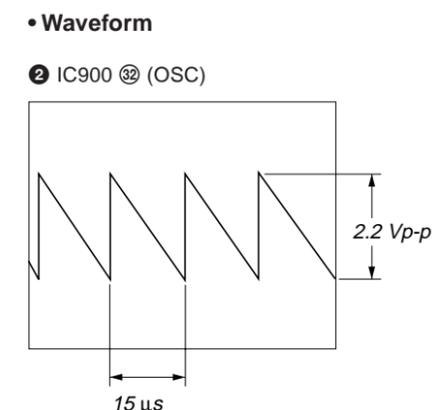
• Semiconductor Location

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

5-6. SCHEMATIC DIAGRAM – PANEL Section –

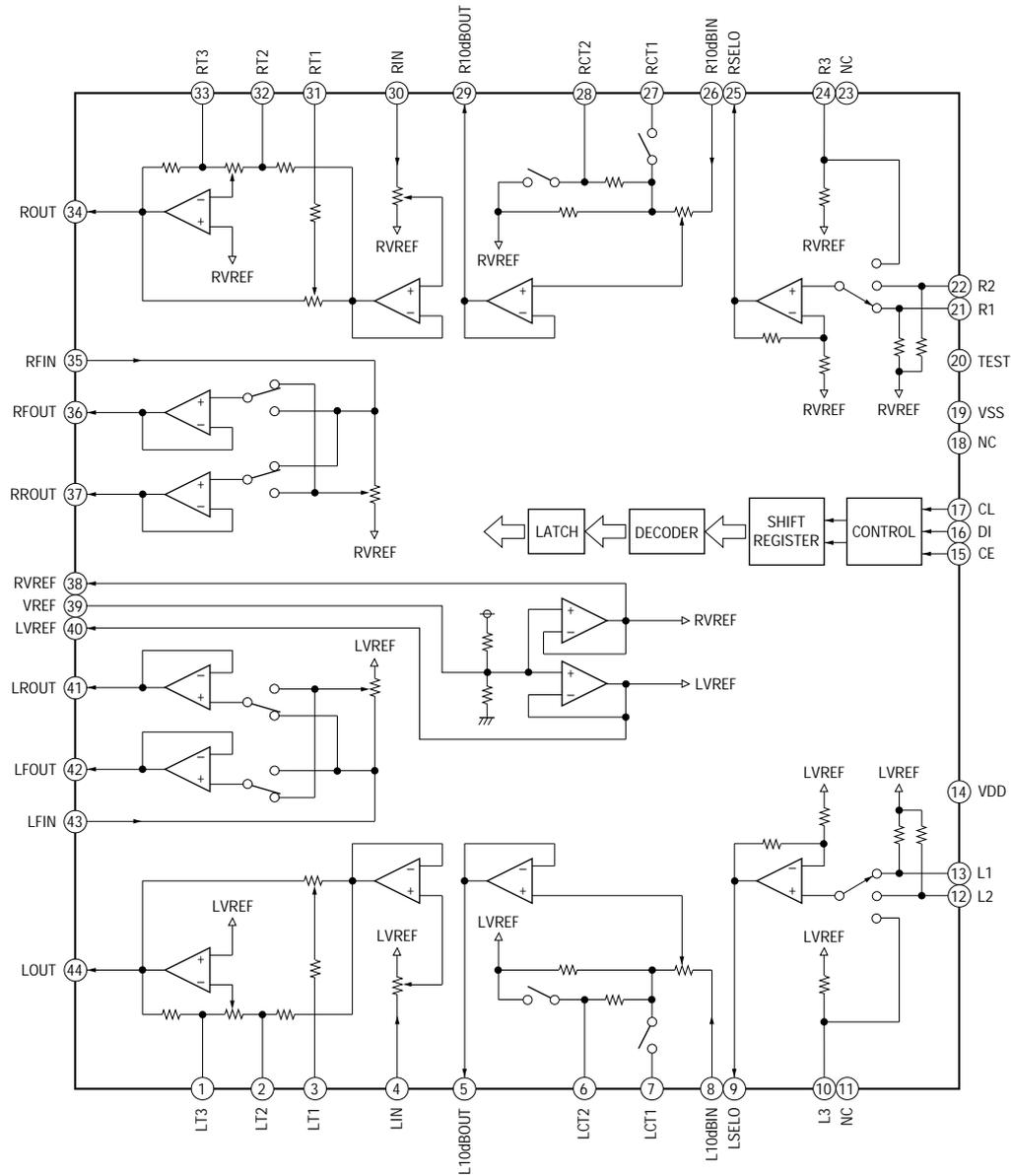


• Waveform  
 ② IC900 ② (OSC)  
 MAIN BOARD (2/2) CN902  
 (Page 22)



• IC Block Diagram – MAIN Board –

IC450 LC75372E



## 5-7. IC PIN FUNCTION DESCRIPTION

### • MAIN BOARD IC1 LC72322N-9400 (SYSTEM CONTROLLER)

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	$\overline{\text{STEREO}}$	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	MOTOR	O	Capstan/reel motor (M901) drive signal output "H": motor on
8	$\overline{\text{AMP-MUTE2}}$	O	Muting control signal output to the power amplifier (IC500) "L": muting on
9	MW/SW	O	MW/SW selection signal output terminal "H": MW, "L": SW Not used (fixed at "H")
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	$\overline{\text{N/R}}$	I	Tape direction switch (S901) input terminal "H": forward side, "L": reverse side
15	$\overline{\text{TAPE-IN}}$	I	Tape in detection switch (S903) input terminal "L": tape in
16	$\overline{\text{FF-REW}}$	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 for the frequency select switch (S1) Used for the E model only
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 E model only
21	$\overline{\text{SEEK}}$	O	Seek control signal output to the FM/AM tuner unit (TU100) "L" active Used for the US and Canadian models only
22	LOCAL/DX	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 for the frequency select switch (S1) Used for the E model only
26	T1	O	Key matrix scan signal output terminal Not used (open)
27	T0	O	
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	MUTE-REQ	I	Muting request signal input terminal ("H" active) "L": accessory on, "H": accessory off
33	$\overline{\text{BAND-KEY}}$	I	TUNER switch (S900) input terminal "L" is input when pressing the switch
34	$\overline{\text{PANEL-IN}}$	I	Detects the removal of the attaching and removing type front panel block "L": attaching Not used (open)
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	$\overline{\text{AMP-MUTE}}$	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

Pin No.	Pin Name	I/O	Function
45 to 48	—	O	Not used (open)
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)

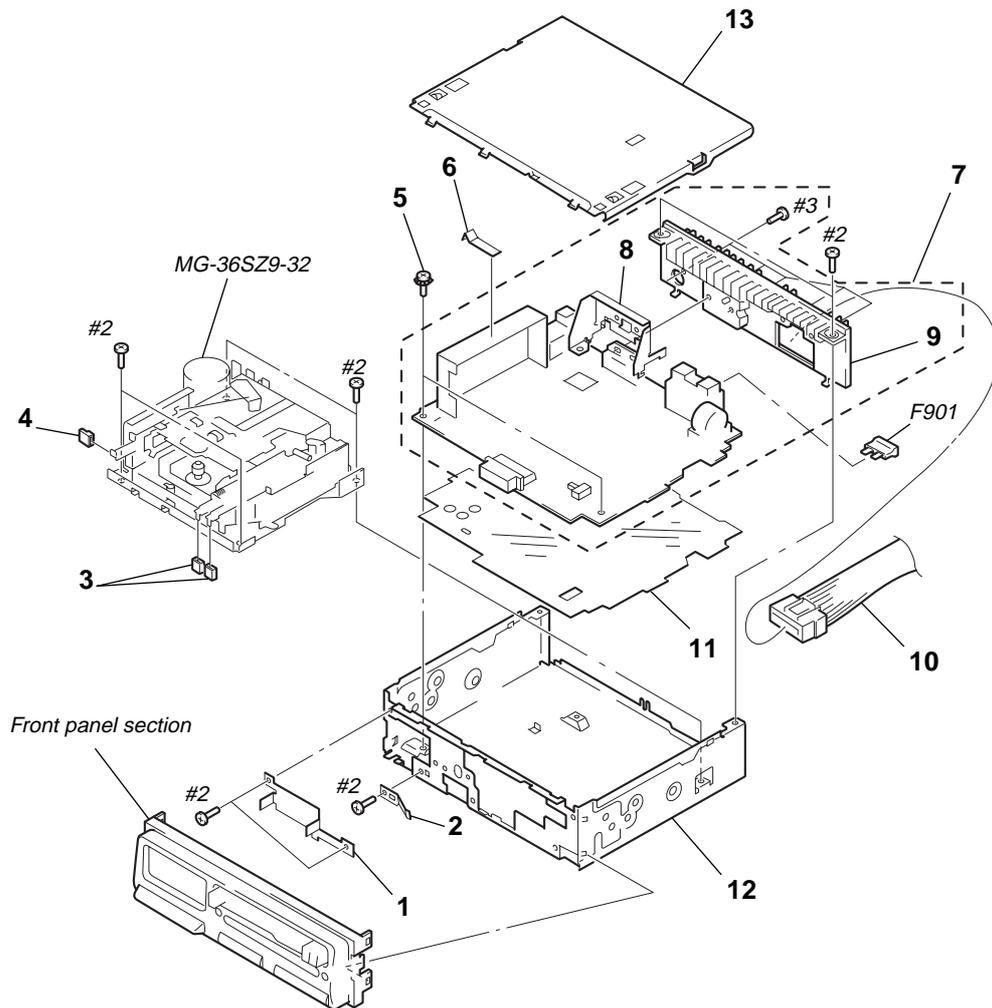
## SECTION 6 EXPLODED VIEWS

**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

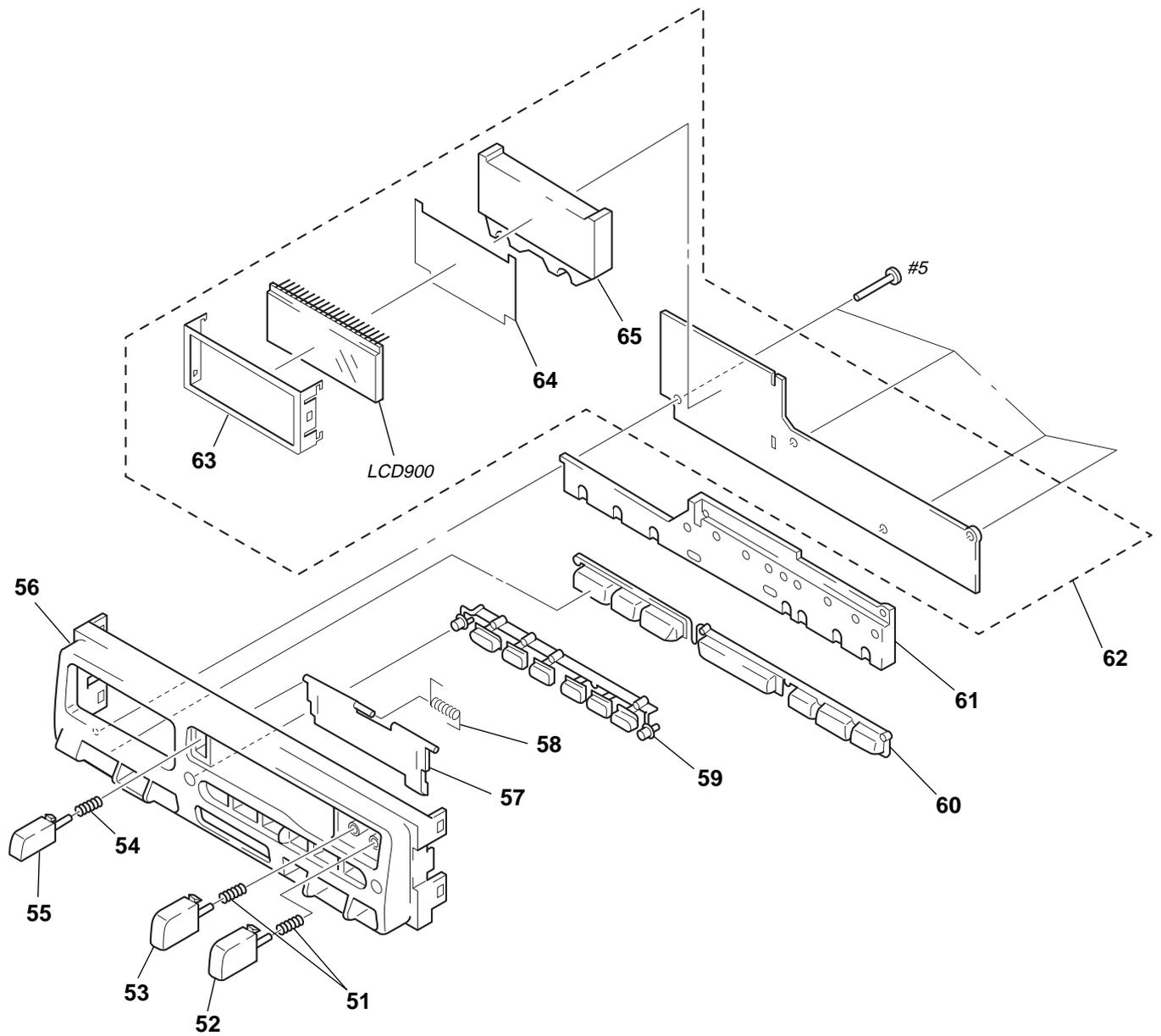
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are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

### (1) GENERAL SECTION



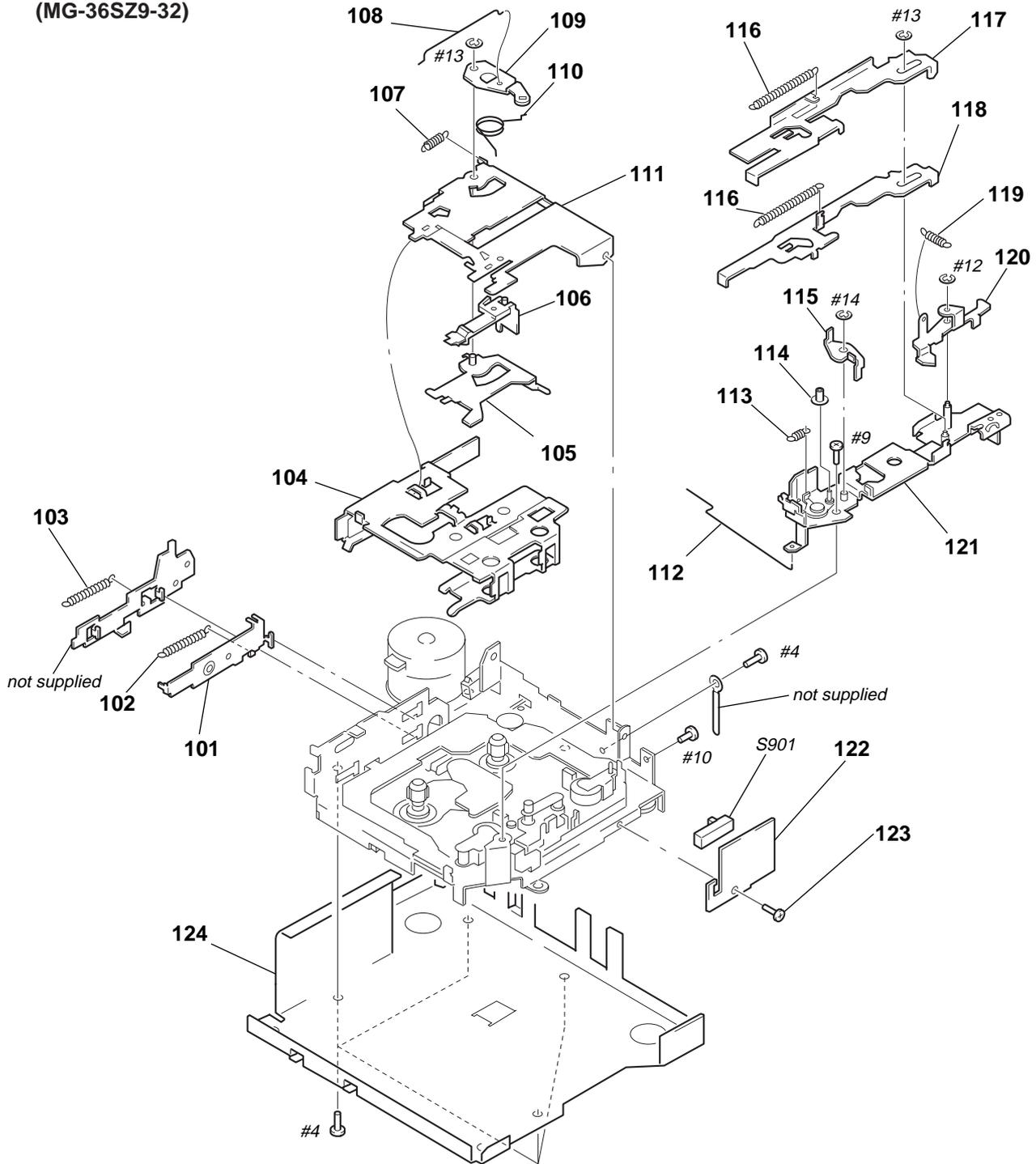
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 1	3-031-237-01	STOPPER (LCD)		* 8	3-022-470-01	BRACKET (IC)	
* 2	3-031-238-01	PLATE, GROUND		* 9	3-022-477-01	HEAT SINK	
3	3-937-529-01	COVER (FF/REW)		10	1-776-207-41	CORD (WITH CONNECTOR) (POWER)	
4	3-937-528-01	COVER (EJECT)		* 11	3-022-487-02	SHEET, INSULATING	
5	3-915-923-01	SCREW, GROUND POINT		* 12	3-022-476-02	CHASSIS, MAIN	
6	3-029-047-01	PLATE (C), GROUND		* 13	3-022-472-01	COVER, TOP	
* 7	A-3317-579-A	MAIN BOARD, COMPLETE (E)		F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	
* 7	A-3317-580-A	MAIN BOARD, COMPLETE (US, Canadian)					

**(2) FRONT PANEL SECTION**



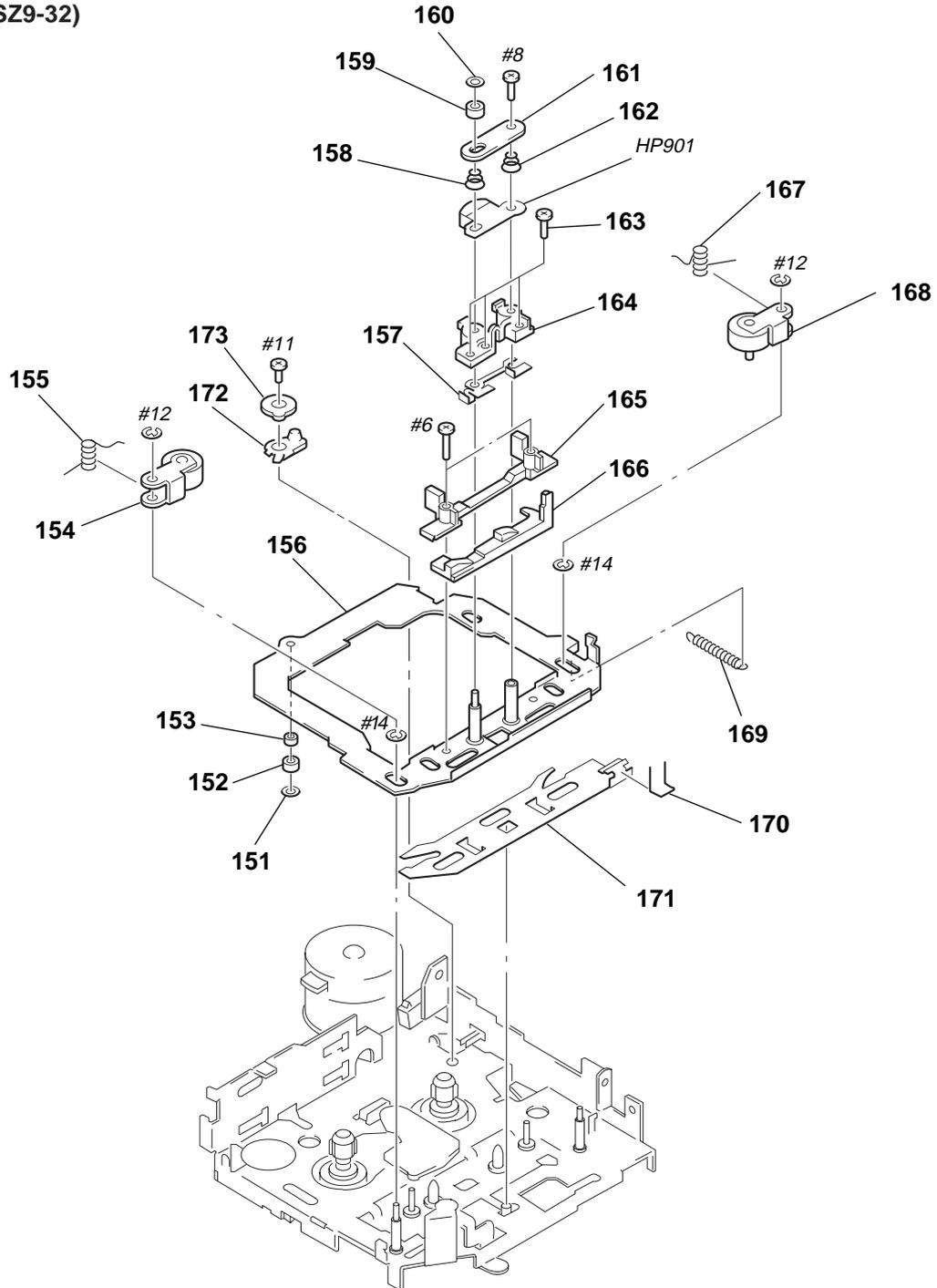
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	3-375-372-01	SPRING (F/R)		60	3-022-480-01	BLOCK (A), BUTTON (-. SEL. +. - SEEK MANU +. LOUD. TUNER. OFF)	
52	3-022-485-01	BUTTON (FF) (▶▶)		* 61	3-022-478-01	PLATE, LIGHT GUIDE	
53	3-022-486-01	BUTTON (REW) (◀◀)		* 62	A-3317-614-A	CONTROL BOARD, COMPLETE	
54	3-029-327-01	SPRING (EJECT)		* 63	3-022-471-01	PLATE (LCD), GROUND	
55	3-022-483-01	BUTTON (EJECT) (▲)		* 64	3-024-264-01	ILLUMINATOR	
56	3-031-236-01	PANEL, FRONT		* 65	3-022-482-01	PLATE (LCD), LIGHT GUIDE	
57	3-924-404-01	DOOR, CASSETTE		LCD900	1-803-137-11	DISPLAY PANEL, LIQUID CRYSTAL	
58	3-377-892-01	SPRING (C DOOR), TORSION					
59	3-022-481-01	BLOCK (B), BUTTON					
		(DSPL. 1. 2. 3. 4. 5. 6. LCL)					

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



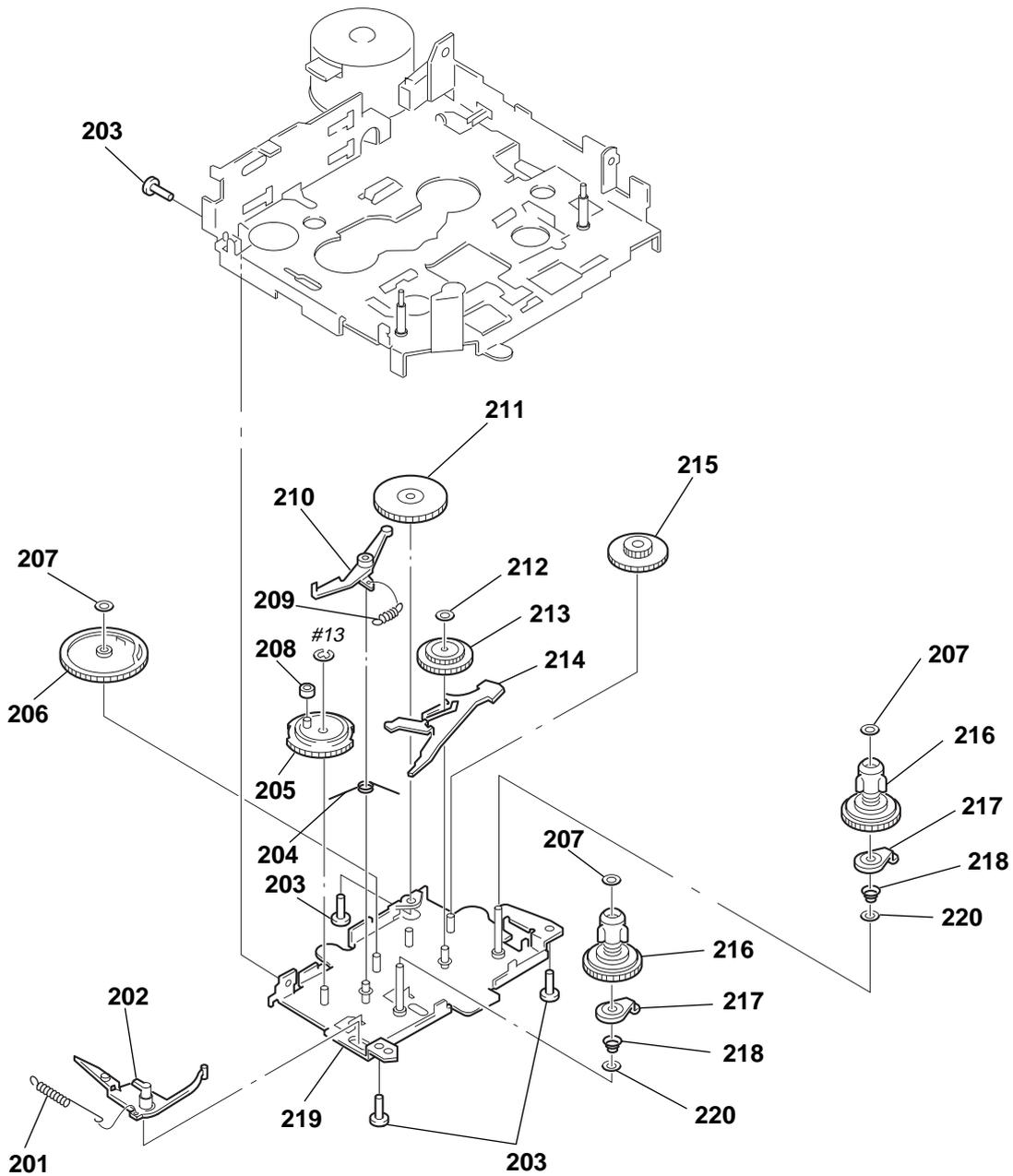
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-938-660-01	LEVER, EJECT		* 115	3-392-933-01	LEVER (B), CHANGE	
102	3-392-950-01	SPRING		116	3-392-948-01	SPRING	
103	3-392-951-01	SPRING		117	3-938-658-01	LEVER, FF	
104	3-375-384-01	HOLDER (X), CASSETTE		118	3-938-659-01	LEVER, REW	
* 105	3-392-921-01	LOCK ASSY, EJECT CAM		119	3-392-917-01	SPRING	
106	3-392-972-01	HOOKER, TAPE		* 120	3-392-935-01	ARM, LOCK	
107	3-392-953-01	SPRING		* 121	3-372-242-01	BRACKET ASSY (D), LEVER	
108	3-392-969-01	LINK, RETURN		122	3-392-970-01	CHASSIS, SWITCH	(DIRECTION SWITCH BOARD)
* 109	3-392-932-01	PLATE, CENTER		* 123	4-908-792-11	SCREW (B2)	
110	3-392-961-01	SPRING (B)		* 124	3-022-479-01	BRACKET (MD)	
111	3-375-383-01	HANGER (X), CASSETTE		S901	1-692-502-11	SWITCH, SLIDE (DIRECTION)	
112	3-372-243-01	LINK (B), SELECTOR					
113	3-392-954-01	SPRING					
114	3-392-994-01	ROLLER, PROGRAM					

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



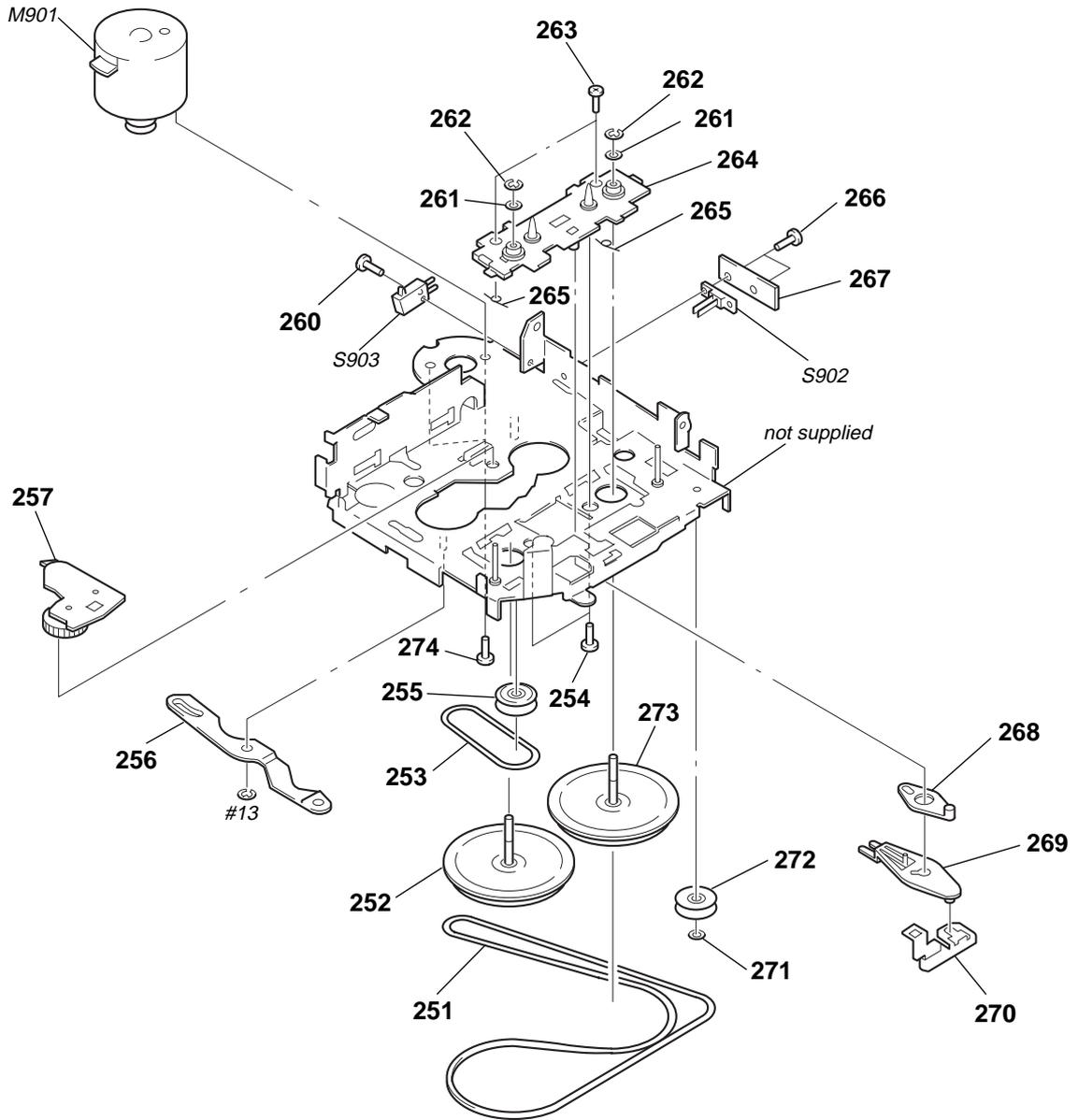
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	3-570-615-02	POLY-WASHER (DIA.1.2)		163	3-375-379-01	SCREW, AZIMUTH	
152	3-392-945-01	ROLLER (A), H.P		* 164	3-379-142-01	ARM (B), ADJUSTOR	
153	3-392-942-01	ROLLER (B), H.P		165	3-392-984-02	GUIDE, TAPE	
154	3-375-378-01	ARM (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		220	3-370-618-01	WASHER	

**(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		266	3-318-204-91	SCREW (M1.7X4), TAPPING	
252	3-392-995-02	FLYWHEEL ASSY (BR)		267	3-375-376-01	MUTE (PWB) (MUTE SWITCH BOARD)	
253	3-375-375-02	BELT (C), SUB		* 268	3-392-925-01	ARM (A) ASSY, F.R	
254	3-392-918-01	SCREW, EJECT HOOK		* 269	3-392-939-01	ARM, FF	
255	3-392-938-01	GEAR, PULLY		* 270	3-392-934-01	ARM (B), F.R	
* 256	3-392-979-01	LEVER, REVERSE		271	3-570-615-02	POLY-WASHER (DIA.1.2)	
257	3-392-916-01	ARM ASSY, TU GEAR		272	3-392-941-01	PULLEY (A), IDLE	
260	3-318-203-11	SCREW (B1.7X6), TAPPING		273	3-392-926-02	FLYWHEEL ASSY (BF)	
261	3-701-437-11	POLY-SLIDER (A)		274	3-713-786-51	SCREW +P 2X3	
262	3-590-768-00	RING (A), E		M901	X-3376-273-1	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)	
265	3-392-963-01	SPRING (R)					

# CONTROL

## 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:  $\mu$ , for example:  
uA. . . :  $\mu$ A. . .      uPA. . . :  $\mu$ PA. . .  
uPB. . . :  $\mu$ PB. . .    uPC. . . :  $\mu$ PC. . .  
uPD. . . :  $\mu$ PD. . .
- CAPACITORS  
uF:  $\mu$ F
- COILS  
uH:  $\mu$ H

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-3317-614-A	CONTROL BOARD, COMPLETE *****				< LIQUID CRYSTAL DISPLAY >	
*	3-022-466-01	REFLECTOR		LCD900	1-803-137-11	DISPLAY PANEL, LIQUID CRYSTAL	
*	3-022-471-01	PLATE (LCD), GROUND				< PILOT LAMP >	
*	3-022-482-01	PLATE (LCD), LIGHT GUIDE		PL900	1-517-534-11	LAMP, PILOT (LCD BACK LIGHT, ILLUMINATION)	
*	3-024-264-01	ILLUMINATOR		PL901	1-517-534-11	LAMP, PILOT (LCD BACK LIGHT, ILLUMINATION)	
		< CAPACITOR >		PL902	1-517-534-11	LAMP, PILOT (ILLUMINATION)	
C900	1-163-006-11	CERAMIC CHIP	560PF 10% 50V	PL903	1-517-534-11	LAMP, PILOT (ILLUMINATION)	
C901	1-163-133-00	CERAMIC CHIP	470PF 5% 50V			< RESISTOR >	
C902	1-164-005-11	CERAMIC CHIP	0.47uF 25V	R900	1-216-091-00	METAL CHIP 56K 5% 1/10W	
C903	1-164-005-11	CERAMIC CHIP	0.47uF 25V	R901	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
C904	1-164-005-11	CERAMIC CHIP	0.47uF 25V	R902	1-216-062-00	METAL CHIP 3.6K 5% 1/10W	
		< CONNECTOR >		R903	1-216-062-00	METAL CHIP 3.6K 5% 1/10W	
CN906	1-764-422-11	PLUG, CONNECTOR 12P		R904	1-216-059-00	METAL CHIP 2.7K 5% 1/10W	
		< DIODE >		R905	1-216-054-00	RES, CHIP 1.6K 5% 1/10W	
D4	8-719-988-61	DIODE 1SS355TE-17		R906	1-216-097-00	RES, CHIP 100K 5% 1/10W	
D900	8-719-158-15	DIODE RD6.6SB				< SWITCH >	
D901	8-719-105-99	DIODE RD6.2M-B1		S900	1-692-118-21	SWITCH, KEY BOARD (TUNER, A MEM)	
D902	8-719-105-99	DIODE RD6.2M-B1		S901	1-692-118-21	SWITCH, KEY BOARD (SEL)	
D903	8-719-105-99	DIODE RD6.2M-B1		S902	1-692-118-21	SWITCH, KEY BOARD (+)	
		< IC >		S903	1-692-118-21	SWITCH, KEY BOARD (-)	
IC900	8-759-544-59	IC LC75842M		S904	1-692-118-21	SWITCH, KEY BOARD (DSPL)	
		< SHORT >		S905	1-692-118-21	SWITCH, KEY BOARD (-, SEEK, MANU)	
JC136	1-216-296-00	SHORT	0	S906	1-692-118-21	SWITCH, KEY BOARD (1, ATA)	
JC137	1-216-295-00	SHORT	0	S907	1-692-118-21	SWITCH, KEY BOARD (2)	
JC901	1-216-296-00	SHORT	0	S908	1-692-118-21	SWITCH, KEY BOARD (3)	
JC902	1-216-296-00	SHORT	0	S909	1-692-118-21	SWITCH, KEY BOARD (4)	
JC903	1-216-296-00	SHORT	0	S910	1-692-118-21	SWITCH, KEY BOARD (6)	
JC904	1-216-296-00	SHORT	0	S911	1-692-118-21	SWITCH, KEY BOARD (LOUD)	
JC905	1-216-296-00	SHORT	0	S912	1-692-118-21	SWITCH, KEY BOARD (5)	
JC906	1-216-296-00	SHORT	0	S913	1-692-118-21	SWITCH, KEY BOARD (LCL)	
JC907	1-216-296-00	SHORT	0	S914	1-692-118-21	SWITCH, KEY BOARD (OFF)	
JC908	1-216-296-00	SHORT	0	S916	1-692-118-21	SWITCH, KEY BOARD (+, SEEK, MANU)	
JC909	1-216-296-00	SHORT	0			*****	
JC910	1-216-296-00	SHORT	0				
JC913	1-216-295-00	SHORT	0				

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-3317-579-A	MAIN BOARD, COMPLETE (E)		C250	1-163-989-11	CERAMIC CHIP 0.033uF	10% 25V
*	A-3317-580-A	MAIN BOARD, COMPLETE (US, Canadian)	*****				(US, Canadian)
				C251	1-163-024-00	CERAMIC CHIP 0.018uF	10% 50V (E)
				C251	1-163-989-11	CERAMIC CHIP 0.033uF	10% 25V
*	3-022-470-01	BRACKET (IC)					(US, Canadian)
*	3-022-477-01	HEAT SINK		C252	1-126-160-11	ELECT 1uF	20% 50V
	7-685-793-09	SCREW +PTT 2.6X8 (S)					
		< CAPACITOR >		C253	1-126-160-11	ELECT 1uF	20% 50V
C4	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V	C300	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C5	1-124-584-00	ELECT 100uF	20% 10V	C301	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C6	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C350	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C7	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V	C351	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C8	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C352	1-163-137-00	CERAMIC CHIP 680PF	5% 50V
C9	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C353	1-163-137-00	CERAMIC CHIP 680PF	5% 50V
C10	1-163-235-11	CERAMIC CHIP 22PF	5% 50V	C354	1-126-154-11	ELECT 47uF	20% 6.3V
C11	1-163-235-11	CERAMIC CHIP 22PF	5% 50V	C355	1-126-154-11	ELECT 47uF	20% 6.3V
C15	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C356	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V
C16	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V	C357	1-124-229-00	ELECT 33uF	20% 10V
C17	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V	C358	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V
C20	1-163-018-00	CERAMIC CHIP 0.0056uF	5% 50V	C359	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V
C21	1-104-760-11	CERAMIC CHIP 0.047uF	10% 50V	C360	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C71	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V	C450	1-124-584-00	ELECT 100uF	20% 10V
C100	1-163-235-11	CERAMIC CHIP 22PF	5% 50V	C451	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C101	1-216-295-00	SHORT 0		C452	1-126-160-11	ELECT 1uF	20% 50V
C102	1-163-220-11	CERAMIC CHIP 3PF	0.25PF 50V	C453	1-126-160-11	ELECT 1uF	20% 50V
C103	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V	C454	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C104	1-164-489-11	CERAMIC CHIP 0.22uF	10% 16V	C455	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C105	1-126-925-11	ELECT 470uF	20% 10V	C456	1-164-345-11	CERAMIC CHIP 0.082uF	10% 25V
C106	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C457	1-164-345-11	CERAMIC CHIP 0.082uF	10% 25V
C107	1-104-760-11	CERAMIC CHIP 0.047uF	10% 50V	C458	1-164-182-11	CERAMIC CHIP 0.0033uF	10% 50V
C110	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V	C459	1-124-229-00	ELECT 33uF	20% 10V
C111	1-124-589-11	ELECT 47uF	20% 16V	C460	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V
C112	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V	C461	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V
C114	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V	C462	1-124-228-11	ELECT 22uF	20% 10V
C115	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V	C463	1-124-228-11	ELECT 22uF	20% 10V
C116	1-104-760-11	CERAMIC CHIP 0.047uF	10% 50V	C464	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C117	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V	C465	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C118	1-124-228-11	ELECT 22uF	20% 10V	C471	1-164-182-11	CERAMIC CHIP 0.0033uF	10% 50V
C119	1-124-584-00	ELECT 100uF	20% 10V	C500	1-163-181-00	CERAMIC CHIP 100PF	5% 50V
C120	1-124-584-00	ELECT 100uF	20% 10V	C501	1-163-181-00	CERAMIC CHIP 100PF	5% 50V
C121	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V	C502	1-163-181-00	CERAMIC CHIP 100PF	5% 50V
C122	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C503	1-163-181-00	CERAMIC CHIP 100PF	5% 50V
C125	1-163-235-11	CERAMIC CHIP 22PF	5% 50V	C504	1-163-181-00	CERAMIC CHIP 100PF	5% 50V
C131	1-126-162-11	ELECT 3.3uF	20% 50V	C505	1-163-181-00	CERAMIC CHIP 100PF	5% 50V
C132	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V	C506	1-163-181-00	CERAMIC CHIP 100PF	5% 50V
C150	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V	C507	1-163-181-00	CERAMIC CHIP 100PF	5% 50V
C151	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V	C550	1-126-159-11	ELECT 0.047uF	20% 50V
C152	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V	C551	1-126-159-11	ELECT 0.047uF	20% 50V
C200	1-164-489-11	CERAMIC CHIP 0.22uF	10% 16V	C552	1-126-159-11	ELECT 0.047uF	20% 50V
C201	1-163-020-00	CERAMIC CHIP 0.0082uF	10% 50V (E)	C553	1-126-159-11	ELECT 0.047uF	20% 50V
C201	1-163-989-11	CERAMIN CHIP 0.033uF	10% 25V	C554	1-104-760-11	CERAMIC CHIP 0.047uF	10% 50V
C202	1-163-023-00	CERAMIC CHIP 0.015uF	10% 50V	C558	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C202	1-216-295-00	SHORT 0 (E)		C559	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C250	1-163-024-00	CERAMIC CHIP 0.018uF	10% 50V (E)	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	1-124-233-11	ELECT 10uF	20% 16V
				C574	1-124-233-11	ELECT 10uF	20% 16V
				C603	1-163-037-11	CERAMIC CHIP 0.022uF	10% 25V

**MAIN**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C604	1-124-233-11	ELECT	10uF 20% 16V	D621	8-719-991-33	DIODE 1SS133T-77	
C605	1-124-229-00	ELECT	33uF 20% 10V			< COMPOSITION CIRCUIT BLOCK >	
C606	1-125-701-11	DOUBLE LAYER	0.047F 5.5V	DSP100	1-519-504-11	GAP, DISCHARGE	
C607	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V			< IC >	
C608	1-124-233-11	ELECT	10uF 20% 16V	IC1	8-759-536-09	IC LC72322N-9400	
C609	1-124-584-00	ELECT	100uF 20% 10V	IC350	8-759-924-46	IC BA4560F	
C610	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V	IC450	8-759-368-11	IC LC75372E	
C611	1-124-233-11	ELECT	10uF 20% 16V	IC500	8-759-578-83	IC HA13158A	
C612	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V			< SHORT/CAPACITOR >	
C613	1-136-165-00	FILM	0.1uF 5% 50V	JC1	1-216-295-00	SHORT	0
C614	1-163-021-11	CERAMIC CHIP	0.01uF 10% 50V	JC35	1-216-296-00	SHORT	0
C615	1-163-251-11	CERAMIC CHIP	100PF 5% 50V	JC56	1-216-296-00	SHORT	0
C616	1-163-251-11	CERAMIC CHIP	100PF 5% 50V	JC57	1-216-296-00	SHORT	0
C617	1-163-181-00	CERAMIC CHIP	100PF 5% 50V	JC58	1-216-296-00	SHORT	0
C618	1-163-251-11	CERAMIC CHIP	100PF 5% 50V	JC59	1-216-296-00	SHORT	0
C620	1-128-060-11	ELECT	4700uF 20% 16V	JC60	1-216-295-00	SHORT	0
C621	1-164-489-11	CERAMIC CHIP	0.22uF 10% 16V	JC61	1-216-295-00	SHORT	0
C622	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V	JC101	1-216-295-00	SHORT	0 (E)
C623	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V	JC102	1-216-295-00	SHORT	0 (US, Canadian)
C624	1-163-021-11	CERAMIC CHIP	0.01uF 10% 50V	JC103	1-216-295-00	SHORT	0 (E)
C625	1-163-021-11	CERAMIC CHIP	0.01uF 10% 50V	JC104	1-216-295-00	SHORT	0
		< JACK/CONNECTOR >		JC112	1-216-296-00	SHORT	0
CN900	1-764-808-21	JACK (ANT) (FM/AM ANTENNA)		JC113	1-216-296-00	SHORT	0
* CN901	1-691-582-11	PIN, CONNECTOR (PC BOARD) 11P		JC114	1-216-296-00	SHORT	0
CN902	1-764-423-11	PIN, CONNECTOR 12P		JC116	1-216-296-00	SHORT	0
CN903	1-774-701-11	PIN, CONNECTOR 16P		JC118	1-216-296-00	SHORT	0
		< DIODE >		JC119	1-216-295-00	SHORT	0
D1	8-719-921-54	DIODE MTZJ-6.2B		JC120	1-216-296-00	SHORT	0
D2	8-719-991-33	DIODE 1SS133T-77		JC121	1-216-296-00	SHORT	0
D3	8-719-991-33	DIODE 1SS133T-77		JC122	1-216-296-00	SHORT	0
D12	8-719-991-33	DIODE 1SS133T-77 (E)		JC123	1-216-296-00	SHORT	0
D14	8-719-921-54	DIODE MTZJ-6.2B		JC125	1-216-296-00	SHORT	0
D15	8-719-921-54	DIODE MTZJ-6.2B		JC126	1-216-296-00	SHORT	0
D16	8-719-921-54	DIODE MTZJ-6.2B		JC127	1-216-296-00	SHORT	0
D17	8-719-921-54	DIODE MTZJ-6.2B		JC128	1-163-021-11	CERAMIC CHIP	0.01uF 10% 50V
D18	8-719-921-54	DIODE MTZJ-6.2B		JC129	1-216-295-00	SHORT	0
D19	8-719-921-54	DIODE MTZJ-6.2B		JC130	1-216-296-00	SHORT	0
D20	8-719-921-54	DIODE MTZJ-6.2B		JC131	1-216-296-00	SHORT	0
D100	8-719-991-65	DIODE SB02W03C		JC132	1-216-296-00	SHORT	0
D350	8-719-200-82	DIODE 11ES2		JC133	1-216-296-00	SHORT	0
D351	8-719-991-33	DIODE 1SS133T-77		JC134	1-216-296-00	SHORT	0
D503	8-719-200-82	DIODE 11ES2		JC138	1-216-296-00	SHORT	0
D506	8-719-200-82	DIODE 11ES2		JC139	1-216-296-00	SHORT	0
D551	8-719-929-15	DIODE MTZJ-T-77-9.1B		JC140	1-216-296-00	SHORT	0
D600	8-719-991-33	DIODE 1SS133T-77		JC191	1-216-296-00	SHORT	0
D601	8-719-991-33	DIODE 1SS133T-77		JC192	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
D602	8-719-935-40	DIODE HZS6B2LTD		JC193	1-216-295-00	SHORT	0
D603	8-719-048-54	DIODE MTZJ-T-77-10A		JC195	1-216-295-00	SHORT	0
D605	8-719-200-82	DIODE 11ES2		JC196	1-216-296-00	SHORT	0
D606	8-719-200-82	DIODE 11ES2		JC197	1-216-296-00	SHORT	0
D607	8-719-921-63	DIODE MTZJ-7.5B		JC198	1-216-295-00	SHORT	0
D608	8-719-991-33	DIODE 1SS133T-77		JC199	1-216-295-00	SHORT	0
D609	8-719-991-33	DIODE 1SS133T-77		JC302	1-216-296-00	SHORT	0
D610	8-719-110-49	DIODE RD18ES-B2		JC303	1-216-296-00	SHORT	0
D611	8-719-060-48	DIODE RB751V-40TE-17					
D620	8-719-049-38	DIODE 1N5404TU					

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
JC306	1-216-296-00	SHORT	0				
JC307	1-216-296-00	SHORT	0	R17	1-216-049-11	RES, CHIP	1K 5% 1/10W
JC452	1-216-295-00	SHORT	0	R18	1-216-049-11	RES, CHIP	1K 5% 1/10W
JC453	1-216-295-00	SHORT	0	R19	1-216-049-11	RES, CHIP	1K 5% 1/10W
JC454	1-216-295-00	SHORT	0	R20	1-216-049-11	RES, CHIP	1K 5% 1/10W
JC455	1-216-295-00	SHORT	0	R22	1-216-097-00	RES, CHIP	100K 5% 1/10W
< COIL/RESISTOR >				R25	1-249-417-11	CARBON	1K 5% 1/4W
JW144	1-414-856-11	INDUCTOR	10uH	R26	1-216-049-11	RES, CHIP	1K 5% 1/10W
L1	1-249-389-11	CARBON	4.7 5% 1/4W	R27	1-216-049-11	RES, CHIP	1K 5% 1/10W
L100	1-410-312-11	INDUCTOR	0.22uH (US, Canadian)	R28	1-216-049-11	RES, CHIP	1K 5% 1/10W
L600	1-411-669-12	INDUCTOR	0uH	R29	1-249-417-11	CARBON	1K 5% 1/4W
< TRANSISTOR >				R30	1-249-417-11	CARBON	1K 5% 1/4W
Q10	8-729-205-95	TRANSISTOR	2SA1428-Y	R31	1-249-417-11	CARBON	1K 5% 1/4W
Q30	1-801-806-11	TRANSISTOR	DTC144EK-T146	R32	1-216-049-11	RES, CHIP	1K 5% 1/10W
Q31	1-801-806-11	TRANSISTOR	DTC144EK-T146	R33	1-216-049-11	RES, CHIP	1K 5% 1/10W
Q32	1-801-806-11	TRANSISTOR	DTC144EK-T146	R35	1-216-097-00	RES, CHIP	100K 5% 1/10W
Q60	8-729-027-44	TRANSISTOR	DTC114TKA-T146	R36	1-216-073-00	METAL CHIP	10K 5% 1/10W
Q100	8-729-120-28	TRANSISTOR	2SC1623-L5L6	R37	1-216-262-00	RES, CHIP	470K 5% 1/8W
Q101	8-729-107-43	TRANSISTOR	2SC3624-L18	R38	1-216-049-11	RES, CHIP	1K 5% 1/10W
Q102	8-729-901-98	TRANSISTOR	2SA1036K-R	R39	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
Q103	8-729-027-52	TRANSISTOR	DTC124EKA-T146	R41	1-249-417-11	CARBON	1K 5% 1/4W
Q104	8-729-901-98	TRANSISTOR	2SA1036K-R	R42	1-216-037-00	METAL CHIP	330 5% 1/10W
Q105	8-729-027-52	TRANSISTOR	DTC124EKA-T146	R75	1-216-049-11	RES, CHIP	1K 5% 1/10W
Q350	8-729-205-95	TRANSISTOR	2SA1428-Y	R76	1-216-049-11	RES, CHIP	1K 5% 1/10W
Q351	8-729-900-53	TRANSISTOR	DTC114EK	R77	1-216-049-11	RES, CHIP	1K 5% 1/10W
Q553	8-729-035-36	TRANSISTOR	2SC2412K-T146-PQR	R78	1-216-049-11	RES, CHIP	1K 5% 1/10W
Q554	8-729-026-49	TRANSISTOR	2SA1037K-T146-R	R79	1-216-045-00	METAL CHIP	680 5% 1/10W
Q600	8-729-205-96	TRANSISTOR	2SC3668	R103	1-216-001-00	METAL CHIP	10 5% 1/10W
Q601	8-729-921-48	TRANSISTOR	2SD1760F5-TRPQR	R104	1-216-049-11	RES, CHIP	1K 5% 1/10W
Q602	8-729-026-49	TRANSISTOR	2SA1037K-T146-R	(US, Canadian)			
Q604	8-729-900-53	TRANSISTOR	DTC114EK	R106	1-216-041-00	METAL CHIP	470 5% 1/10W
Q605	8-729-205-95	TRANSISTOR	2SA1428-Y	R107	1-216-069-00	METAL CHIP	6.8K 5% 1/10W
Q606	8-729-026-49	TRANSISTOR	2SA1037K-T146-R	R108	1-216-049-11	RES, CHIP	1K 5% 1/10W
Q608	8-729-027-52	TRANSISTOR	DTC124EKA-T146	R109	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
Q610	8-729-035-36	TRANSISTOR	2SC2412K-T146-PQR	R110	1-216-198-11	RES, CHIP	1K 5% 1/8W
Q611	8-729-035-36	TRANSISTOR	2SC2412K-T146-PQR	R111	1-216-142-00	RES, CHIP	4.7 5% 1/8W
Q612	8-729-027-38	TRANSISTOR	DTA144EKA-T146	R112	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
< RESISTOR >				R113	1-216-073-00	METAL CHIP	10K 5% 1/10W
R2	1-216-097-00	RES, CHIP	100K 5% 1/10W	R114	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R3	1-216-073-00	METAL CHIP	10K 5% 1/10W	R115	1-216-073-00	METAL CHIP	10K 5% 1/10W
R4	1-216-081-00	METAL CHIP	22K 5% 1/10W	R116	1-216-037-00	METAL CHIP	330 5% 1/10W
(US, Canadian)				R118	1-216-049-11	RES, CHIP	1K 5% 1/10W
R5	1-216-073-00	METAL CHIP	10K 5% 1/10W	(US, Canadian)			
R6	1-216-073-00	METAL CHIP	10K 5% 1/10W	R118	1-216-295-00	SHORT	0 (E)
R7	1-216-262-00	RES, CHIP	470K 5% 1/8W	R119	1-163-205-00	CERAMIC CHIP	0.001uF 5% 50V
R8	1-249-417-11	CARBON	1K 5% 1/4W	(US, Canadian)			
R9	1-249-417-11	CARBON	1K 5% 1/4W	R119	1-216-198-00	RES, CHIP	1K 5% 1/8W
R10	1-216-097-00	RES, CHIP	100K 5% 1/10W	(E)			
R11	1-216-097-00	RES, CHIP	100K 5% 1/10W	R120	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
R12	1-216-097-00	RES, CHIP	100K 5% 1/10W	(US, Canadian)			
R13	1-216-085-00	METAL CHIP	33K 5% 1/10W	R200	1-216-075-00	METAL CHIP	12K 5% 1/10W
R14	1-216-085-00	METAL CHIP	33K 5% 1/10W	(E)			
R15	1-249-437-11	CARBON	47K 5% 1/4W	R200	1-216-073-00	METAL CHIP	10K 5% 1/10W
(E)				(US, Canadian)			
R16	1-249-417-11	CARBON	1K 5% 1/4W	R250	1-216-049-11	RES, CHIP	1K 5% 1/10W
(US, Canadian)				R250	1-216-065-00	RES, CHIP	4.7K 5% 1/10W
				(US, Canadian)			
				R251	1-216-049-11	RES, CHIP	1K 5% 1/10W
				(E)			

**MAIN**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R251	1-216-065-00	RES, CHIP	4.7K 5% 1/10W (US, Canadian)	R601	1-216-071-00	METAL CHIP	8.2K 5% 1/10W
R252	1-216-067-00	RES, CHIP	5.6K 5% 1/10W (US, Canadian)	R602	1-216-085-00	METAL CHIP	33K 5% 1/10W
R252	1-216-091-00	METAL CHIP	56K 5% 1/10W (E)	R603	1-216-081-00	METAL CHIP	22K 5% 1/10W
R253	1-216-067-00	RES, CHIP	5.6K 5% 1/10W (US, Canadian)	R604	1-216-081-00	METAL CHIP	22K 5% 1/10W
R253	1-216-091-00	METAL CHIP	56K 5% 1/10W (E)	R605	1-216-037-00	METAL CHIP	330 5% 1/10W
R350	1-216-097-00	RES, CHIP	100K 5% 1/10W	R606	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R351	1-216-073-00	METAL CHIP	10K 5% 1/10W	R607	1-249-413-11	CARBON	470 5% 1/4W
R352	1-216-089-00	RES, CHIP	47K 5% 1/10W	R608	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R353	1-216-089-00	RES, CHIP	47K 5% 1/10W	R609	1-216-073-00	METAL CHIP	10K 5% 1/10W
R354	1-216-013-00	METAL CHIP	33 5% 1/10W	R610	1-216-053-00	METAL CHIP	1.5K 5% 1/10W
R355	1-216-013-00	METAL CHIP	33 5% 1/10W	R612	1-216-097-00	RES, CHIP	100K 5% 1/10W
R356	1-216-077-00	METAL CHIP	15K 5% 1/10W	R614	1-216-089-00	RES, CHIP	47K 5% 1/10W
R357	1-216-077-00	METAL CHIP	15K 5% 1/10W	R615	1-216-081-00	METAL CHIP	22K 5% 1/10W
R358	1-216-115-00	METAL CHIP	560K 5% 1/10W	R616	1-216-053-00	METAL CHIP	1.5K 5% 1/10W
R359	1-216-115-00	METAL CHIP	560K 5% 1/10W	R617	1-249-425-11	CARBON	4.7K 5% 1/4W
R360	1-216-049-11	RES, CHIP	1K 5% 1/10W	R619	1-216-081-00	METAL CHIP	22K 5% 1/10W
R361	1-216-097-00	RES, CHIP	100K 5% 1/10W	R620	1-216-081-00	METAL CHIP	22K 5% 1/10W
R362	1-247-807-31	CARBON	100 5% 1/4W	R630	1-249-385-11	CARBON	2.2 5% 1/6W
R370	1-216-051-00	METAL CHIP	1.2K 5% 1/10W	R631	1-249-385-11	CARBON	2.2 5% 1/6W
R371	1-216-049-11	RES, CHIP	1K 5% 1/10W	R632	1-249-385-11	CARBON	2.2 5% 1/6W
R451	1-216-081-00	METAL CHIP	22K 5% 1/10W	R633	1-249-385-11	CARBON	2.2 5% 1/6W
R452	1-216-081-00	METAL CHIP	22K 5% 1/10W	R634	1-249-478-11	CARBON	2.2 5% 1/2W F
R453	1-249-393-11	CARBON	10 5% 1/4W	R635	1-249-478-11	CARBON	2.2 5% 1/2W F
R551	1-216-071-00	METAL CHIP	8.2K 5% 1/10W	R636	1-216-073-00	METAL CHIP	10K 5% 1/10W
R552	1-216-073-00	METAL CHIP	10K 5% 1/10W	R907	1-216-296-00	SHORT	0
R553	1-216-073-00	METAL CHIP	10K 5% 1/10W			< SWITCH >	
R554	1-216-073-00	METAL CHIP	10K 5% 1/10W	S1	1-571-478-11	SWITCH, SLIDE (FREQUENCY SELECT) (E)	
R555	1-216-073-00	METAL CHIP	10K 5% 1/10W			< TUNER >	
R556	1-216-041-11	RES, CHIP	470 5% 1/10W	TU100	A-3282-031-A	TUNER UNIT (TUX-006/2 (EE)) (US, Canadian)	
R557	1-216-041-11	RES, CHIP	470 5% 1/10W	TU100	A-3282-034-A	TUNER UNIT (TUX-010 (E)) (E)	
R558	1-216-041-11	RES, CHIP	470 5% 1/10W			< VIBRATOR >	
R559	1-216-041-11	RES, CHIP	470 5% 1/10W	X1	1-567-713-11	VIBRATOR, CRYSTAL (4.5MHz) (E)	
R560	1-216-073-00	METAL CHIP	10K 5% 1/10W	X1	1-781-049-21	VIBRATOR, CRYSTAL (4.5MHz) (US, Canadian)	
R561	1-216-073-00	METAL CHIP	10K 5% 1/10W			*****	
R562	1-216-097-00	RES, CHIP	100K 5% 1/10W			MISCELLANEOUS	
R563	1-216-113-00	METAL CHIP	470K 5% 1/10W			*****	
R565	1-216-105-00	RES, CHIP	220K 5% 1/10W	10	1-776-207-41	CORD (WITH CONNECTOR) (POWER)	
R570	1-216-067-00	METAL CHIP	5.6K 5% 1/10W	F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	
R571	1-216-073-00	METAL CHIP	10K 5% 1/10W	HP901	1-543-717-11	HEAD, MAGNETIC (PLAYBACK)	
R572	1-216-049-11	RES, CHIP	1K 5% 1/10W	M901	X-3376-273-1	MOTOR ASSY (CAPSTAN/REEL)	
R573	1-216-121-00	RES, CHIP	1M 5% 1/10W	S901	1-692-502-11	SWITCH, SLIDE (DIRECTION)	
R574	1-216-093-11	METAL CHIP	68K 5% 1/10W	S902	1-692-065-11	SWITCH, LEAF (FF/REW)	
R582	1-216-073-00	METAL CHIP	10K 5% 1/10W	S903	1-554-790-21	SWITCH, POWER (TAPE DETECT)	
R583	1-216-073-00	METAL CHIP	10K 5% 1/10W			*****	
R584	1-216-077-00	METAL CHIP	15K 5% 1/10W			*****	
R585	1-216-077-00	METAL CHIP	15K 5% 1/10W			HARDWARE LIST	
R586	1-216-077-00	METAL CHIP	15K 5% 1/10W			*****	
R587	1-216-077-00	METAL CHIP	15K 5% 1/10W	#2	7-685-792-09	SCREW +PTT 2.6X6 (S)	
R588	1-216-129-00	METAL CHIP	2.2M 5% 1/10W	#3	7-685-793-09	SCREW +PTT 2.6X8 (S)	
R589	1-216-129-00	METAL CHIP	2.2M 5% 1/10W	#4	7-685-790-01	SCREW +PTT 2.6X4 (S)	
R590	1-216-129-00	METAL CHIP	2.2M 5% 1/10W	#5	7-685-105-19	TPG +P 2X8, TYPE 2, NON-SLIT	
R591	1-216-129-00	METAL CHIP	2.2M 5% 1/10W	#6	7-627-553-88	SCREW, PRECISION +P 2X7	
R600	1-216-073-00	METAL CHIP	10K 5% 1/10W				

Ref. No.	Part No.	Description	Remark
#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	

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ACCESSORIES & PACKING MATERIALS

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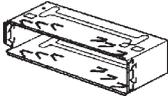
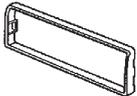
3-865-584-11	MANUAL, INSTRUCTION (ENGLISH) (US, Canadian)
3-865-584-21	MANUAL, INSTRUCTION (FRENCH) (Canadian)
3-865-584-31	MANUAL, INSTRUCTION (ENGLISH, SPANISH, CHINESE) (E)
3-865-585-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH) (US, Canadian)
3-865-585-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH, CHINESE) (E)

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PARTS FOR INSTALLATION AND CONNECTIONS

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501	X-3373-605-1	FRAME ASSY
502	3-012-601-01	COLLAR (B)
503	3-032-993-01	BRACKET (LOCK)
504	3-934-325-01	SCREW, +K (5X8) TAPPING
505	1-776-207-41	CORD (WITH CONNECTOR) (POWER)
506	3-702-658-01	TOOL (REMOVE)
507	3-924-961-01	SUPPORT (ND), FITTING (US, Canadian)
508	X-3368-725-1	SCREW ASSY, FITTING (US, Canadian)
509	7-682-560-04	SCREW +P 4X6 (US, Canadian)
510	X-3366-405-1	SCREW ASSY (EXP), FITTING (E)

Ref. No.	Part No.	Description	Remark
<b>501</b>		 FRAME ASSY x 1	
<b>502</b>		 COLLAR x 1	
<b>503</b>		 BRACKET (LOCK) x 2	
<b>504</b>		 +K 5X8 x 4	
<b>505</b>		 CORD (WITH CONNECTOR) x 1	
<b>506</b>		 TOOL (REMOVE) x 1	
<b>US, Canadian</b>			
<b>507</b>		 SUPPORT (ND) FITTING x 1	
<b>508</b>		 +T 4X12 x 1	
<b>509</b>		 +P 4X6 x 1	
<b>E</b>			
<b>510</b>		 FITTING SCREW x 1	
		 BUSHING x 1	

