

# Portable Cassette Recorder With Radio

## INSTRUCTION MANUAL



M 9800F

# CONTROLS

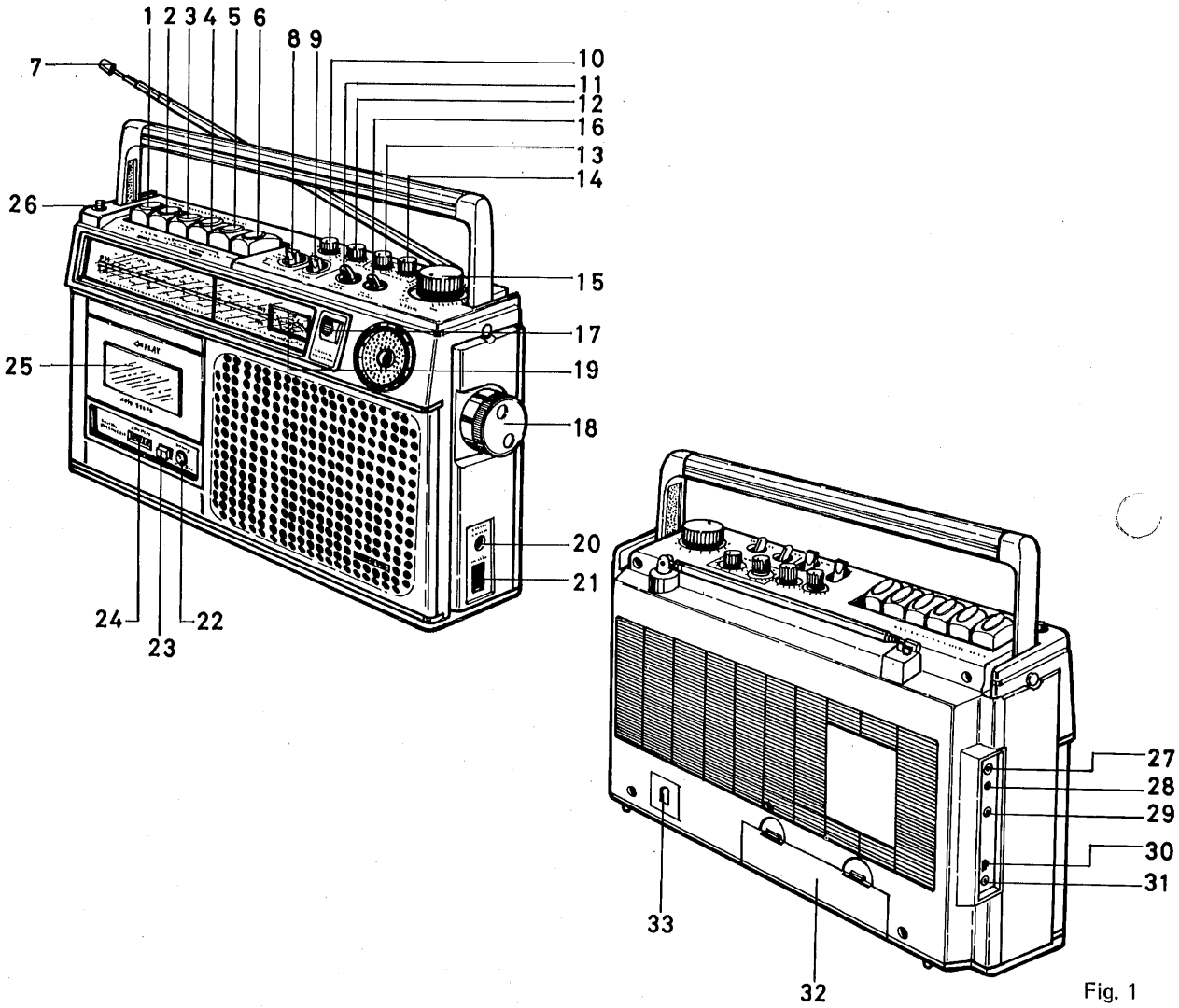


Fig. 1

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>1. Stop/Eject button</li> <li>2. Fast forward/Cue button</li> <li>3. Play button</li> <li>4. Rewind/Review button</li> <li>5. Record button</li> <li>6. Pause button</li> <li>7. Aerial (antenna)</li> <li>8. Radio switch</li> <li>9. Band select switch</li> <li>10. Microphone volume control knob</li> <li>11. Automatic frequency control (AFC) switch</li> <li>12. Tone control knob</li> <li>13. Woofer volume control knob</li> <li>14. Tweeter volume control knob</li> <li>15. Main volume control knob</li> <li>16. Loudness control switch</li> <li>17. Built-in microphone</li> </ul> | <ul style="list-style-type: none"> <li>18. Tuning control knob</li> <li>19. VU/TUNING/BATT indicator</li> <li>20. External DC socket</li> <li>21. AC input socket</li> <li>22. Memory switch</li> <li>23. Memory counter reset button</li> <li>24. Memory counter</li> <li>25. Cassette compartment lid</li> <li>26. Dial light/battery check button</li> <li>27. External microphone socket</li> <li>28. Remote socket</li> <li>29. Auxiliary input socket</li> <li>30. Beat cancel switch</li> <li>31. Earphone socket</li> <li>32. Battery compartment lid</li> <li>33. Voltage selector</li> </ul> |
|---|--|

## POWER SUPPLY

### Battery Operation

1. Open the battery compartment lid by sliding the knobs in the direction of arrow (Fig. 2).

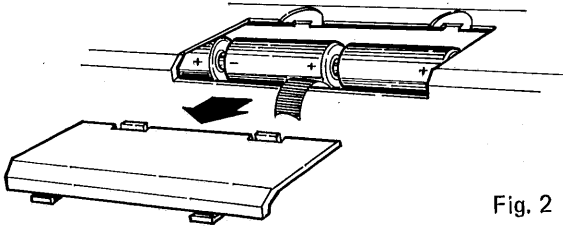


Fig. 2

2. Install 6 "D" (UM-1) size flashlight batteries carefully as indicated, placing the strip at the bottom for easy battery replacement (Fig. 3).

(-) (+)

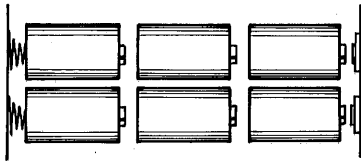


Fig. 3

3. Close the battery compartment lid.

### Battery Checking

1. Press the PLAY button.
2. Press the dial LIGHT button.
3. Check the battery condition. The pointer of INDICATOR should deflect in "F" area. If the pointer only moves as far as "E" area, the batteries are exhausted and must be replaced (Fig. 4).

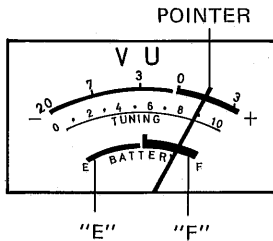


Fig. 4

## RADIO OPERATION

### Reception of Radio Programs

1. Set the RADIO switch in ON position.
2. Set the BAND select switch to desired radio band.
3. Tune in a desired station by turning the TUNING control knob as the INDICATOR pointer shows maximum swing to right.
4. For FM reception pull out the aerial and determine the direction, length and angle to give the best reception.

For AM reception, the aerial inside of the unit is somewhat directional, reception from distant stations may sometimes be improved rotating the unit (Fig. 6).

5. After tune in a FM station, set the AFC switch in ON position.

### External DC (Car Battery) Power Operation

1. Connect the plug of an Car adaptor (optional) or 9V external battery into DC socket of this unit.
2. When a plug is connected into the external DC socket, battery socket, battery circuit is automatically disconnected.

### AC Power Operation

Before operating the unit for the first time in a new area, it is absolutely necessary to make sure the setting of the voltage selector (located inside of the cabinet) corresponds as near by as possible to the local power supply. To adjust the voltage, move the voltage selector which corresponds to your local power voltage (Fig. 5).

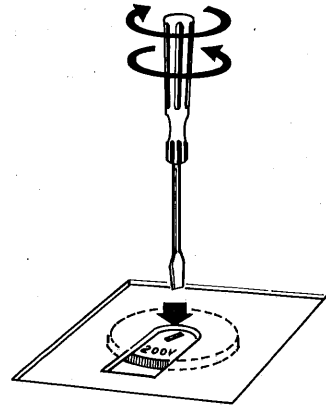


Fig. 5

Connect one end of the power cord to the AC input socket and the other end to an AC outlet.

NOTE: The batteries are automatically disconnected when AC power cord is plugged into the AC input socket.

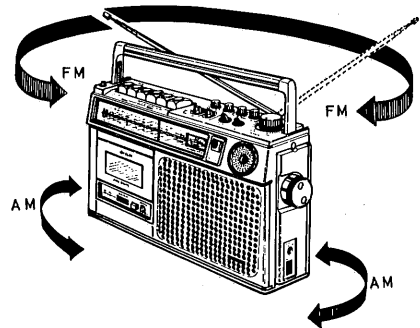


Fig. 6

6. Adjust the WOOFER, TWEETER, and MAIN VOLUME control knobs to your desired sound and tone quality.

To increase the bass response, adjust the TONE control knob.

7. To turn off the radio, set the RADIO switch in OFF position.

**NOTES:**

\* Set the LOUDNESS control switch in ON position to compensate tonal response when the MAIN VOLUME is adjusted to low position.

\* Push the dial LIGHT button to tune in a desired station at night.

\* If the PLAY button is pressed during radio operation, the unit will change to play mode.

**To Listen to the Radio Programs in Bed**

If you desire to listen to the radio programs in the bed, AUTO STOP mechanism system of this unit works as a sleep timer and operating time is determined by the cassette to be used.

- C-30 Cassette..... 15 minutes
- C-60 Cassette..... 30 minutes
- C-90 Cassette..... 45 minutes
- C-120 Cassette ..... 60 minutes

1. Press the STOP/EJECT button and insert the selected cassette into its compartment and close the cassette compartment lid.
2. Set the RADIO switch in ON position and tune in a desired station as previously described.
3. Press the PLAY button. Or if you wish to record the radio program, press the RECORD and PLAY buttons simultaneously.
4. Set the RADIO switch in TIMER position.
5. When the tape is wound completely, the PLAY buttons or RECORD and PLAY buttons will be released and radio power is shut off automatically.
6. To listen to the radio programs continuously, set the RADIO switch in ON position.

**COMPACT CASSETTE**

**Inserting and Removing the Cassette**

Open the cassette compartment lid by pressing the STOP/EJECT button. Insert the cassette with the full reel to the right (visible through the window) and tape slot at the top (Fig. 7). The cassette fits into the unit only in the correct position. Push the cassette compartment lid at the top to put the cassette in place. Now the unit is ready to operate. To use the second track, press the STOP/EJECT button and remove the cassette. Turn the cassette over and reinsert it as previously described (Fig. 8).

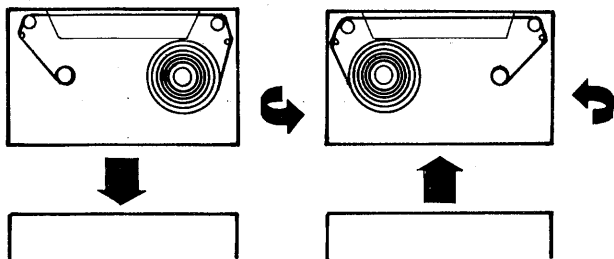


Fig. 7

Fig. 8

**NOTE:** Both ends of the tape are attached permanently to the reels, when the end of the tape has been reached during fast forward or rewind mode, the reels will stop. Then the STOP/EJECT button should be pressed. At the end of the tape while playback or recording, the PLAY button or RECORD and PLAY buttons will be automatically released and the unit will be in stop condition.

**Memory Switch and Memory Counter**

Before recording, press the memory counter reset button to reset the counter to "000". The memory counter helps you to index and more quickly locate your desired selection for playback. When rewinding with MEMORY switch in ON position, REW/REVIEW button will be automatically released soon after counter numerals "000". Be sure to set the MEMORY switch in OFF position, while memory counter numerals "900" to "999" to use the REW/REVIEW button. Check the MEMORY switch first, when the REW/REVIEW button can not be locked.

**To Avoid Accidental Erasing**

Whenever a recording is made, the sound previously recorded is erased automatically. To protect valuable recordings from accidental erasing, the unit and cassette are equipped with safety devices. To keep the recorded material permanently, break out the tabs on the back of the cassette with a knife or screw driver. To protect the TOP side of the tape from accidental erasing, break out the right side tab. To record on a cassette from which the tabs have been removed, simply attach adhesive tape over the tab opening (Fig. 9).

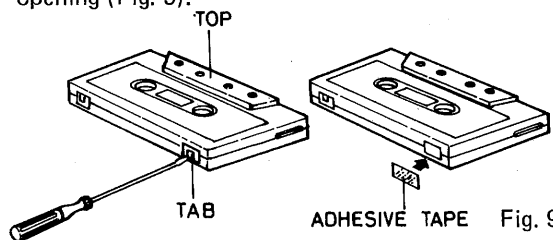


Fig. 9

## a) Recording through the Built-in Microphone

1. Set the RADIO switch in OFF position.
2. Press the STOP/EJECT button and insert the cassette into its compartment, then close the cassette compartment lid.
3. Set the MEMORY switch in ON position and press the memory counter reset button.
4. Press the RECORD and PLAY buttons simultaneously.
5. Speak in a normal voice at a distance of approximately 1 foot away from the unit (Fig. 10). The indicator pointer deflects and show the input signal condition. Since the monitoring can not be done with this recording assure the recording with the indicator.

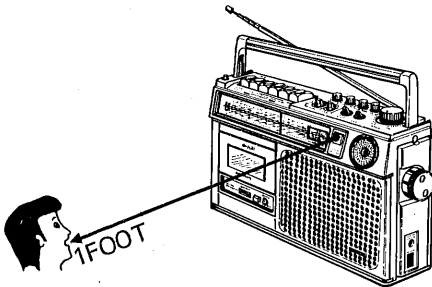


Fig. 10

6. This unit has an automatic level control (ALC) circuit and does not require any adjustment of volume and tone controls while recording.
7. Press down the STOP/EJECT button to stop recording at any position. When tape is wound completely, the RECORD and PLAY buttons will be released automatically.

## b) Recording from an External Microphone

1. Connect the two-pronged plug of an optional external microphone to the sockets marked "MIC" and "REMOTE" (Fig. 11).

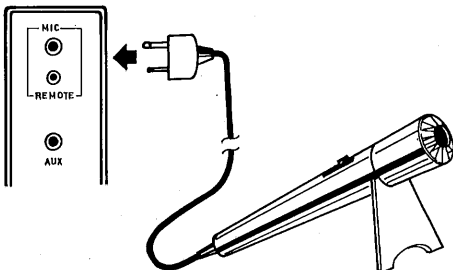


Fig. 11

2. Press the STOP/EJECT button and insert the cassette into its compartment, then close the cassette compartment lid.
3. Set the MEMORY switch in ON position and press the memory counter reset button.
4. Press the RECORD and PLAY buttons simultaneously

5. Speak in a normal voice at a distance of approximately 1 foot away from the microphone.
6. Since you can monitor through the speaker regardless of recording level, adjust the WOOFER, TWEETER, MAIN VOLUME and TONE control knobs as desired.

NOTE: The large (MIC) socket is the microphone circuit, which may also be used with a telephone pick-up or similar device. The small (REMOTE) socket is the remote control circuit and foot switch may be connected here. Either of these accessories are obtained from your dealer.

## c) Recording from Built-in Radio

1. Press the STOP/EJECT button and insert the cassette into its compartment, then close the cassette compartment lid.
2. Set the RADIO switch in ON position and tune in a desired radio programs as described in "Reception of the Radio Programs".
3. Press the RECORD and PLAY buttons simultaneously.
4. When recording an AM radio program on tape, an irritating beat sound may sometimes appear, caused by interaction between the radio frequency and the recording bias frequency. In such case, simply set the BEAT CANCEL switch to other position.
5. Since you can monitor through the speakers regardless of recording level, adjust the WOOFER, TWEETER, MAIN VOLUME and TONE controls to your desired listening level.
6. Press and re-press the PAUSE button to momentarily stop and start the tape movement.

## d) Recording from External Sound Source

1. Plug in an optional patch cord from loudspeaker socket or output of your player, tuner, amplifier or other signal source to AUX socket of the unit (Fig. 12).
2. Set the RADIO switch in OFF position.
3. Press the RECORD and PLAY buttons simultaneously.
4. Follow the steps 5 and 6 of "Recording from Built-in Radio".

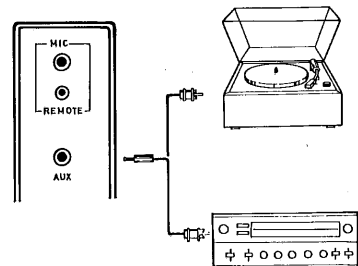


Fig. 12

### e) Recording of Telephone Conversation

1. Attach the suction cap of the telephone pick-up (SANYO Model TL-20 or TL-30 is available optional extra) to the telephone case and plug the cord into the MIC socket of the unit (Fig. 13).
2. Follow the steps of "Recording from an External Microphone".

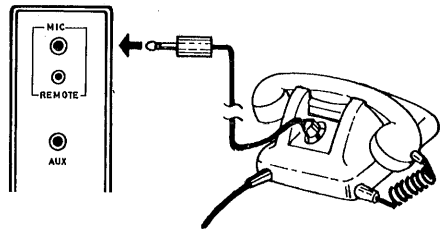


Fig. 13

## MIXED RECORDING

### a) Built-in Radio and External Microphone

1. Plug in an external microphone into the MIC socket.
2. Follow step of "Recording from Built-in Radio".

### b) External Microphone and External Sound Source

1. Connect an optional patch cord from loudspeaker socket or output of your player, tuner, amplifier or other signal source to AUX socket of the unit.
2. Follow steps of "Recording from an External Microphone".

## FAST FORWARD AND REWIND

For fast winding or rewind the tape, press the F FWD/CUE or REW/REVIEW button. Press the STOP/

EJECT button when desired location or the end of tape has been reached.

## PLAYBACK

1. Press the STOP/EJECT button and insert the recorded cassette into its compartment lid and close the cassette compartment lid.
2. Press the PLAY button.
3. Adjust the WOOFER, TWEETER, MAIN VOLUME and TONE control knobs to your desired listening level and tone quality.
4. To repeat something that has just been played, press the REW/REVIEW button. The tape will be rewound at high speed. The sound will be heard as an aid to locating the desired portion of the tape. Removing pressure on the button will allow the unit to return to the play mode.

5. To rapidly locate desired portion during playback, press the F FWD/CUE button. The tape will run forward at high speed. The recorded sound will be heard as an aid to locating the desired section of the tape. When pressure on the button is removed the unit will return to normal play operation.
6. To stop the tape at any position on the tape, press down the STOP/EJECT button. When tape wound completely, the PLAY button will be released automatically.

## MIXING (PLAYBACK)

### a) External Microphone and Tape Playback

1. Plug in an external microphone into MIC socket.
2. Press the STOP/EJECT button and insert the recorded cassette into its compartment and close the cassette compartment lid.
3. Press the PLAY button.
4. Adjust the external microphone sound with the MIKE VOLUME control and tape sound with the MAIN VOLUME control.

### b) External Microphone and Built-in Radio

1. Set the RADIO switch in ON position and tune in a desired station as previously described.
2. Plug in an external microphone into MIC socket.
3. Adjust the external microphone sound with the MIKE VOLUME control and radio sound with the MAIN VOLUME control.

### c) To Use as Loud Speaker

1. Set the RADIO switch in ON position.
2. Adjust the MAIN VOLUME control to MIN position.

3. Plug in an external microphone into the MIC socket.
4. Adjust the external microphone sound with the MIKE VOLUME control.

## MAINTENANCE

To ensure continued high performance from your unit, periodically clean the heads and pinch roller whenever dust or reddish-brown oxide has accumulated. Failure to clean these parts will result in inferior sound quality, distortion of recordings, deterioration of high frequency reproduction, and inconsistent tape speed (Fig. 14).

1. Press the STOP/EJECT button and open the cassette compartment lid.
2. Remove the head cover from the unit, and press the PLAY button.
3. Moisten a cotton applicator with cleaner or alcohol and apply to the face of both heads, rubbing gently until all traces of dirt or oxide are removed. Also clean the surface of the pinch roller and the capstan.
4. Dry, clean, and polish the face of the heads with a piece of cloth.

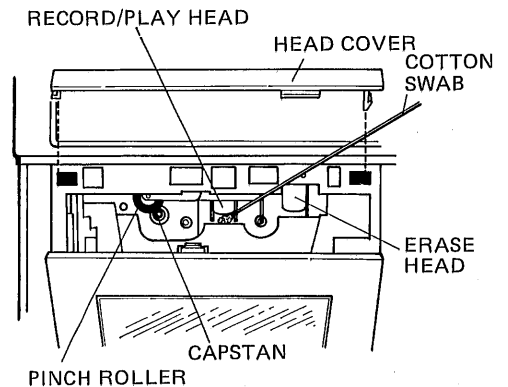


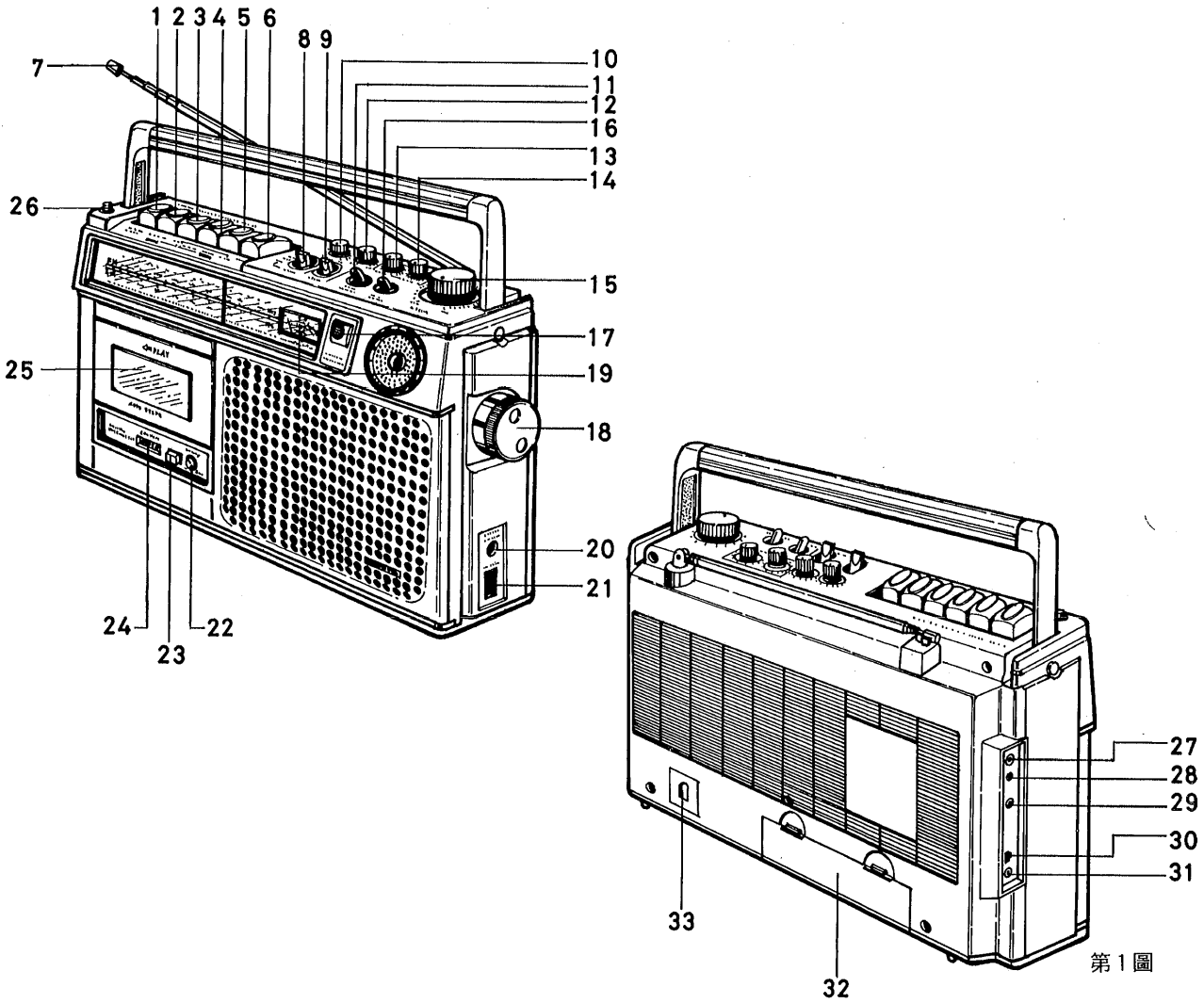
Fig. 14

## SPECIFICATIONS

Recording system	AC bias, Double track
Erasing	AC erase
Tape speed	1-7/8 ips. (4.75 cm/s)
Rewind & Fast forward time	1'30" (C-60)
Wow & Flutter	0.3% RMS
Power output	TWEETER: 650mW WOOFER: 3W
Frequency range	AM: 530 - 1,605kHz FM: 88 - 108MHz
Terminal impedance	EXT MIC: 15K ohms AUX: 68K ohms EARPHONE: 8 ohms
Power source	DC: 9V UM-1 (D-cell) x 6 AC: 120/200/240V, 50/60Hz
Dimensions	14-9/16"(W) x 4-1/4"(D) x 9-7/16"(H) (372 x 108 x 240mm)
Weight	Approx. 8 lbs. 7 oz. (3.9Kg) excluding batteries

\* Specifications subject to change without notice.

各種調整控制機件



1. 停止 / 拋出按鈕
2. 快繞 / 指令按鈕
3. 播放按鈕
4. 重繞 / 重查按鈕
5. 錄音按鈕
6. 暫停按鈕
7. 天線
8. 收音機開關
9. 波段選擇開關
10. 麥克風音量調整旋鈕
11. 自動頻率調整 (AFC) 開關
12. 音質調整旋鈕
13. 低音喇叭音量調整旋鈕
14. 高音喇叭音量調整旋鈕
15. 主音量調整旋鈕
16. 響度調整開關
17. 內裝麥克風

18. 調諧旋鈕
19. 電平 / 調諧 / 電池三用指示表
20. 外部直流插座
21. 交流輸入插座
22. 記憶開關
23. 記憶計數計復位按鈕
24. 記憶計數計
25. 卡式室蓋子
26. 度盤燈 / 電池檢查按鈕
27. 外接麥克風插座
28. 遙控插座
29. 補助輸入插座
30. 差拍聲消除開關
31. 耳機插座
32. 電池室蓋子
33. 電壓選擇器



## MANTENIMIENTO

Para asegurar un rendimiento duradero y perfecto en su unidad, hay que limpiar periódicamente los cabezales y los rodillos siempre que se acumule polvo en ellos o aparezca manchas rojizas de óxido. Si se descuida el limpiar estas partes, será inferior la calidad del sonido, se deformarán las grabaciones, se deteriorará la reproducción de alta frecuencia y la velocidad de la cinta no será uniforme. (Fig. 14).

1. Apriétese el botón STOP/EJECT y ábrase la tapa del compartimiento del cassette.
2. Extrágase la cubierta superior de la unidad y apriétese el botón PLAY.
3. Humedézcase un aplicador de algodón con un líquido de limpiaro con alcohol y aplíquese a la cara de ambos cabezales, frotando con suavidad hasta que desaparezcan todas las huellas de polvo o de óxido.  
Límpiese también las superficies del rodillo y del cabrestante.
4. Séquese, límpiese y púlase la cara de los cabezales con una trozo de tela.

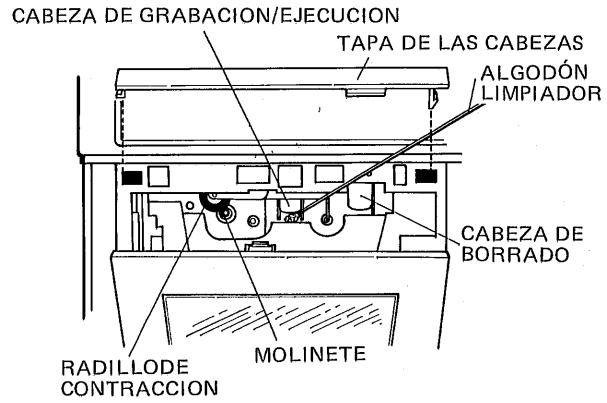


Fig. 14

## ESPECIFICACIONES

Sistema de grabación	Polarización CA, pista doble.
Borrado	Borrar con CA
Velocidad de la cinta	1-7/8 ips. (4.75cm/s)
Tiempo de rebobinado y de avence rápido	1'30" (C-60)
Fluctuación y trémolo	0.3% RMS
Salida de potencia	TWEETER (agudos): 650mW WOOFER (bajos): 3W
Alcance de frecuencia	AM: 530 - 1.605kHz FM: 88 - 108MHz
Impedancia del terminal	EXT MIC: 15K ohmios AUX: 68K ohmios EARPHONE: 8 ohmios
Fuente de energía	CC: 9V UM-1 (pila-D) x 6 CA: 120/200/240V, 50/60Hz
Dimensiones	Anchura 14-9/16" x Profundidad 4-1/4" x Altura 9-7/16" (372 x 108 x 240mm)
Peso	Aproximadamente 8 libras, 7 onzas (3.9 kilos) excluyendo las pilas.

\* Estas especificaciones están sujetas a cambio sin previo aviso.

**SANYO ELECTRIC CO.,LTD.**  
**OSAKA, JAPAN**

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