



SANYO

TP X2

4/3/1982



SANYO FULL AUTOMATIC BELT DRIVE TURNTABLE WITH STROBE

OPERATING INSTRUCTIONS

LIMITED WARRANTY TO ORIGINAL PURCHASER

TURNTABLES

This Sanyo Product is warranted against manufacturing defects in materials and workmanship for the period specified:

PARTS
2 YEARS

LABOR
2 YEARS

Sanyo will repair or replace (at our option) at no charge, any part(s) found to be defective during the warranty period.

This warranty period starts on the date of purchase by the original consumer.

The warranty repairs must be performed at a Sanyo Authorized Service Station. A list of the Sanyo Authorized Service Centers can be obtained from the dealer, or from

Sanyo Electric, Inc.

1200 W. Artesia Blvd., P.O. Box 5177, Compton, CA 90220

(213) 537 - 5830

OBLIGATION OF THE ORIGINAL OWNER

1. The dealer's original dated bill of sale must be retained as a proof of purchase and must be presented to the Sanyo Authorized Service Station.
2. Transportation to and from the service center is the responsibility of the customer.

EXCLUSIONS OF THE WARRANTY

The warranty does not cover accident, misuse, fire, flood and other Acts of God, incorrect line voltage, damage caused by improper installation, labor cost of removing or reinstalling of the product for repairs, improper or unauthorized repair, cartridge and stylus, antenna, broken or marred cabinet, when applicable; 50/60 cycle/60/50 cycles conversions, missing or altered serial numbers and customer adjustments that are not covered in the instruction book. This warranty is valid only on products purchased and used in the United States of America.

EFFECTIVE JULY 4, 1975

MARCH 1976

ATTENTION

For your protection in the event of theft or loss of this product, please fill in the information below for your own personal records.

Model No. _____ Serial No. _____
(Located on back or bottom side of unit)

Date of Purchase _____ Purchase Price _____

Where Purchased _____

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

INTRODUCTION

The SANYO TP X2 Full Automatic Turntable is especially designed to provide accurate speed and minimize wow and flutter for musical entertainment and ease of operation. For full enjoyment and the versatility of this turntable, please read the following operating instructions to familiarize with it.

* This model comes in two different versions.

TP X2

Cartridge is not included in the unit.

TP X2CN for System 2003

Dust cover is not included in the unit. "CN" mark is indicated at upper right of all sides on the individual carton for identification.

CAUTIONS FOR SAFE OPERATION

Location:

Place your TP X2 turntable in a proper location.

- * Avoid direct exposure to sunlight or heat from any appliance.
- * Humidity and dust can cause problems.

Power Supply:

- * Plug the power cord of your TP X2 turntable into an 120V AC, 60 Hz wall outlet or a switchable AC outlet of your stereo system.

- * Do not handle the power cord with wet hands.
- * Do not pull on the power cord when unplugging it. Hold it by the plug.

If trouble occurs

To avoid electric shock hazard or any accidents to your self or the unit, have the unit bench tested by a SANYO dealer. Do not remove the unit from its cabinet or attempt a repair yourself.

CONTROLS (Fig. 1)

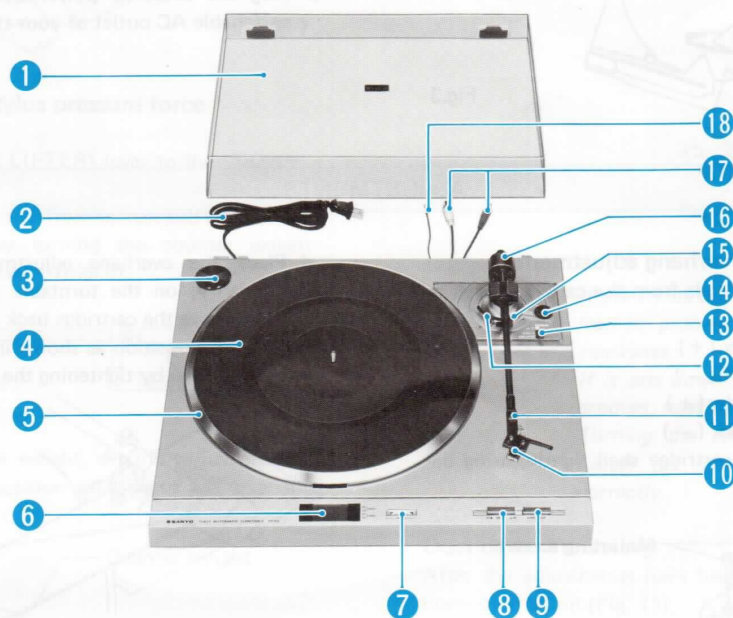


Fig. 1

1. Dust cover
2. AC power cord
3. 45 rpm adaptor
4. Rubber mat
5. Turntable platter
6. Stroboscope
7. Pitch (PITCH) control
8. Speed/Disc size select (SPEED) button
9. Start/Stop (START/STOP) button

10. Cartridge and shell
11. Cartridge shell set screw
12. Tone arm lifter
13. Tone arm lift (ARM LIFTER) lever
14. Anti-skating (ANTI SKATING) control
15. Tone arm rest
16. Counter weight
17. Output cords
18. Ground lead

PREPARATIONS

- a. Carefully unpack the unit and other parts. Remove the dust cover and all packing material from around the turntable. Be sure to remove three shipping screws as shown in Fig. 2.
NOTE: Whenever you re-ship, fasten the screws for protecting the floating mechanism section.

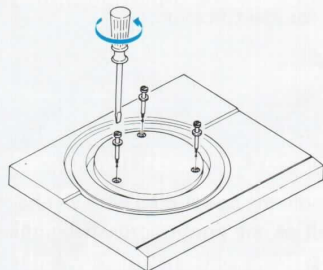


Fig. 2

- b. Locate the unit horizontally on a heavy duty stand and away from the speaker system to avoid acoustical feedback.
 c. Before sliding the turntable platter over the turntable shaft, be sure the turntable shaft gear moves freely as shown in Fig. 3.

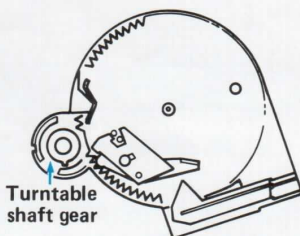


Fig. 3

If not, turn the turntable shaft gear clockwise by your hand to correct. Carefully slide the turntable platter over the turntable shaft. Attach the drive belt as shown in Fig. 4.

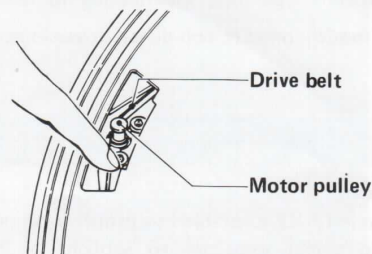


Fig. 4

- Then place the rubber mat on the turntable platter.
 d. Temporarily attach the counter weight to the rear of the tone arm by turning it clockwise.
 e. Place the 45 rpm adaptor in its appropriate rest position.
 f. Connect the output cords (RAC type) to the phono input jacks of your stereo system. The red lead is for the right channel and the white lead is for the left channel. Connect the ground lead to the ground terminal of your receiver or amplifier.
 g. Plug the attached power cord into an AC outlet or a switchable AC outlet of your stereo system.

ADJUSTMENTS

Cartridge Mounting and Overhang adjustment:

- a. Connect the four colored leads from the cartridge shell to the cartridge terminals.
 White lead Left (+)
 Blue lead Left (-)
 Red lead Right (+)
 Green lead Right (-)
 b. Attach a cartridge to the cartridge shell lightly, using the screws and nuts (Fig. 5).

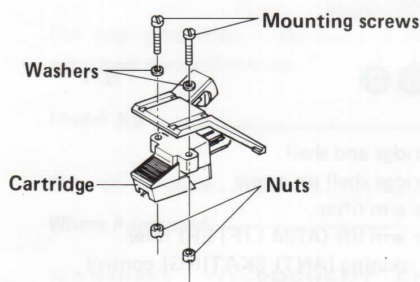


Fig. 5

- c. Attach the cartridge shell to the tone arm and tighten the cartridge shell with the cartridge shell set screw by turning it clockwise.

- d. Place the overhang adjustment gauge (included as an accessory) on the turntable platter as shown in Fig. 6a. Then move the cartridge back or forth to obtain the correct stylus tip position as shown in Fig. 6b. Fix the cartridge in this location by tightening the screws.

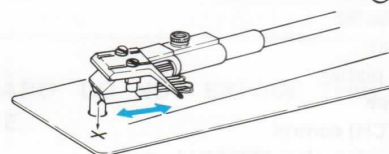
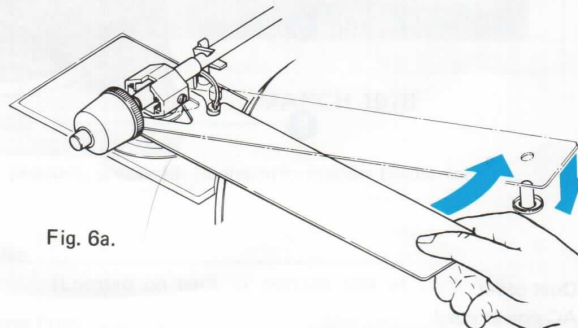


Fig. 6b.

- NOTES:**
- * Choose a cartridge which weighs between 4 and 10 grams. Before mounting your cartridge, carefully read the instruction manual provided by the cartridge manufacturer.
 - * An extremely big cartridge may not be mounted on the cartridge shell of this unit. Consult your dealer regarding the best type of cartridge to be used.

Tone arm lifter height adjustment:

- Shift the tone arm lift (ARM LIFTER) lever to the "UP" position and place a record on the turntable platter.
- Move the tone arm over the record and check the height of the stylus.
- If the stylus touches the record, the tone arm lifter is too low. Adjust the tone arm lifter height by turning the adjusting screw clockwise until a small space between the stylus and record is obtained.

NOTE: Remove the sticker covering the adjusting screw hole before making this adjustment. Replace it after adjusting.

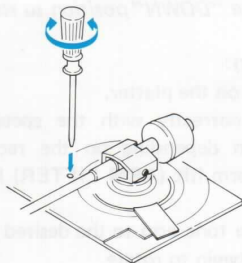


Fig. 7

Horizontal balance and stylus pressure force adjustment:

- Shift the arm lifter (ARM LIFTER) lever to the "DOWN" position.
- Carefully release the tone arm from its rest and balance the tone arm horizontally by turning the counter weight clockwise or counter-clockwise (Fig. 8).

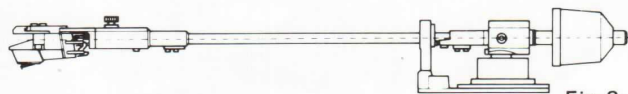


Fig. 8

- While holding the counter weight, set the stylus pressure force ring to the zero position relative to the base line (Fig. 9).

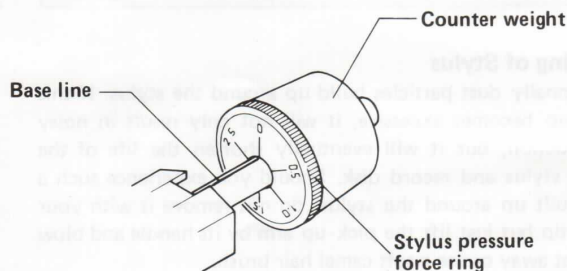


Fig. 9

- Now, turn the counter weight to set the proper stylus pressure force recommended for your cartridge, as indicated by the figures marked on the stylus pressure force ring.

Anti-skating force adjustment:

Set the anti-skating (ANTI-SKATING) control to a position which corresponds to the adjusted stylus pressure force. For example, if the cartridge pressure force is set at 2 grams, the anti-skating control should also be set to 2 grams. The anti-skating force may differ slightly depending on the type of stylus being used but there will be no difference in performance.

Tone arm set-down adjustment:

When the start/stop (START/STOP) button is pressed to start for the automatic operation, the stylus descends automatically and sets down on the lead-in groove of the record. Though this adjustment has been made properly by the factory, the stylus may set down too far inside or outside of the lead-in groove. Therefore when mounting an alternative cartridge, if this occurs, you can correct as follows:

NOTE: Remove the rubber cap covering the adjustment hole before making the adjustment. Replace it after adjusting.

- Be sure the overhang and anti-skating force adjustments have been made correctly.
- Place a 12" (30 cm) record on the turntable.
- Set the speed/disc size select (SPEED) button to the "33" position.
- In the automatic operation, turn the adjusting screw clockwise or counter-clockwise as shown in Fig. 10 so that the stylus tip will correctly set down on the lead-in groove of the record.

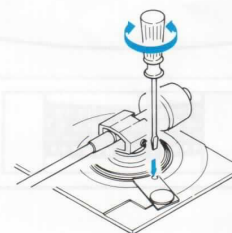


Fig. 10

NOTES:

- * If the stylus tip sets down too far inside of the lead-in grooves, turn the adjustment screw clockwise.

- * If it sets down too far outside of the lead-in grooves, turn it accordingly counter-clockwise. Turning the adjustment screw too far will cause the arm return not to function correctly.

Dust cover mounting:

After the adjustments have been completed, install the dust cover on the unit (Fig. 11).

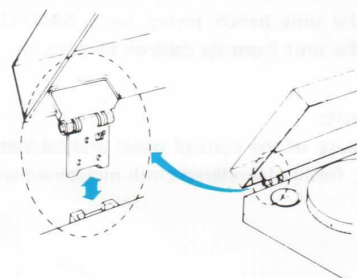


Fig. 11

OPERATION

- NOTES:**
- * Be sure that the tone arm is detached from the tone arm rest chip before operation and when operation has finished, secure the tone arm.
 - * The speed/disc size select (SPEED) button should be set to the correct position. If the button is incorrectly set, the stylus may be damaged. 12" (30 cm)/33 rpm and 7" (17 cm)/45 rpm records can be played with "Automatic operation". Other type of records such as 7"/33 rpm or 10" (25 cm) records should be played with "Manual operation".
 - * Do not turn the turntable platter counter-clockwise.
 - * When operating the turntable for the first time, the tone arm might not return to its rest position. Should this occur, press the start/stop (START/STOP) button and the tone arm will complete the next full cycle.

Automatic operation:

- a. Place the record on the platter (if required, use the 45 rpm adaptor).
- b. Set the speed/disc size select (SPEED) button to the correct position depending on the record to be used (12"/33 rpm or 7"/45 rpm).
- c. Shift the tone arm lift lever (ARM LIFTER) to the "DOWN" position.
- d. Press the start/stop (START/STOP) button. Then, the stroboscope lamp will light up. The platter will begin to rotate. The tone arm will automatically rise, move across, and descend gently onto the record.
- e. Adjust the speed accurately using the pitch (PITCH) control and stroboscope. Turn the pitch control from side to side until the stroboscope pattern seems to stop (Fig. 12).

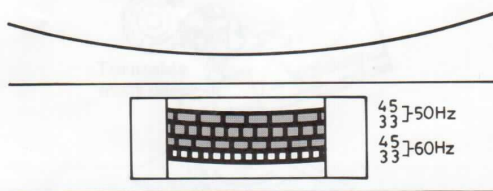


Fig. 12

- f. When the stylus has reached the end of the record, the tone arm will return to its rest position and the power will be shut off automatically. You can stop the play at any time by pressing the start/stop button. The tone arm will immediately return to its rest position.

NOTE: If you want to momentarily stop the play, shift the tone arm lift lever to the "UP" position. Shift it to the "DOWN" position to start the play again.

Manual operation:

- a. Place the record on the platter.
- b. Set the speed correctly with the speed/disc size select (SPEED) button depending on the record to be used.
- c. Shift the tone arm lift (ARM LIFTER) lever to the "UP" position.
- d. Slowly move the tone arm to the desired position by hand. The platter will begin to rotate.
- e. Shift the tone arm lift lever to the "DOWN" position. Then the tone arm will descend gently onto the record.
- f. When the stylus has reached the end of the record, the tone arm will return to its rest position and the power will be shut off automatically.

NOTE: If you want to momentarily stop the play, shift the tone arm lift lever to the "UP" position. Shift it to the "DOWN" position to start the play again.

MAINTENANCE

If trouble occurs

To avoid electric shock hazard or any accidents to yourself or the unit, have the unit bench tested by a SANYO dealer. Do not remove the unit from its cabinet to attempt a repair yourself.

Cleaning the unit:

To retain the beauty of the control panel and cabinet, simply wipe with a soft, freshly laundered cloth moistened with plain lukewarm water.

Cleaning of Stylus

Occasionally dust particles build up around the stylus. If this build up becomes excessive, it will not only result in noisy reproduction, but it will eventually shorten the life of the record stylus and record disk. Should you experience such a dust built up around the stylus, do not remove it with your finger tip but just lift the pick-up arm by its handle and blow the dust away or use a soft camel hair brush.

Usable cartridge weight . 4 – 10 g.
Stylus pressure
force range 0 – 3 g.
Power source 120V AC, 60Hz
Power consumption . . . 4 W
Dimensions (Approx.) . 17-3/8" x 14-5/8" x 4-3/8"
440(W) x 370(D) x 111(H) mm
Weight (Approx.) 10 lbs. 13 ozs. (4.9 kg.)
(including dust cover)

* Specifications subject to change without notice.