

 **SANYO**

TP 1020



SANYO DIRECT DRIVE STEREO TURNTABLE

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 requested below:

Model No. _____ Serial No. _____ (Located on back or bottom side of unit)
Date of Purchase _____ Purchased Price _____
Where Purchased _____

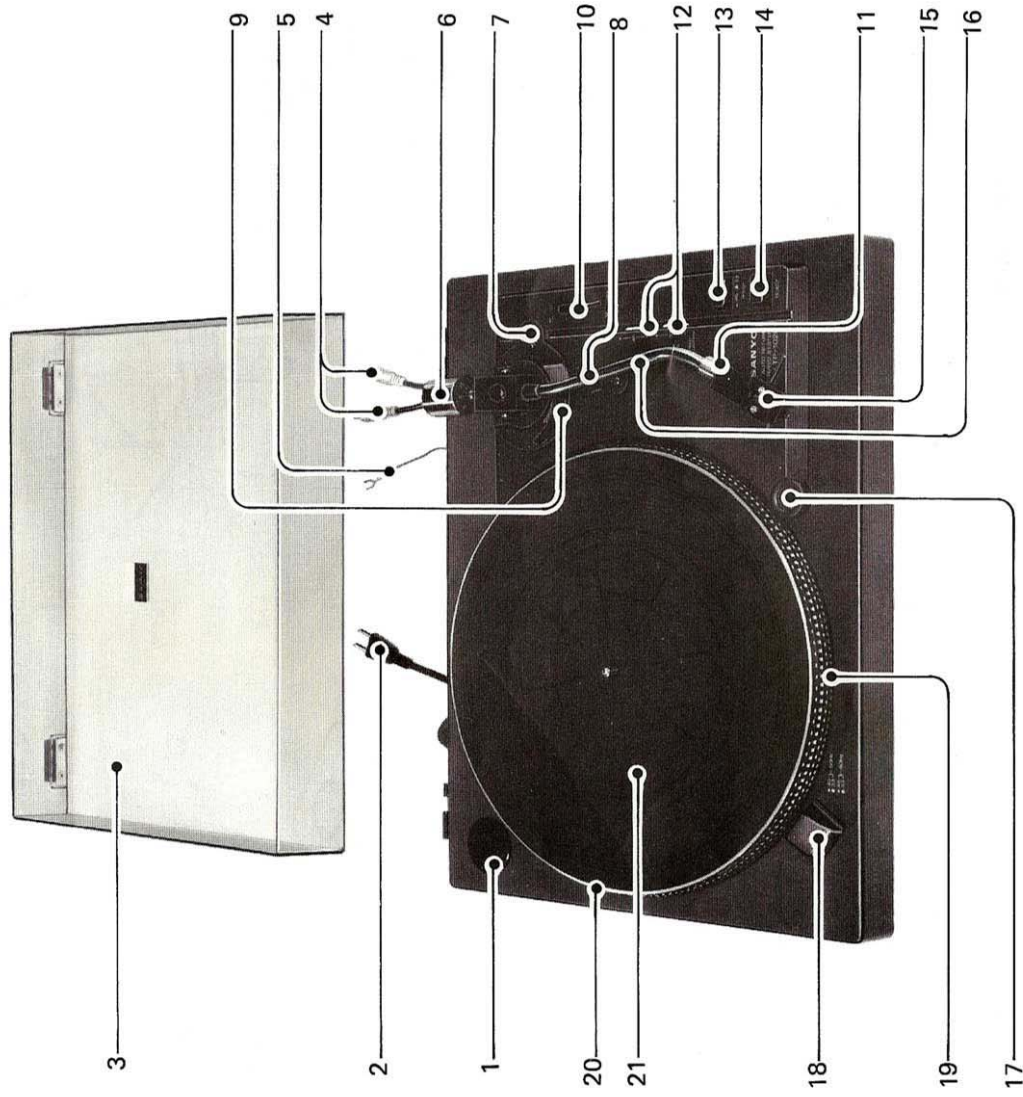
WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

DESCRIPTION

The SANYO TP 1020 Semi Automatic with Auto Arm Return Direct Drive Stereo Turntable is especially designed to provide accurate speed and minimize wow and flutter for musical

entertainment with ease of operation. For full enjoyment and the versatility of this turntable, please read the following operating instructions to familiarize yourself with it.

CONTROLS (Fig. 1)



1. 45 rpm adaptor
2. AC power cord
3. Dust Cover
4. Output plugs
5. Ground lead wire
6. Counter weight
7. Anti-skating control knob
8. Tone arm rest
9. Tone arm lifter
10. Cueing lever
11. Cartridge shell nut

12. Fine speed control knobs
13. Speed select button
14. Reject button
15. Cartridge shell
16. Tone arm
17. Mirror
18. Strobe lamp
19. Strobe
20. Turntable platter
21. Rubber mat

Fig. 1

PREPARATIONS

1. Carefully unpack the unit and put aside the turntable platter, rubber mat, counter weight, cartridge shell and 45 rpm adaptor. It is advisable to save carton, fillers and mounting hardware in case it is necessary to reship it.
2. Since tone arm adjustments are necessary, pull up the dust cover and remove it from the unit temporarily. After adjustments have been completed, reinstall the dust cover on the unit (Fig. 2).
3. Determine the most suitable turntable location for safety and convenience of operation. Place the turntable horizontally on a heavy duty stand with in a well ventilated environment and as far away as possible from the front of

the speaker system to avoid acoustical feedback. Refer to the section "Placement of the turntable" under MAINTENANCE. Again the proper placing of the turntable is absolutely important.

4. Carefully slide the turntable platter over the turntable shaft and place the rubber mat on the turntable platter. Attach the counter weight to the rear of tone arm by turning it clockwise (Fig. 3). Place the 45 rpm adaptor in its appropriate rest position.
5. Since a cartridge is not supplied with this unit, the tone arm adjustments will require a cartridge weight within a range of 1 to 10 gr.

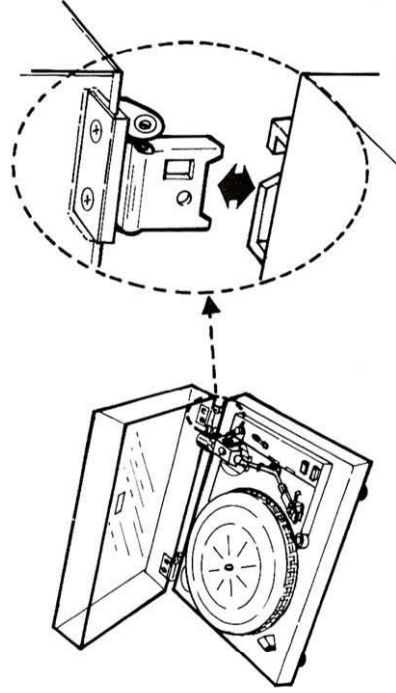


Fig. 2

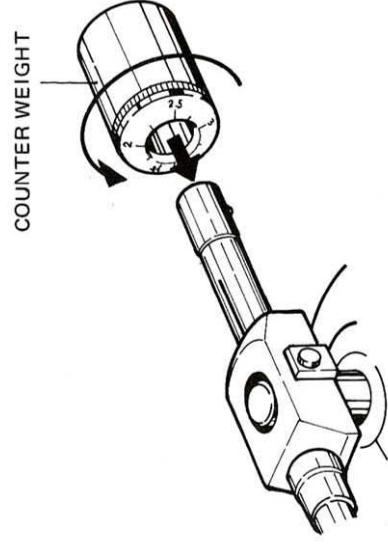


Fig. 3

ADJUSTMENTS

Cartridge Mounting and Overhang Adjustment

NOTE: *(Cartridge is not supplied)*

1. Before mounting your cartridge, carefully read the instruction manual provided by your cartridge manufacturer.
2. Connect the four colored wires from cartridge shell to the cartridge terminals.

White wire = Left (+)

Blue wire = Left (-)

Red wire = Right (+)

Green wire = Right (-)

3. Carefully mount the cartridge to the cartridge shell as shown with the mounting screws and nuts (Fig. 4). For overhang adjustment, do not tighten the mounting screws as yet.

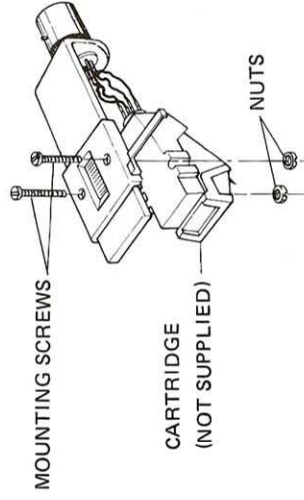


Fig. 4

4. Attach the cartridge shell to the tone arm and tighten the cartridge shell with the cartridge shell nut by turning it clockwise (Fig. 5).

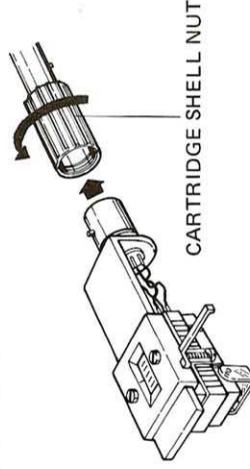


Fig. 5

5. Move the tone arm over the turntable shaft and move the cartridge back or forth to obtain a space of 19/32" (15 mm) between turntable shaft and stylus tip (Fig. 6). Fix the cartridge in this location by tightening the screws.

NOTE: *Be sure the cueing lever is set in the UP position.*

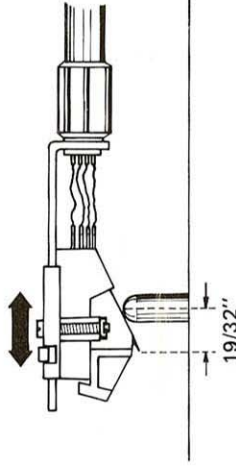


Fig. 6

6. Set the cueing lever in the UP position and place a record on the turntable platter temporarily. Move the tone arm over the record and check the height of stylus. If the stylus touches with record, tone arm lifter is too low. Adjust the tone arm lifter height by turning its screw counter-clockwise until a little space between the stylus and record will be obtained for smooth auto return function (Fig. 7).

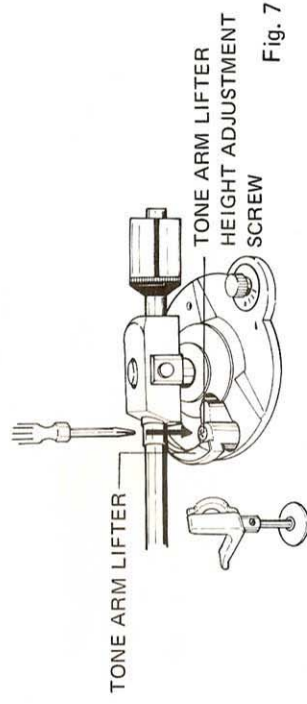


Fig. 7

Horizontal Balance Adjustment

NOTE: *The tone arm should be rebalanced whenever cartridge and/or cartridge shell is exchanged.*

1. Move the cueing lever to the DOWN position.
2. 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).

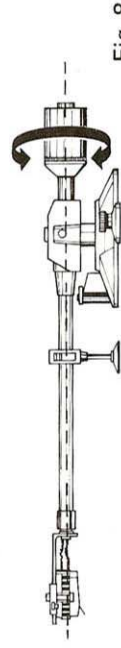


Fig. 8

Stylus Pressure Force Adjustment

Stylus pressure force adjustment is one of the most important factors for proper operation of the turntable. Either too low or too high stylus pressure force will cause trouble such as sound distortion, damage to record, stylus and etc. Before adjusting, carefully read the instruction manual given with your cartridge.

1. While holding the counter weight, set the stylus pressure force ring to the zero position relative to the base line (Fig. 9).
2. Turn the counter weight to set the proper stylus pressure force recommended for your cartridge.

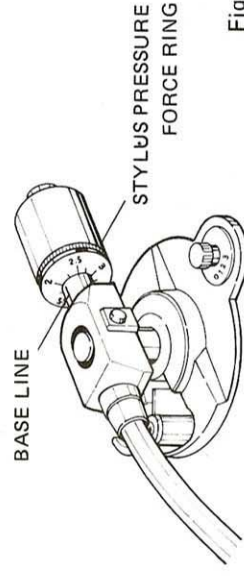
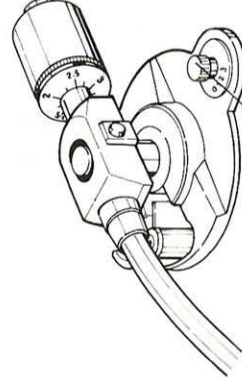


Fig. 9

Anti-skating Force Adjustment

Set the anti-skate control (Fig. 10) to a position which corresponds to the adjusted stylus pressure force. For example, if the cartridge pressure force is set at 2 gr. the anti-skating control should also be set to 2 gr. Anti-skating force may be a little different depending on the type of stylus being used but there will be no difference on the records performance.



ANTI-SKATING CONTROL KNOB

Fig. 10

CONNECTIONS (Fig. 11)

1. Connect the output lead wires equipped with the turntable to PHONO input jacks of your stereo system. The lead wire with red plug should be connected to the right channel jack and the lead wire with white plug to the left channel jack.
NOTE: Proper stereo operation will not be obtained if the connections are wrong.
2. Connect the ground lead wire to the ground terminal of your stereo system. This is for effective hum-free record playback.

3. Plug the AC power cord to a 120V 60Hz AC outlet. If your stereo system has a switchable AC outlet, plug the AC power cord into it.

NOTE: The AC power will always be on to the turntable, if the AC power cord is plugged into an unswitched AC outlet.

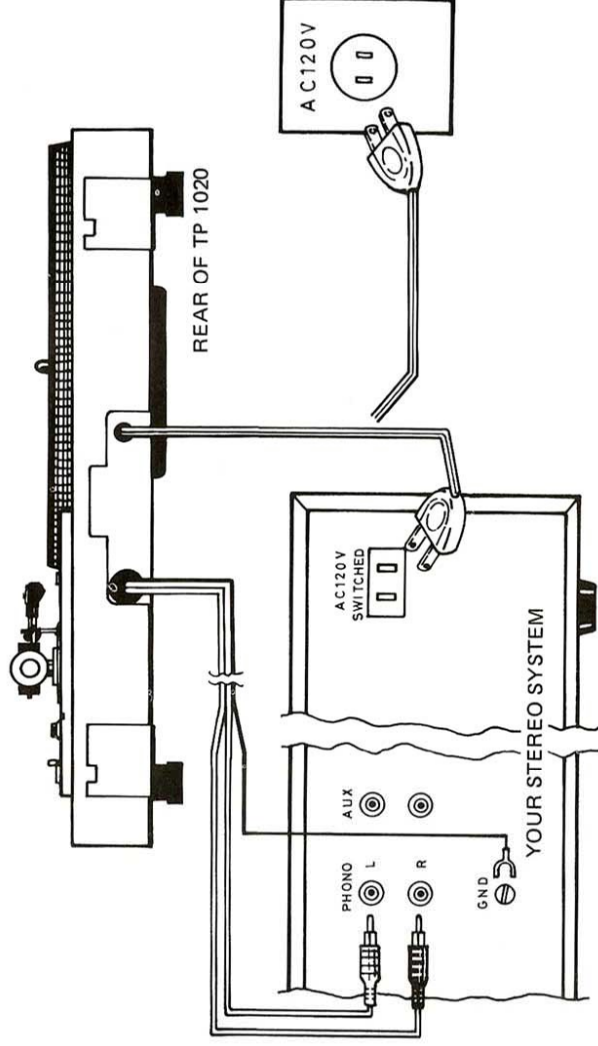


Fig. 11

OPERATIONS

1. Place the record on the turntable. (If needed, use 45 rpm adaptor)
2. Be sure that the cueing lever is in the UP position.
3. Select the speed with the speed select button depending on the record to be used (33 or 45 rpm).
4. Slowly move the tone arm to a position just above the starting point of the record groove. The turntable will start rotating.
5. Adjust the speed accurately using fine speed control and stroboscope. Move the fine speed control knob to back or forth until stroboscope seems to stop. If the speed select button is set to 33 position, use the 33 fine speed control and 45 position for 45 fine speed control (Fig. 12).
6. Move the cueing lever to the DOWN position. Because of the viscous damping, the arm will gently lower on to the

record and if everything is set up correctly, balanced sound will be heard from your audio system.

7. When playback is finished, the tone arm will return to the tone arm rest and the power will shut off automatically. If you want to stop the records playback at any time, press the REJECT button.

NOTE: Do not rotate the turntable platter counter-clockwise manually or damage may be occurred.

When operating the turntable for the first time, the tone arm might not return to its rest position. This is not the indication of a malfunction, but is caused by an incomplete cycle of the auto-return mechanism. Should this occur depress the REJECT button and tone arm will complete fully the next cycle.

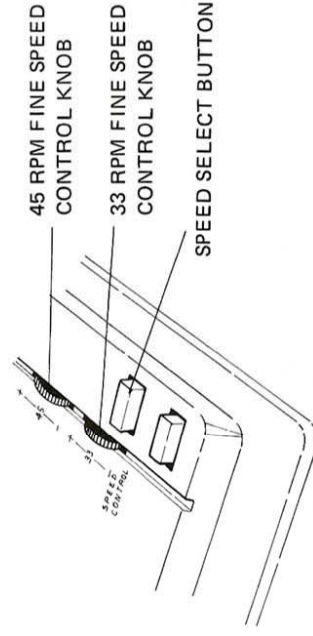
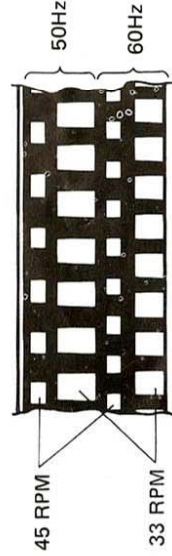


Fig. 12

MAINTENANCE

Please remember that your turntable is a sensitive electro-mechanical device which needs occasional maintenance.

* Cleaning of stylus

You will occasionally build up dust particles around the stylus (as reflected in the mirror). 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 dust built up around the stylus, do not remove it with your finger tip but just lift the tone arm by its handle and blow the dust away or use a soft camel hair brush.

* Cleaning the Unit

To keep the dust cover and main unit cabinet clean, wipe off dust and stains only with a soft cloth moistened with lukewarm water. **DO NOT USE** any plastic cleaners containing benzol or petroleum products or permanent discoloration damage may occur to the above described components.

* Placement of the turntable

Never place the turntable in the vicinity of extreme hot areas such as radiator or direct sunlight. It should not be placed in a moist environment, following this advice will result in saving the turntable from damage. Placing the turntable in a well ventilated area is strongly recommended and as far away as possible from speakers.

SPECIFICATIONS

Motor	DC brushless servo motor	Tone arm	Static-balance type
Drive system	Direct drive	Tracking error	$\pm 1.5^\circ$
Speeds	33-1/3 and 45 rpm	Stylus pressure force range	0 – 3 gr.
Speed control range	Individual controls: $\pm 4\%$	Overhang	15 mm
Speed change	Electronic type	Power source	AC: 120V 60Hz
Wow & flutter	Less than 0.04% WRMS	Power consumption	12 watts
Signal to noise ratio	Better than 60dB	Dimensions (Approx.)	17-3/4" W x 14-5/8" D x 5-1/8" H (440 W x 360 D x 130 H mm)
Rumble	60dB B Din spec	Weight	Approx. 15 lbs. 11 ozs. (7 kg)
Turntable plattter	12-1/16" (305 mm) dia. 2 lbs. 3 ozs (1.0kg)		

*Specifications and design are subject to change without notice.

* **AC power cord**
If the turntable is not use for long period, unplug the AC power cord from the AC outlet.

* Lubrication

Lubrication should be applied after using the turntable more than 1000 hours or once a year. Remove the rubber mat and turntable platter and carefully put a few drops of "3 and 1" brand oil into the lubrication hole as shown in Fig. 13. Do not lubricate any other places or parts. Or trouble may occur.

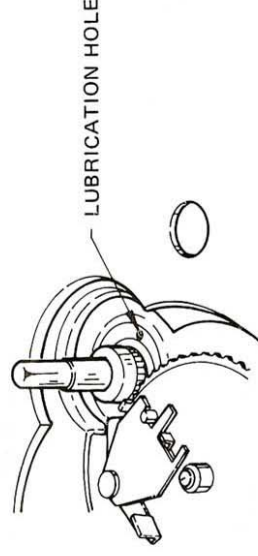


Fig. 13

* If trouble occurs . . .

To avoid any shock hazards or accidents to yourself or the turntable, have the turntable bench tested at a SANYO service station. Do not attempt by yourself to remove the units, cabinet for repairing.



SANYO ELECTRIC INC.

1200 W. ARTESIA BLVD.

P. O. BOX 5177

COMPTON, CA 90220

Printed in Japan

141-6-411T94600A