

# YAMAHA YP211

Belt Drive turntable with Cueing lever S-type tonearm



- \* Powerful multipole synchronous motor
- \* Belt drive for low wow and flutter (0.08% wrms)
- \* Auto-return and auto-cut features designed for optimum operating convenience
- \* Sensitive S-type static balance tone arm
- \* Cueing lever and inside force canceler
- \* Slim, attractive styling.
- \* Free-setting hinged dust cover
- \* Gold-plated headshell contacts
- \* Ideal for most high performance cartridges

*Owner's Manual*

# YP-211

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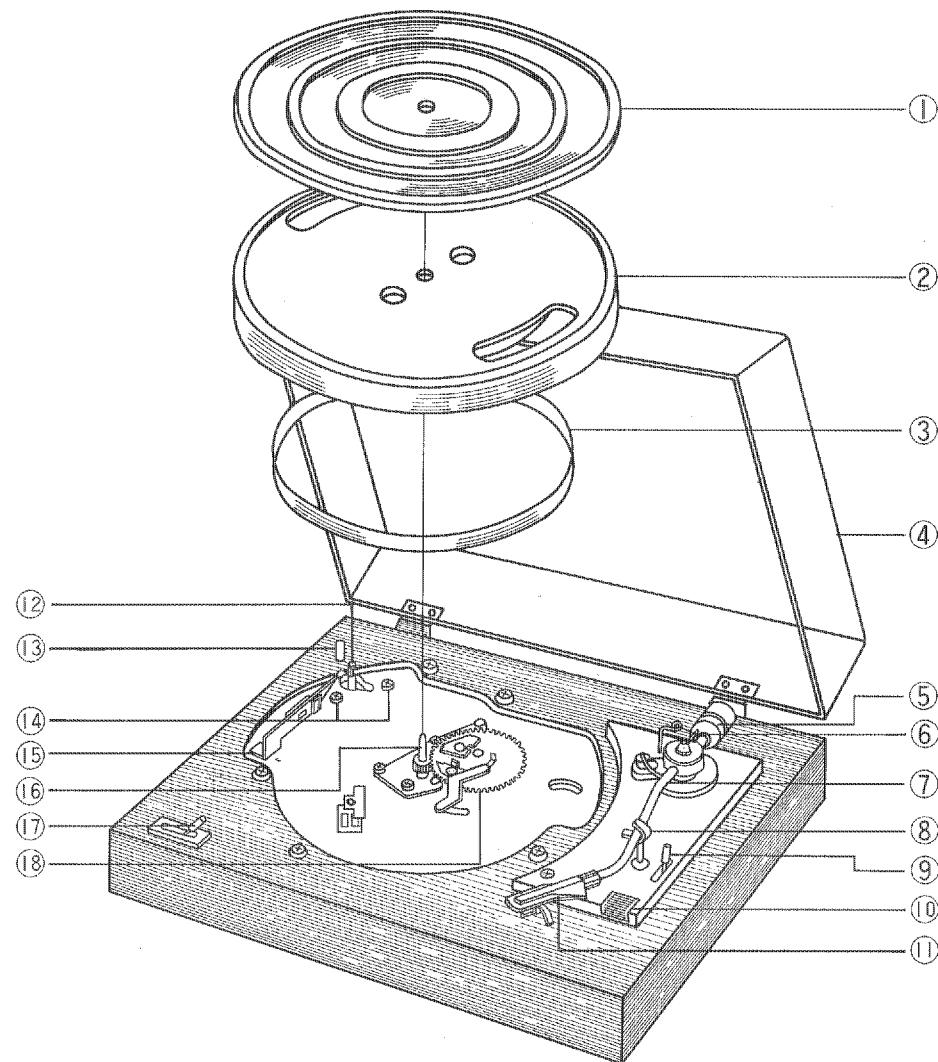
# YP-211

## CAUTIONS - READ THIS BEFORE OPERATING YOUR YP-211

- 1 The YP-211 is a sensitive piece of precision audio equipment. This manual is required reading if you are to get the best from it.
- 2 Be very careful not to drop or jar the YP-211, particularly after it has been fully assembled and all adjustments made. If it is accidentally bumped, check carefully that nothing has gone out of adjustment, or readjust accordingly.
- 3 Locate the YP-211 in a flat and level place, out of the direct rays of the sun, avoiding locations subject to vibration and excessive dust, heat, cold or moisture. Also avoid placing it directly in front or too close to your speakers.
- 4 If the YP-211 ever has to be relocated, carry it with extreme care. Better still, retain the original packing, and carefully re-pack it for transit.
- 5 Do not attempt to clean any dirt with chemical solvents (such as alcohol or benzene). Wipe only with a clean, dry cloth.
- 6 Do not assume your YP-211 is faulty before reading the section on 'Trouble Shooting,' which details common operating errors.
- 7 Keep this manual in a safe place for future reference, and refer to it frequently until you are fully familiar with your YP-211.
- 8 If your YP-211 has a voltage selector switch (these are not provided on models for continental N. America), make sure that it is set for your local mains voltage before plugging in the AC main supply. Voltages are 110-130/220-240 V AC, 50/60 Hz. It may also be necessary to change the drive pulley to match your local AC main supply frequency, see page 12.
- 9 Whichever high performance cartridge you buy for use with the YP-211, be sure to keep the stylus tip free from accumulated dirt: this is the major single source of poor sound quality from records.

# YP-211

## THE NAMES AND FUNCTIONS OF THE PARTS



- ① Rubber Turntable 'Platter' Mat
- ② Turntable
- ③ Drive Belt
- ④ Detachable Dust Cover
- ⑤ Balance Counterweight
- ⑥ Inside Force Canceler
- ⑦ Tone Arm
- ⑧ Arm Rest
- ⑨ Cueing Lever
- ⑩ PLAY and REJECT Switch
- ⑪ Headshell
- ⑫ Motor Pulley
- ⑬ EP Adaptor Holder
- ⑭ Transit Screws
- ⑮ Belt Changeover Guide
- ⑯ Center Shaft
- ⑰ Speed Selector Switch
- ⑱ Auto Return Mechanism

### ① Rubber Turntable 'Platter' Mat

Specially designed to give the ideal support for records, lowering their resonant frequency and so improving overall bass response.

### ② Turntable

Die-cast aluminum, this has been specially dynamically balanced for optimum flywheel smoothing effect, giving steady, even rotation.

### ③ Drive Belt

Made to extremely close tolerances, the belt is designed to retain its precise shape throughout long periods of use, absorbing motor vibration for extra low wow and flutter.

### ④ Detachable Dust Cover

The beautiful transparent acrylic dust cover is fully detachable by free-setting hinges for maximum accessibility.

### ⑤ Balance Counterweight

This counterweight rotates to give the precise balance required for accurate stylus tracking force settings.

### ⑥ Inside Force Canceler

This anti-skating device ensures middle-of-the-groove tracking, even at low tracking forces, for the best possible stereo reproduction and the longest life for record and cartridge stylus.

### ⑦ Tone Arm

The advanced S-type static balance arm used in the YP-211 is highly sensitive, and accepts all types of cartridge.

### ⑧ Arm Rest

This provides a positive rest for the tone arm after auto-return at the end of a record, and between records.

### ⑨ Cueing Lever

With this lever you can gently lift the cartridge from the record — and lower it back down just as gently — without any fear of jarring the delicate stylus or damaging precious records.

### ⑩ PLAY and REJECT Switch

With the cartridge poised above the lead-in groove, a touch to this switch will start record audition. Another touch at any point during the playing of a record, and audition will be automatically terminated and the tone-arm returned to its rest.

### ⑪ Headshell

With gold-plated contacts for ultra-low contact resistance (enemy of top quality phono reproduction), this superior headshell accepts virtually all cartridge types.

### ⑫ Motor Pulley

A different size pulley is used for 50 and for 60 Hz

main supplies. Use the type intended for your local supply.

### ⑬ EP Adapter Holder

Keep your extended-play record center here when it is not in use.

### ⑭ Transit Screws

These prevent rattle and damage during transit, but must be removed before the YP-211 is used. Keep them for use if you ever need to relocate it.

### ⑮ Belt Changeover Guide

This guide flips the belt into contact with the appropriate part of the motor pulley for 33 or 45 rpm rotation under the control of the speed switch lever.

### ⑯ Center Shaft

This is the central bearing on which the turntable itself is supported and turns.

### ⑰ Speed Selector Switch

Both 33 and 45 rpm speeds are instantly selected by this lever-type switch.

### ⑱ Auto Return Mechanism

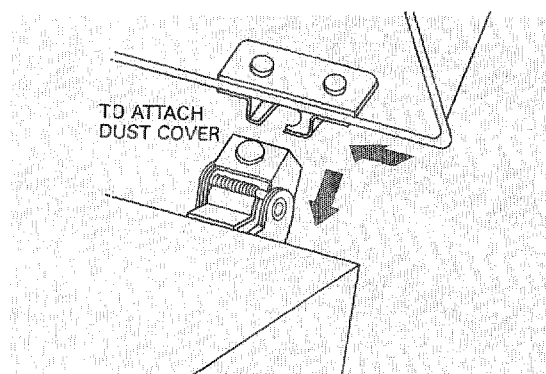
Simple and reliable, this mechanism safely and gently returns the tone arm to its rest at the end of the record, or when the record has been rejected.

# YP-211

## ASSEMBLY AND ADJUSTMENTS

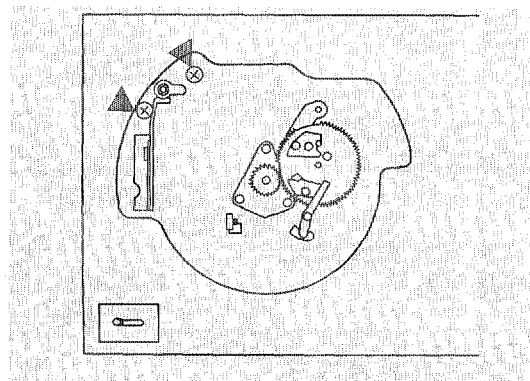
### ATTACHING AND DETACHING THE ACRYLIC DUST COVER

The acrylic dust cover has been made fully detachable, so that the YP-211 can be used at will with the dust cover off. It is wrapped separately in the original packing from the Yamaha factory, and should be attached in the first place as shown in the diagram. Align the studs on both hinges with the grooves, and slip them first on (1) and then along (2). Simply reverse this when you wish to detach the dust cover.



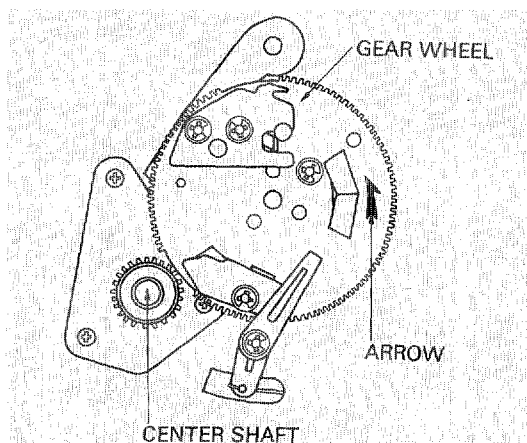
### REMOVING THE TRANSIT SCREWS

The motor assembly is protected from vibration and damage during transit by two screws which are located as shown in the diagram. Be sure to remove both of these screws before attempting to use the YP-211. If both screws are not removed, they may foul the turntable and prevent free rotation.



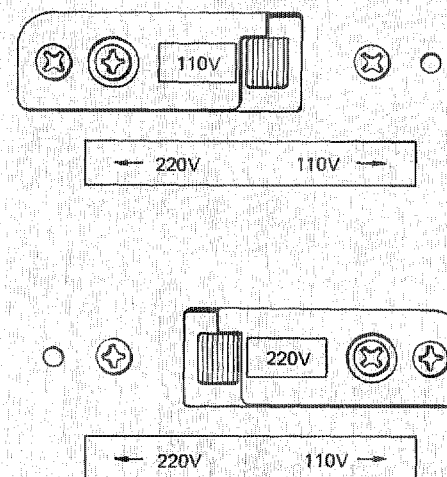
### BEFORE MOUNTING THE TURNTABLE

After removal of the two transit screws, and before placing the turntable itself on its central shaft, turn the auto-return mechanism so that the arrow is in the position shown in the diagram.



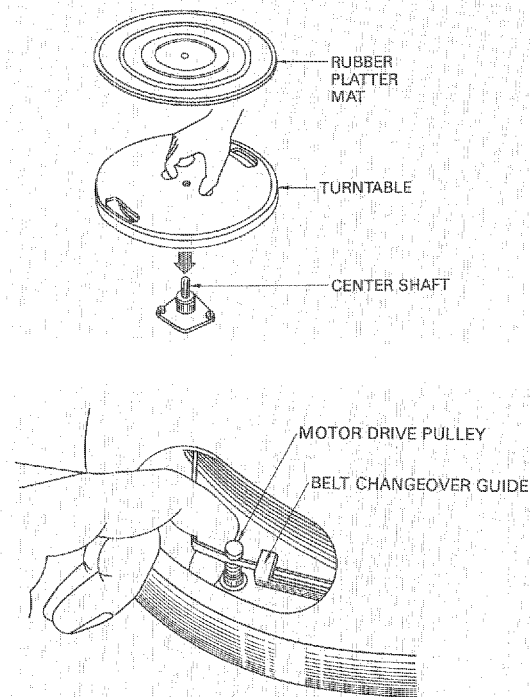
### SETTING THE VOLTAGE SELECTOR

All models of the YP-211 provided with a voltage selector as shown should be checked to confirm that the voltage indicated is the same as your local supply. Performance will be unacceptable if the YP-211 is adjusted for a much higher voltage than your local AC mains, and the YP-211 will be severely damaged if the voltage setting is lower than the actual voltage. Voltages are 110-130/220-240 AC. Where the exact setting is not available, the nearest above it should be used (e.g. use the 220 setting if your voltage is 210).



## MOUNTING THE TURNTABLE

First loop the drive belt around the large drum-shaped pulley on the underside of the turntable (the belt and drum are visible through the larger holes near the rim). Grip the turntable by the finger holes nearer the center, and place the central hole directly over the central shaft. The instructions in the next section on 'Fitting the Drive Belt' should also be carried out at this time.



## FITTING THE DRIVE BELT

- (1) First put the speed selector switch (at the left-hand front of the motor board) in the '33' position.
- (2) Stretch the drive belt as shown in the diagram, and loop it over the drive pulley, making sure that it passes through the belt changeover guide.

Note: the belt must pass through the belt changeover guide, and it must be free from twists.

- (3) Finally place the rubber turntable platter mat on the turntable.

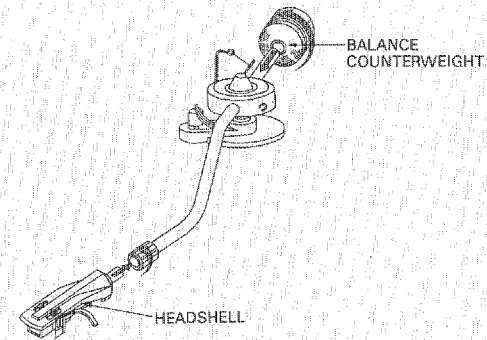
## ASSEMBLING THE TONE ARM

### Fitting the Balance Counterweight

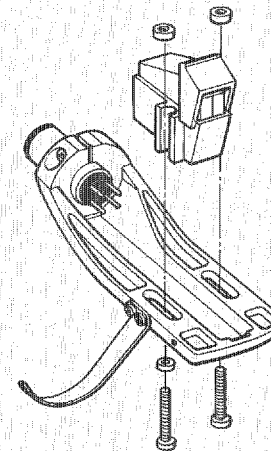
- (1) Push the separately wrapped balance counterweight onto the rear of the tone arm, rotating it at the same time in the direction shown.
- (2) When the helicoidal groove on the inside of the counterweight engages with the projecting stopper on the rear of the tone arm, further rotation of the weight in the clockwise direction (i.e. to the right when viewed from the rear of the arm) draws the weight forward smoothly, and counter-clockwise rotation draws it backwards.

### Fitting the Headshell and Cartridge

- (1) First read carefully the maker's instructions provided with the cartridge you purchase for the YP-211. Do not remove the stylus guard.\*



### CARTRIDGE INSTALLTION



- (2) Two different lengths of screws are provided with the accessories: choose the better length to secure the cartridge as shown in the diagram. Tighten the nuts only just enough to prevent the cartridge moving.

(3) Note the coding of the colored leads attached to the headshell: one stereo pair being green/red, and the other white/blue. Observe the maker's instructions carefully in attaching the metal sleeves to the cartridge connectors. A small pair of tweezers will be invaluable.

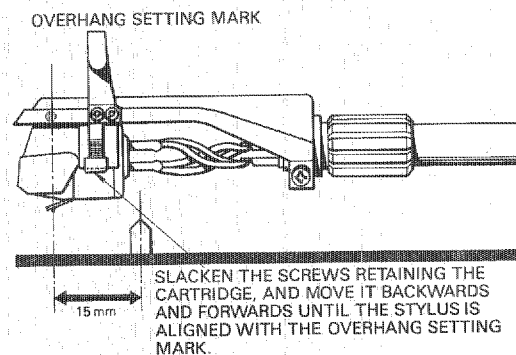
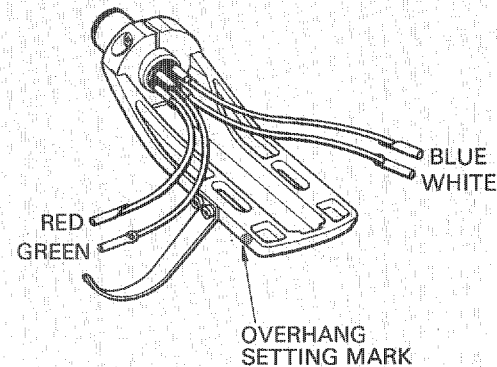
(4) Note also the position of the overhang setting mark on the headshell. Slightly slacken the screws holding the cartridge in place, and slide it gently backward or forward until the stylus is exactly in line with the overhang setting mark as shown in the diagram. This is an extremely important adjustment. Take care that the cartridge itself remains parallel with the edges of the headshell. Finally, gently tighten the screws.\*

(5) Push the headshell plus cartridge into the socket on the end of the tone arm, and gently turn the lock 'sleeve' until it grips the headshell in position. Do not apply excessive pressure.

(6) The stylus guard may be removed at this point.

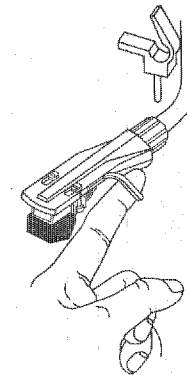
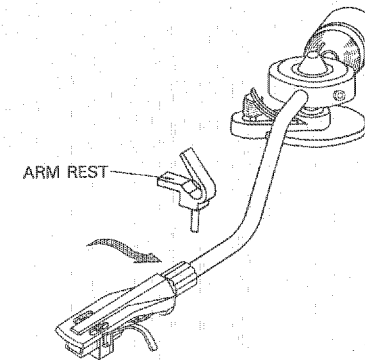
\*Note: Cartridges of all weights between 5 and 11 g may be used.

\*Note: Only tighten the screws sufficiently to prevent the cartridge from later moving out of position. Excessive force must not be used.



### ADJUSTING THE STYLUS TRACKING FORCE

Remove the stylus guard from the cartridge if there is one, and lift the tone arm up off its rest, placing it on the right (i.e. the outside) of the rest as shown. Support the headshell as shown if it is necessary to prevent the stylus tip from coming into contact with the motor board.

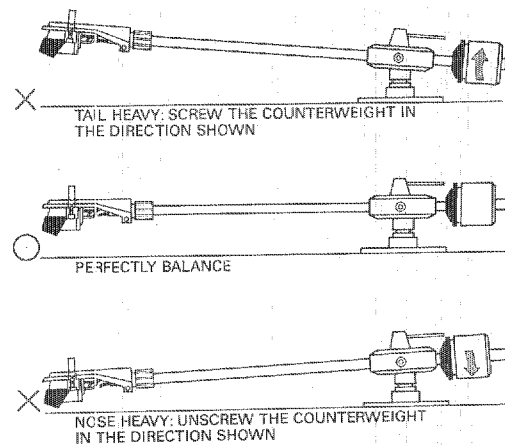




(1) Slowly rotate the balance counterweight in the direction indicated until the tone arm is perfectly balanced, parallel with the motor board.

A very small rotation only should be made at a time, until the headshell floats freely, no longer needing to be supported.

(2) Return the tone arm to the arm rest once perfect balance has been achieved.

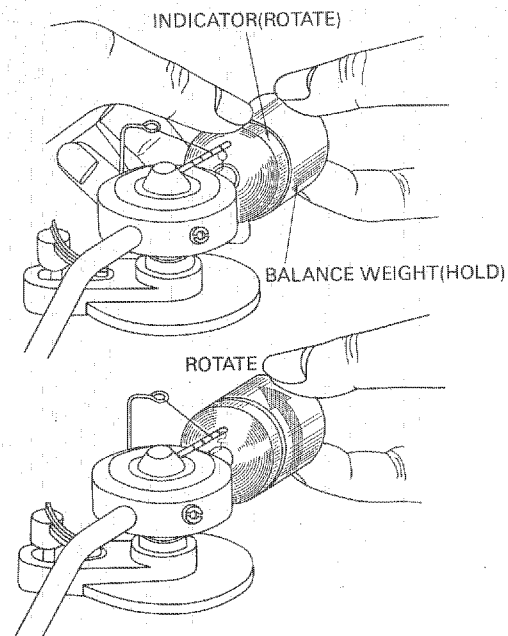


(3) Hold the balance weight so that it does not rotate away from the position at balance, and rotate only the indicator dial until the zero on it comes to top dead center as shown.

(4) Now grip the rear of the counterweight, and rotate it slowly and carefully: the number showing opposite the top center line is the tracking force in grams. One complete rotation (bringing the indicator dial back to zero) actually corresponds to 3.0 grams.

(5) Turn the counterweight until the manufacturer's recommended tracking force has been set.

Note: If any change likely to affect the balance of the cartridge is made (movement with respect to the headshell, stylus replacement, etc.), or if the balance counterweight is accidentally moved, repeat all the steps (1) to (5) above.



### ADJUSTING THE INSIDE FORCE CANCELER

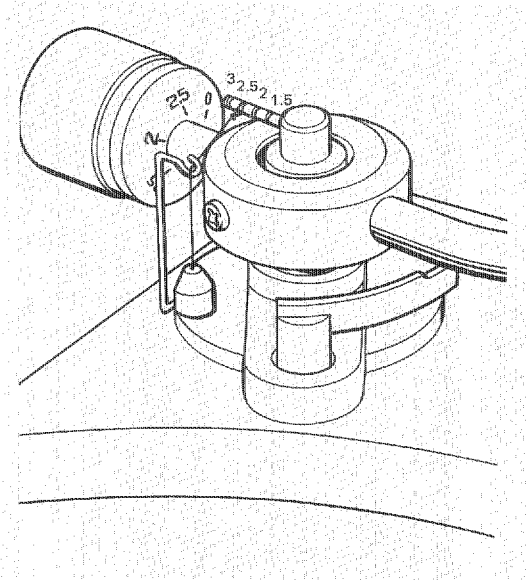
The grooved pole projecting backwards from the top of the tone-arm bearing assembly acts as the inside force canceler. By hanging the little weight from the appropriate groove of the pole, the unbalanced force which the record groove wall exerts on the tip of the stylus (causing it to ride up the outer wall, spoiling stereo balance, and even 'skating' across the surface of the record in extreme cases) can be perfectly canceled. This gives middle-of-the-groove tracking.

Remove the anti-skating weight from the accessory case, and then slip the end of the thread through the hook and hang it over the appropriate groove as below:

Tracking Force	Groove
1.5 gram	1st
2.0 "	2nd
2.5 "	3rd
3.0 "	4th

If you are using an intermediate tracking force, like 1.25 grams, or 2.75, use the groove corresponding to the next highest force.

Check that the weight hangs freely during the whole motion of the tone arm from its rest to the innermost groove of the record being played, neither fouling the guide-hook at the top, nor the motor board at the bottom. Slacken the retaining screw and slightly reposition the hook to ensure freedom of motion for the weight if this is necessary.

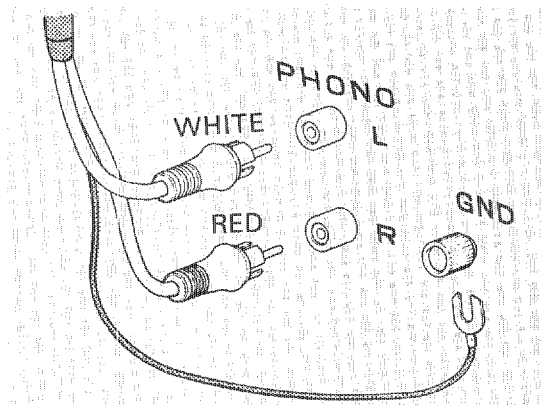


# YP-211

## CONNECTIONS TO YOUR AMPLIFIER OR RECEIVER AND HOW TO PLAY RECORDS

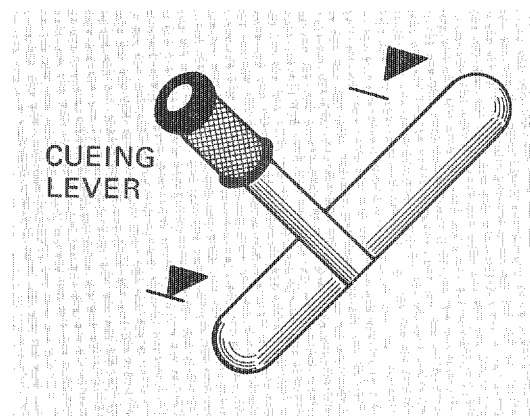
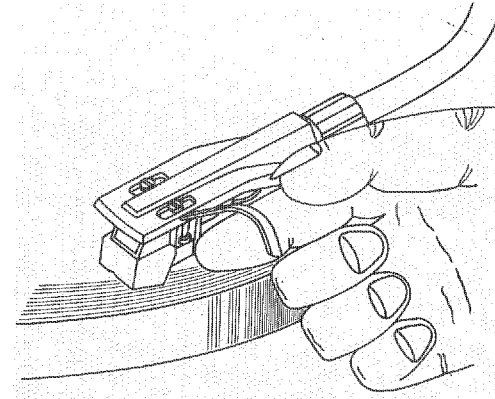
### CONNECTIONS TO YOUR AMPLIFIER OR RECEIVER

- (1) Plug the right- and left-hand channel leads from the back of the YP-211 (clearly identified with the letters L and R) into the left- and right-hand PHONO input sockets of your amplifiers, etc.
- (2) The third lead is the GROUND lead, and hum will usually be reduced if this is attached to the GND or 'Earth' terminal of the amplifier (receiver).
- (3) Plug the turntable main plug into your AC main supply socket.



### HOW TO PLAY RECORDS

- (1) Set the input selector of your receiver or amplifier to PHONO.
- (2) Put the record of your choice on the turntable. If you have chosen an extended-play record with the large center hole, use the EP adaptor.
- (3) Set the cueing lever in the 'down' position.
- (4) Bring the tone arm off the arm rest to a position where the cartridge stylus is directly over the lead-in grooves of the record. As you do this, the record will start to turn, but the arm will not descend.
- (5) Depress the PLAY & REJECT switch. The arm will slowly descend, and record audition will commence.
- (6) At the end of the record, the arm will automatically lift and return to its rest, with the motor OFF.
- (7) If you wish to stop playing the record before the end, press the PLAY & REJECT switch at any time, and the arm will lift, return to its rest, and the motor will turn OFF.



# YP-211

## CHANGING CARTRIDGE STYLUS AND MAINS FREQUENCY

### USE OF THE CUEING LEVER

The cueing lever, located immediately above the PLAY & REJECT switch at the right of the motor board, is convenient when raising and lowering the tone arm and cartridge for brief interruptions to the audition of a record.

- (1) If the cueing lever is turned to the UP  $\nabla$  position during record audition, the turntable will continue to turn, but the tone arm will be lifted off the record, and audition will be interrupted.
- (2) If you later wish to continue with audition, return the cueing lever to the DOWN  $\nabla$  position, and audition will re-commence. The cueing lever should be released slowly and gently, so that the stylus is not abruptly dropped onto the record (which could damage both stylus and record).
- (3) If you later decide that you no longer wish to listen to the record you have interrupted, leave the cueing lever in the UP position and depress the PLAY & REJECT lever. The tone arm will return to its rest, and the motor will be switched off. Remember to re-set the cueing lever to the DOWN position, ready for the next record audition.

### CARTRIDGE STYLUS REPLACEMENT

A worn stylus can cause permanent damage to precious records long before the sound quality has seriously deteriorated. The only safe rule is to change your stylus in good time. Follow the maker's recommendations carefully. As a general guide, even a diamond stylus will only give satisfactory service for some 200 to 300 hours.

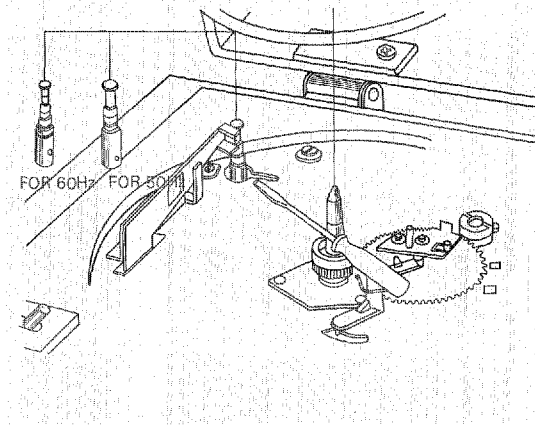
### CHANGING AC MAINS FREQUENCY

If you move from an area with 50 Hz mains frequency to a 60 Hz area (or vice versa), your YP-211 requires a different motor drive pulley.

- (1) Remove the turntable and slacken the grub screw holding the motor drive pulley in position.
- (2) Withdraw the pulley and replace it with the pulley suitable for your new AC frequency. The pulley for 60 Hz is slightly thinner than that for 50 Hz, and is clearly identified with a groove.

- (3) Turn the speed selector switch to 33 rpm, and ensure that the drive belt is correctly located within the speed changeover guide, and is free from twists, after you have replaced the turntable.

Note: Not the slightest trace of grease or dirt must be allowed to come into contact with anything which touches the drive belt (not motor drive pulley, turntable drive drum, nor of course, the belt itself)



# YP-211

## SPECIFICATIONS

### TURNTABLE

Motor	4-Pole synchronous type
Turntable Platter	30 cm (12") die-cast aluminum
Speeds	33 $\frac{1}{3}$ and 45 rpm (2-speed)
Drive System	Belt drive
Signal-to-Noise Ratio	Better than 52 dB
Wow and Flutter	Better than 0.08% wrms

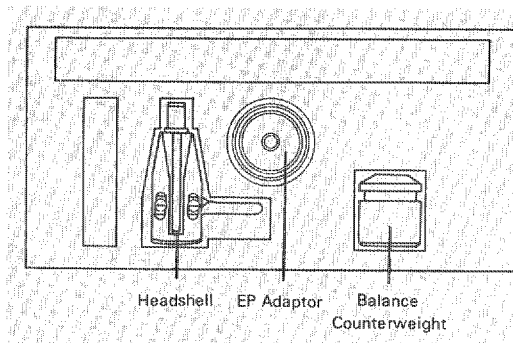
### TONE ARM

Type	S-type static balance
Effective length	215 mm (8 $\frac{1}{2}$ " )
Overhang	15 mm
Suitable Cartridge Weight	5 to 11 grams
Headshell	HS-800 plug-in type to EIA standards, with gold-plated contacts.

### OTHERS

Power Supplies	120 V AC, 60 Hz (USA and Canada) 110-130/220-240 V AC, 50/60 Hz (Other areas)
Power Consumption	9 Watts
Dimensions (WxHxD)	435 x 150 x 361 mm 17 $\frac{1}{8}$ " x 5 $\frac{7}{8}$ " x 14 $\frac{1}{4}$ "
Weight	6 kg (13 lb 3 oz)
Accessories	EP adaptor Long and short cartridge-retaining screws

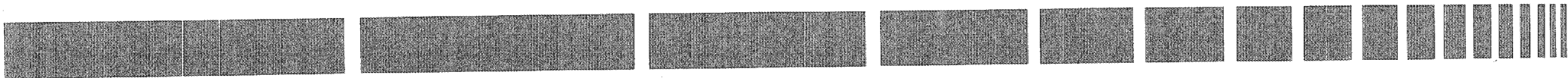
### ACCESSORIES



Before assuming that your YP-211 is faulty, check the following trouble-shooting list, which details corrective action you can take yourself, without having to call a service representative.

Fault	Cause	Cure
Turntable does not rotate even though PLAY/REJECT switch is depressed	Main plug not firmly plugged into main supply socket Drive belt not fitted Drive belt not properly in position Belt has snapped	Plug fully home Fit drive belt to motor pulley Fit belt properly to both motor pulley and turntable drive drum Replace drive belt
There is no sound even though the cartridge stylus is on the record surface	Faulty connections to the amplifier/receiver An unsuitable cartridge has been used so that the body, not the stylus, comes into contact with the record	Check and make good the output lead connections Replace with a cartridge of the correct dimensions
The turntable turns slowly, or wavers (showing wow and flutter)	Oil or dirt on the belt, the motor drive pulley, or the turntable drive drum, is causing slippage. The belt has stretched and become slack	Clean the oily item with a little pure alcohol Replace drive belt
Motor rumble can be heard from the speakers	The two transit screws have not been removed	Remove both the transit screws (See instructions page 6 )
The reproduced sound is distorted and unpleasant, particularly the treble, with clicking or scraping noises.	The turntable is not truly horizontal There is dirt on the stylus tip The stylus tip is worn The record itself is worn, or is dirty or dusty The stylus tracking force is unsuitable (too high or too low) The treble control on your amplifier or receiver is turned up too far The inside-force canceler has not been set correctly	Re-locate in a flat, horizontal position Clean the tip with a stylus-cleaning brush Replace the stylus Check by replacing with new record. Try cleaning the suspect record. Re-adjust tracking force to the recommended value Turn the treble control to the FLAT position. Turn the LOUDNESS control OFF. Carry out the instruction on inside-force canceler adjustment, adjustment, page 10.
A loud humming sound is heard when trying to play records	The GROUND (GND) connection has not been made to the amp. ground terminal	Connect the ground lead to the ground terminal on the amplifier or receiver
The reproduced sound swells into a booming 'roar' (known as howling)	This is caused by sound from the speakers reaching the cartridge stylus, with the turntable too close to the speakers, or vibrating with them on an unstable support. The bass control on your amp. or receiver is turned up too far Extremely high listening levels in a small room	Re-locate the turntable on a strong, stable support, not too close to (nor directly in front of) the speakers. Turn the bass control to the FLAT position. Also turn the LOUDNESS control OFF. Reduce volume
Speed change is impossible	The drive belt is not inside the belt changeover guide	Insert the belt into the belt changeover guide (See page 7 )





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