

OPERATING INSTRUCTIONS

BOGEN MODEL B62

HIGH FIDELITY MANUAL RECORD PLAYER

DESCRIPTION

Model B62 is a precision-made manual record player designed to satisfy the most exacting demands of a high fidelity sound system.

Completely wired for either stereophonic or monophonic sound, the player may be operated at the four popular fixed speeds of 16-2/3, 33-1/3, 45 and 78 rpm. In addition, speed can be controlled at any velocity from 29 to 86 rpm. The B62 player features a four-pole, heavy-duty, constant velocity motor and a balanced 11-3/4" rubber-padded turntable. The player has a professional-type tone arm which will accept a plug-in head. The tone arm is raised or lowered by a power switch linkage to minimize record or stylus wear and to allow cueing of records. A micrometer-type gauge on the arm permits adjustment of the arm for stylus pressure. The B62 will track perfectly with all stereo cartridges having a manufacturer's recommended tracking weight of as low as 1 gram.

The model B62 Series player has a precision non-ferrous massive 7-3/4 lb. turntable. Wow and flutter are less than .20% at 33-1/3 rpm and even better at faster

ACCESSORIES

MODEL PB7 BASE

Sturdily constructed, walnut finished wood base — pre-cut to accommodate record player.

MODEL H4 HEAD

Interchangeable plug-in cartridge head (less cartridge) for use when using more than 1 phono cartridge.

speeds. Wow, hum and flutter are virtually nonexistent.

The B62 will handle discs up to 16 inches in diameter. The record player is supplied with vibration isolators (shockmounts) a 45-rpm adapter, a strobe disc, and a mounting template.

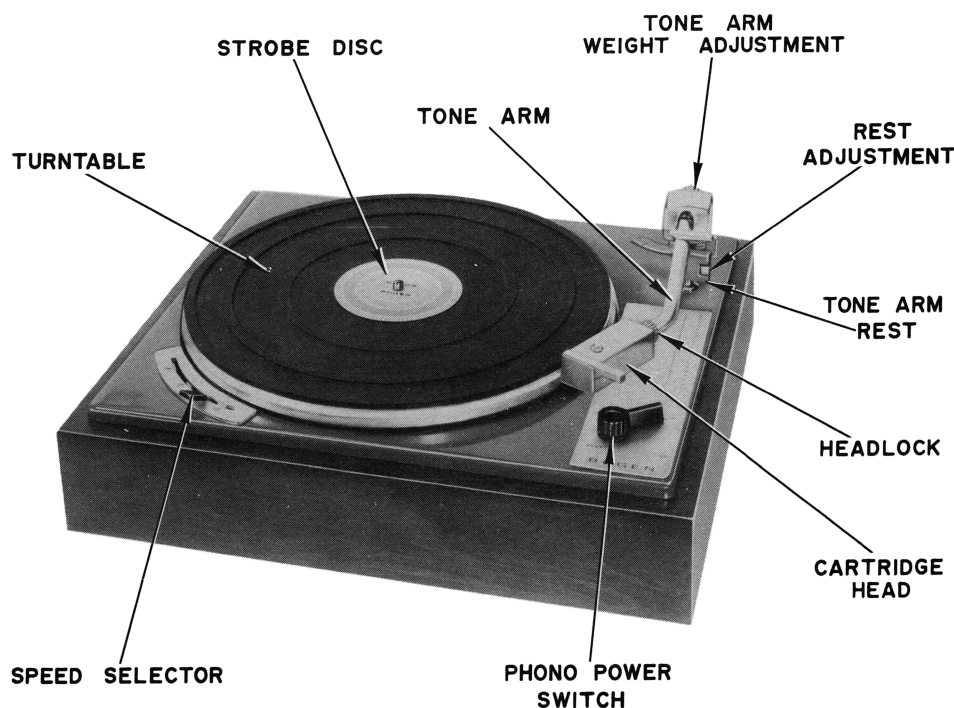


Figure 1 — B62 Controls and Components

INSTALLATION

UNPACKING

Inspect the shipping container and the unit for any indications of improper handling. The unit was carefully checked for condition before leaving the factory. If the unit has been damaged, make an immediate claim to the dealer or distributor from whom it was purchased. If the unit was shipped to you, notify the transportation company without delay and place your claim. Examine all carton packaging and filler for the plug-in cartridge head, the shockmount parts, the circular strobe disc, 45 rpm adapter and a small envelope containing mounting hardware, before discarding the carton.

INSTALLATION

The Bogen Model B62 Record Player may be mounted in a cabinet shelf or any suitable base with minimum dimensions of 16-1/4" x 14". An attractive mahogany finished base, Bogen Model PB7, is available to those who wish a precut and drilled base ready for mounting. A template and instructions are supplied for layout of mounting. The mounting shelf should be at least 1/4" thick (not over 5/8" thick). If a thinner board is used, additional washers may be used to make up the difference.

PROCEDURE

1. Unpack the carton carefully. Examine the packaging for component parts before discarding the carton.
2. Open the bag containing the shockmount parts. Check to see that you have four studs, twelve nuts, four spring plates, and eight wood screws. Look also for an envelope containing cartridge mounting hardware.
3. Remove filler screws from studs on bottom of player; items 1, 2, 3 and 4 in figure 4. Place a nut on each stud. Screw each of the four studs into the tapped hole on each pad. These pads are welded to the bottom of the mounting plate. Run each nut up against the mounting plate to hold the studs in position.
4. Place a second nut on each stud at the approximate distance in inches from the underside of the plate surface to the bottom of the nut (nearest plate surface) as follows (refer to figure 4):
 - a. Stud numbers 1 and 2; 1-1/8 inches from plate surface.
 - b. Stud number 3; 1 inch from plate surface.
 - c. Stud number 4; 1-1/4 inches from plate surface.
5. Insert the spring plate over each of the 1-inch holes on the mounting base so that the spring

part is nested in the hole. Fasten each spring plate securely to the base with two of the supplied wood screws.

6. Place the phono chassis on the base so that all studs protrude through the springs. Check to see whether the chassis is suspended above the base and is level on all four sides. (There should be approximately 1/4 inch clearance between the phono chassis and the base.)
7. If the phono chassis is not parallel to the base, adjust the lower nuts on each stud to level the chassis. It may be necessary to repeat this step several times until the proper balance is obtained. Remember to maintain the approximate 1/4-inch clearance between the phono chassis and the mounting base.
8. After the phono chassis is level with respect to the base, add a third nut on each stud and tighten it against the spring shockmount.
9. Remove the two screws, on the phono chassis which are painted red. (The screws were used to protect the player in transit.)
10. Since finger marks will affect the performance of this instrument, carefully clean all metal surfaces (particularly the drive cone) with carbon tetrachloride. Clean the idler wheel with denatured alcohol.
11. Carefully remove the turntable from its package and place the turntable on the shaft. Place the rubber mat on the turntable.
12. Connect the line cord of the phonograph to a wall outlet supplying 117-volt, 60-cycle AC power.

CONNECTIONS

GROUND

Connect the spade lug on the single wire lead to a ground point on the amplifier or preamplifier.

OUTPUT

STEREO SYSTEM: Two output cables have been supplied with this player for connection to your amplifier(s). Connect these two cables to the phonograph input receptacles on your amplifier. It is not necessary to disconnect either cable for monophonic operation in the stereo system, since the record player will play monophonically through both amplifier channels.

MONOPHONIC SYSTEM: If two output cables are supplied with the record player, connect only one cable to the phono input receptacle of the amplifier. No connection is required for the other cable.

ADJUSTMENTS

INSTALLING CARTRIDGES

Included with your record player, you will find an envelope containing the following hardware: two screw extensions (Bogen Part No. 70-8019-01), two 3/48 x 3/8" round head slotted machine screws, two 3-48 x 5/16" round head slotted machine screws and two 3-48 x 1/8" round head slotted machine screws. This hardware is for use in mounting the phonograph cartridge to the head. Not all of it will be required in every instance.

When installing stereo cartridges in the Model H4 plug-in head, the two stereo channels may be identified as shown in figure 2. The two contact pins on the left are channel No. 1. The two contact pins on the right are channel No. 2.

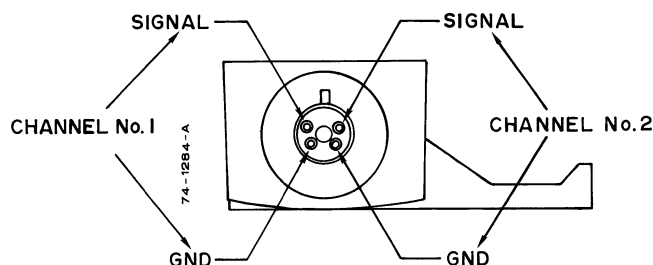


Figure 2 - H4 Head, Rear View

Install the cartridge in accordance with cartridge manufacturer's instructions. Plug the cartridge head into the pickup arm, then tighten the screw on locking collar.

NOTE: Always remove the head from the tone arm before attempting to insert or replace any phonograph cartridge. If the cartridge has a protective shield, it may be necessary to remove it before mounting.

TONE ARM HEIGHT

The height of the tone arm may be adjusted if necessary. Loosen the small set screw in the tone arm base and manually set the arm at the desired height. Tighten the set screw.

ADJUSTING TONE ARM WEIGHT

Turn the Tone Arm Weight Adjustment (refer to figure 1) until cartridge manufacturer's recommended tracking weight is reached (measure carefully using a good quality stylus pressure gauge). Once correct setting is obtained, read micrometer logging scale (on tone arm) and note setting. If cartridge is removed

at a subsequent time, it can be easily reinstalled using the same micrometer logging scale setting. **IMPORTANT:** the scale is for logging purposes only, the numbers on the scale do not indicate the actual tracking pressure, since this will vary with the weight of the cartridge.

NOTE: With some cartridges, the magnetic attraction of the cartridge to the turntable must be included in the measurement.

REMINDERS: Did you remove the transit screws (painted red) under the turntable? Did you clean all surfaces carefully? If not, please read the Installation Instructions before operating the player.

1. Make certain that the cartridge is connected properly. Check to see that it is properly set for long-play or for 78 rpm records.
CAUTION: Do not play a stereophonic record with a monophonic cartridge. The record will be ruined after a few plays.
2. Set the speed selector for the appropriate speed. For maximum speed accuracy, the desired speed position, of the SPEED SELECTOR, should be approached from the low speed side of the SPEED SELECTOR.
3. Set the pickup arm so that the stylus is directly over the entering groove of the record.
4. Turn the power switch until a click is felt and allow a few seconds for the turntable to reach full speed.
5. Continue turning the power switch clockwise until the stylus is gently lowered onto the record (see figure 3).
6. When the record has finished playing, turn the power switch counterclockwise to lift the pickup arm and continue rotation until the motor shuts off. Never turn off power by any other means, or flat spots may be formed on the drive wheel.

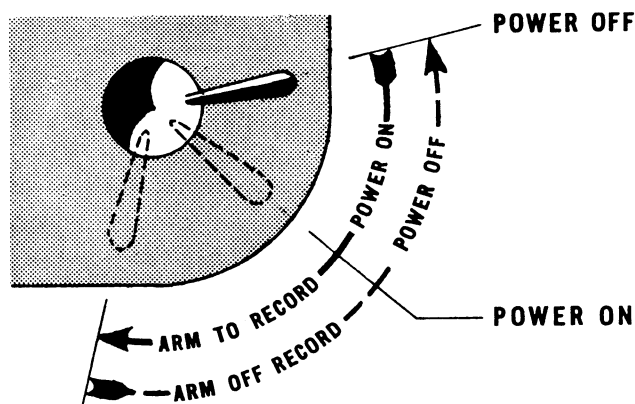


Figure 3 - Power Switch

7. Slide arm to the right and, if the player will not be operated again for a period of time, secure the arm with the hold-down spring.
8. For 16" records, be careful to avoid hitting the support post when placing the record on the

turntable.

9. For a 45 rpm record, place the adapter supplied with the record player on the turntable shaft before placing the record on the turntable.

SERVICE

SPEED TESTING AND ADJUSTING

All units are tested and adjusted at the factory. No further adjustment should be required. However, if adjustment is required for any reason, proceed as follows:

1. Set speed selector lever at appropriate position.
2. Place record on the turntable.
3. Set the strobe disc on the record (the circular disc with the radial black lines).
4. Plug the power cord into any 110-120 volt, 60-cycle AC power source.
5. Turn the power switch on.
6. Set the needle on the first grooves of the record.
7. Test speed accuracy by checking the strobe pattern which corresponds to the speed selected. Use fluorescent light if possible: the pattern will be much clearer. If the pattern appears to be moving, adjust speed in the following manner:
 - a. Loosen the speed step-groove screw one or two turns.
 - b. With the speed selector lever in the step groove, move the step groove carefully until the appropriate strobe disc pattern seems to be stationary.
 - c. Carefully lift the speed selector lever out of the step groove without moving the step, and tighten the screw.
 - d. Repeat this procedure for each speed setting which needs adjustment.

50-CYCLE CONVERSION

There is not sufficient range in the groove positions to adjust the speed step grooves to provide accurate readings for 50-cycle operation. To reset the step grooves so as to show correct speeds with a 50-cycle input, proceed as follows. Refer to figures 4 and 5 for letter callouts.

1. Set a strobe disc over a record which has been placed on the turntable. Use a 50-cycle strobe

- disc and make certain that the fluorescent light under which it is observed is powered from a 50-cycle source.
2. Plug the power cord into a 105-125 vac, 50-cycle power source and turn the power on.
3. Set the stylus down on the first groove of the record and check the strobe pattern for the speed selected, as described above under Speed Testing and Adjusting.
4. The record will be found to be rotating more slowly than the required speed.
5. Move the Speed Control Lever (H) until the speed of the record coincides roughly with the strobe pattern.
6. Turn off the Power Switch (E).
7. Lift the turntable and loosen the Speed Linkage Screw (U) on the underside.
8. Move the Speed Control Lever (H) until it coincides with the appropriate Speed Step Groove (W) for the speed selected. Retighten Speed Linkage screw.
9. Loosen the Speed Step Groove Screw (V) and make the final adjustment by moving the step groove as described for Speed Testing above.
10. Repeat Step 9 for each speed setting.

LUBRICATION

A few drops of fine oil may be used to lubricate the Motor Drive Cone bearings (see figure 4, callout N) at each end of the cone. Apply a few drops of fine oil into the bearings at each end of the cone and wipe off any excess oil.

All other points have been lubricated at the factory for the life of the unit.

CARE OF EQUIPMENT

1. Clean the stylus periodically to keep it free from dust and grit.
2. Clean the drive wheel periodically with denatured alcohol.
3. Periodically check the tracking weight to the tone arm. It is suggested that you obtain a stylus gauge for this purpose.
4. Avoid oil on the idler wheel rim and the motor

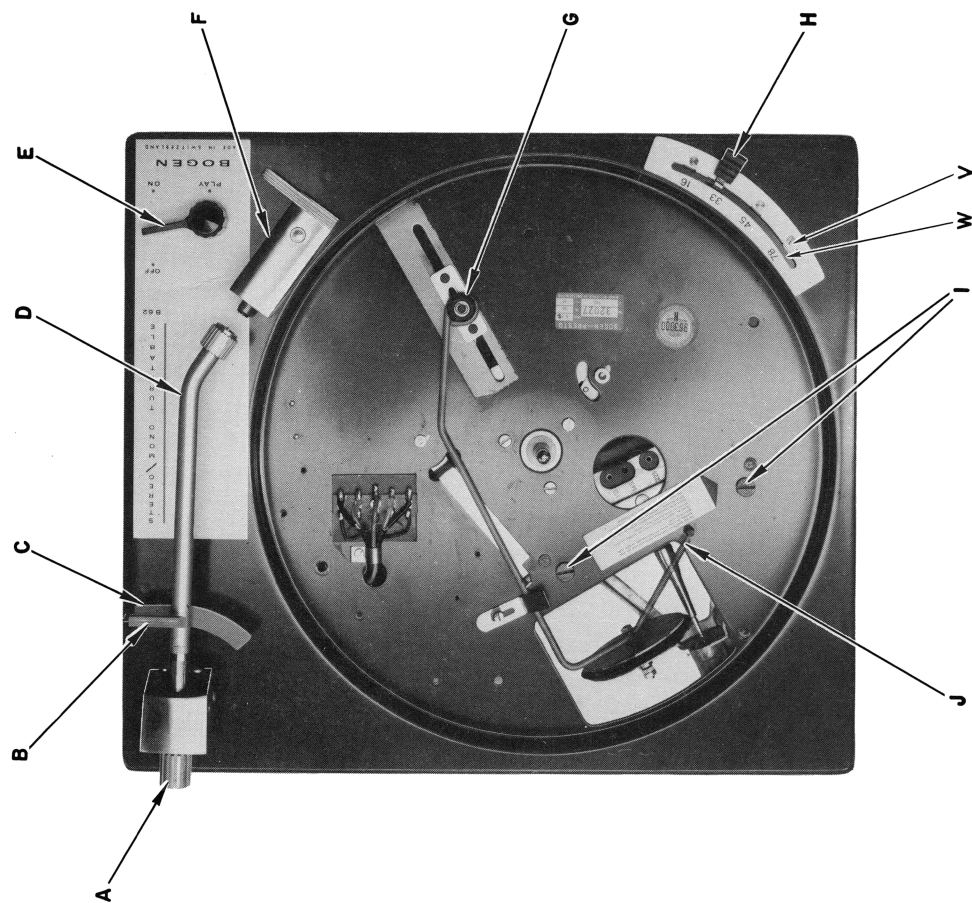


Figure 5 — Model B62 Record Player, With Turntable Removed

K — Output Plugs
L — Power Cord
M — Idler Wheel
N — Motor Drive Cone
O — Motor Assembly

P — Spade Lug (Ground)
R — Turntable Well
S — Toggle Switch
T — Lift Bar Cam
U — Speed Linkage Screw
V — Step Groove Screw (4)
W — Speed Step Groove (4)

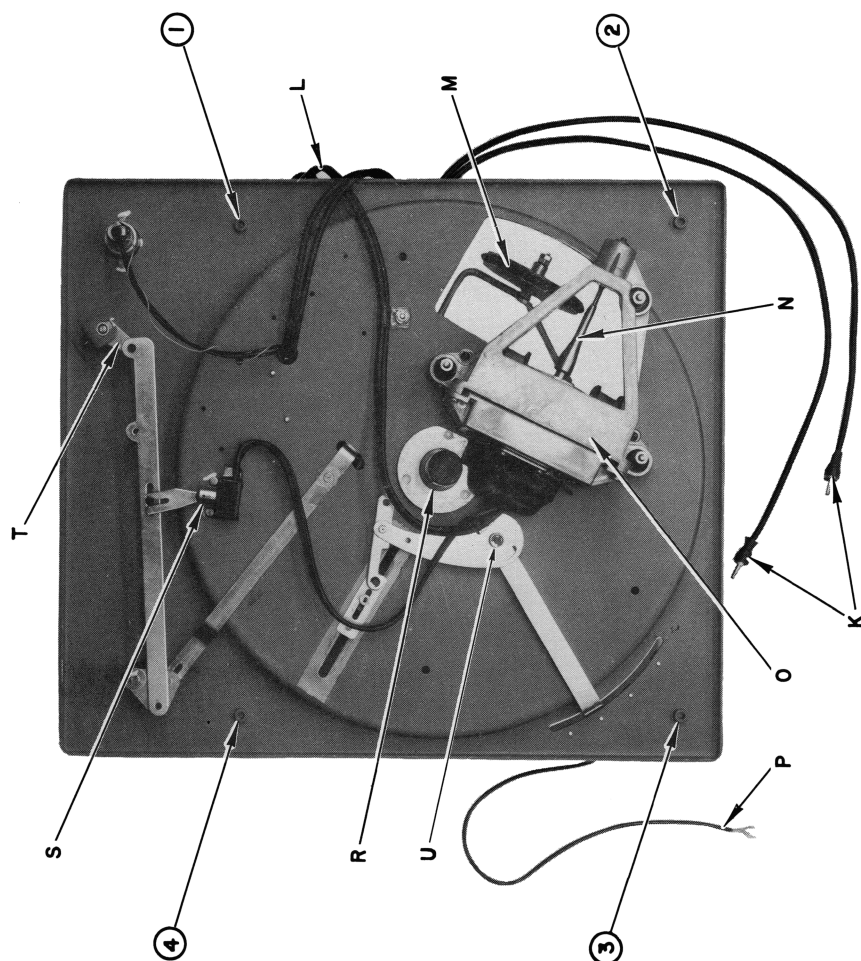


Figure 4 — Model B62 Record Player, Underside View

A — Tone Arm Weight Adjustment
B — Arm Hold — Down Spring
C — Tone Arm Rest
D — Tone Arm
E — Power Switch Lever

F — Cartridge Head
G — Idler Assembly Retaining Spring
H — Speed Control Lever
I — Transit Screws
J — Idler Arm Spring

conical drive shaft.

SERVICING

1. If the turntable doesn't rotate, but the motor operates, it is likely that either the idler wheel rim or the idler arm spring is damaged.
2. If the motor doesn't operate, check all connections. Check the toggle switch under the mounting plate which activates the idler assembly. Check the power cable. If none of these is the cause, it is possible that the motor may have to be replaced.
3. If the motor will not turn off, the capacitor across the switch terminals is shorted.
4. If speed is erratic, clean the rubber rim of the idler wheel with denatured alcohol. Look for oil or grease under the turntable or on the motor drive cone. Clean thoroughly with alcohol or carbon tetrachloride.
5. If sound is distorted, check the stylus and replace it if worn. If the stylus is good, it is likely that the tracking pressure is too low. Readjust the pressure.

BOGEN SERVICE

If trouble ever develops with your unit, please do

not hesitate to ask our advice or assistance. We are interested in your Bogen unit for as long as you have it. Information can be obtained by writing to: Service Department, Bogen Communications, P. O. Box 500, Paramus, New Jersey 07652.

When communicating with us give the model number and serial number of your unit. Completely describe the difficulty encountered. Describe the effect each operating control has upon the symptoms of trouble. Include details on electrical connections to associated equipment and list such equipment.

When we receive this information we will send you service information if the trouble appears to be simple (e.g. bad vacuum tube, incorrect connections). If trouble requires servicing we shall send you the name and address of the nearest Bogen authorized service agency to which you can send your unit for repair.

When shipping your unit, pack instrument well using the equivalent of the original shipping carton and filler material to prevent damage in transit. Send unit, fully insured and prepaid, via railway express. Do not ship via parcel post unless so instructed. The unit will be promptly repaired and returned to you.

WARRANTY

The Bogen equipment which you have just purchased has been carefully tested and inspected before leaving our factory. When properly installed and operated in accordance with instructions furnished, it should give excellent performance and reliable operation.

Bogen equipment is guaranteed against all defects in material and workmanship for one year from date of sale to the original purchaser. Any part of the equipment which, under normal installation and use, becomes defective will be repaired or replaced by us, provided it is returned for our examination, transportation prepaid, to our factory (or authorized service station). This warranty does not apply to equipment which has been subjected to abuse or accident, or which has been altered in any way; nor does this warranty extend to tubes, vibrators, or accessories, etc., not of our own manufacture and which are separately covered by the producing manufacturer's warranty.

The registration card enclosed with the equipment must be filled out and mailed to us within 5 days of purchase to place the warranty in effect.

LEAR SIEGLER, INC.



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