Edison
Standard Phonograph

DIRECTIONS FOR
SETTING UP AND OPERATING

TRADE MARK
Thomas A. Edison

Do not lose this sheet. You will always find it useful.

NOTICE

Every Edison Phonograph and every Edison Record and Blank is sold by the NATIONAL PHONOGRAPH COMPANY under restrictions as to the persons to whom and the prices at which such Phonographs, Records and Blanks are to be sold, and as to the removal or change in whole or in part of the serial numbers on such Phonographs. Any violation of such restrictions terminates the license to use and vend such Phonographs, Records and Blanks implied from the sale thereof, and any subsequent use or sale of such Phonographs, Records and Blanks is an infringement of the Edison Patents.

National Phonograph Company
Orange, N. J., U. S. A.
Index of Parts

A. Back Rod.
B. Barrel.
C. Belt Tightening Pulley.
D. Crank.
E. Cylinder.
F. Cylinder Gear.
G. Cylinder Gear Set Screw.
H. Cylinder Shaft Centers.
I. Feed Screw Center.
J. Fourth Gear.
K. Friction Felt.
L. Gear Guard.
M. Governor Pinion.
N. Governor Disc.
O. Governor Shaft Pivot Bearings.
P. Intermediate Gear.
Q. Reproducer Arm.
R. Reproducer Arm Lift Pin.
S. Speed Adjusting Screw.
SE. Straight Edge.
T. Starting Lever.
U. Swing Arm.
V. Winding Shaft.
W. Reproducer.
X. Reproducer Weight.
Y. Catch Lever.
Z. Supporting Link.

In ordering parts give NAME and NUMBER of Phonograph.
Read These Directions Before Operating the Instrument

How to Set Up

1. Unpack the case carefully.

2. Pull out catch levers (Y) on each side of the cabinet and lift off the top.

3. Remove carefully all fastenings and paper that hold the different parts during transportation, especially the string which holds the reproducer weight.

4. Get access to inside of lower case by raising lid (upon which the machine rests) at the front, high enough to allow supporting link (Z), at the inner left hand side, to drop into the catch.

5. Take out the padding under spring barrel (B) and while motor and gears are exposed and in full view, apply a drop of Phonograph oil to friction felts (K) which come in contact with brass governor disc (N) and to each center of the governor shaft (R) and other bearings. Be sure that there is no excelsior between the teeth of the gears, especially between the teeth of the fine governor pinion (M) and large gear (J) that engages the governor pinion. A little vaseline applied to this fine gear (J) is beneficial.

6. Before closing lid of cabinet, set the machine in motion by pushing the starting lever (T) toward the left, and observe whether the small belt tightening pulley (C), which holds the belt at proper tension, is revolving. Apply a drop of oil to each side of pulley, but keep belt and pulley face free from oil. Place horn crane base into the holder on bottom of cabinet as far as it will go, put the upright support rod of horn crane through the hole in the brace that goes on top of cabinet and insert lower end of rod into the socket in the crane base. Place the brace over the top edge of cabinet in such a position that the support rod stands vertical. Close the lid of cabinet by holding it up at the front with right
hand and pushing supporting link (Z) off the catch pin with the left hand. Lower it gently.

7. Clean off with soft cloth all the upper parts of the machine and wipe off back rod (A) and top of straight edge (SE); apply now, and occasionally afterwards, a few drops of Phonograph oil to back rod (A) and straight edge (SE), but first always wipe off dust and gum. The threads of the feed screw, and both feed screw centers (I), cylinder shaft centers (H), and intermediate gear stud (P) also require oiling occasionally.

8. Raise reproducer arm (Q) and push in lift button (R) so that the lift button stem rests on top of straight edge and slide reproducer arm (Q) to the left as far as it will go. Reproducer arm should always be up when machine is not in operation. Push catch levers (Y) into place against sides of case, insert crank (D) through thimble hole on right side of case and on winding shaft (V). As the screw end of the winding shaft enters the sleeve of the crank, turn crank to the right until screwed up tight, and keep turning to the right as long as it can be turned, thereby winding up the motor spring. To take off winding crank, turn crank to the left, when it will unscrew and come off. Insert chain rod of horn crane into the upper end of support rod as far as it will go, and hang horn on the hook at end of chain. Place the rubber horn connection on small end of horn as far as it will go and over the tube of the reproducer (W) having the outer end of chain rod opposite the center of cylinder (E). The machine is now ready for operating.

How to Operate

Pull swing arm (U) wide open, and place Record on taper cylinder (E) (title end to the right); push it on as far as it will go with a slight pressure. Next close swing arm (U) and start motor by pushing starting lever (T) to the left as far as it will go; slide reproducer arm (Q) to the point where the Record seems to begin and let reproducer down by pulling out button; this engages feed nut (which is attached to back of reproducer arm) with thread of feed screw and also brings the sapphire point of reproducer (W)
in contact with surface of Record. When reproducer has travelled to the end of the Record, raise up reproducer arm and stop machine by pushing the starting lever (T) to the right; then slide reproducer arm (Q) to about the center of the cylinder and with three fingers of the left hand loosen the Record from the cylinder by pushing it toward the right, then open swing arm (U) and take off Record with right hand. To play another Record, repeat the above operations.

Adjustment of Speed

All master Records, from which the Edison Gold Moulded Records are made, are recorded at a speed of 160 revolutions per minute, and to reproduce these Records perfectly, it is absolutely necessary that the Phonograph should run at the same speed (160 revolutions per minute) no more, no less.

Every Phonograph is adjusted to run 160 revolutions per minute, but if by accident or through carelessness the governor should become displaced on pinion shaft or the speed adjusting screw (S) underneath the top plate should be turned (whereby the speed would be altered after machine leaves the factory) re adjustment of speed can be made by raising up table and by taking hold of speed adjusting screw (S) between thumb and forefinger and turning to the left to make cylinder run faster and to the right to make cylinder run slower.

The announcement at the beginning of the Record should sound perfectly natural; if not, the speed is either too fast or too slow and can be regulated by the speed adjusting screw (S). To enable anyone to set speed correctly, two circular rings will be found on right side of back rod (A) one and six tenths (1 6-10) of an inch apart. With the Phonograph fully wound and running at full speed, and with reproducer arm down as for reproducing, the reproducer arm should travel from one mark to the other in exactly one minute, which indicates that the cylinder makes 160 revolutions in one minute.
General Information

When large horn is used, requiring horn crane, the crane should be adjusted so that the small chain, from which the horn is suspended, hangs in a vertical position.

Sometimes the machine may repeat or tremble. This may be caused by the Record being loose on the cylinder, in which case a light push at the end of the Record will fasten it. Or the reproducer weight may be caught; in this case raise reproducer arm (Q) and drop it again gently. This also happens when the machine is set on a table or other surface that is not perfectly level, which allows the reproducer weight to lean toward the lower side. It is therefore important that the machine should be set on a level surface.

If the machine should not run freely, apply a drop of oil to centers (H) of cylinder shaft and feed screw centers (I). Back rod (A) and straight edge (SE) should also be cleaned and oiled; also look at belt, as it may have run on the flange of the pulley, which would retard the motion. After a time the belt may become too long, so that the reach of the idler cannot keep it at proper tension, then a new belt is required.

If gears become noisy, put a few drops of oil on the teeth.

Above all, keep the machine clean, as the mechanism will not work properly unless free from grit.

Always keep cabinet top on the machine when not in operation, to prevent dust from accumulating on working parts.

Do not leave the Record upon the cylinder (E) of the Phonograph for any length of time when the machine is not in use.

Handling Records

While not necessary, it is desirable to handle Edison Gold Moulded Records by inserting two fingers in one end and spreading the fingers apart.

Records may be kept in the felt-lined boxes in which they come packed, or may be kept in boxes or cabinets made for the purpose, which have perpendicular pegs at fixed distances to prevent Records from coming in contact with each other. Over these pegs they are placed with the title end up.