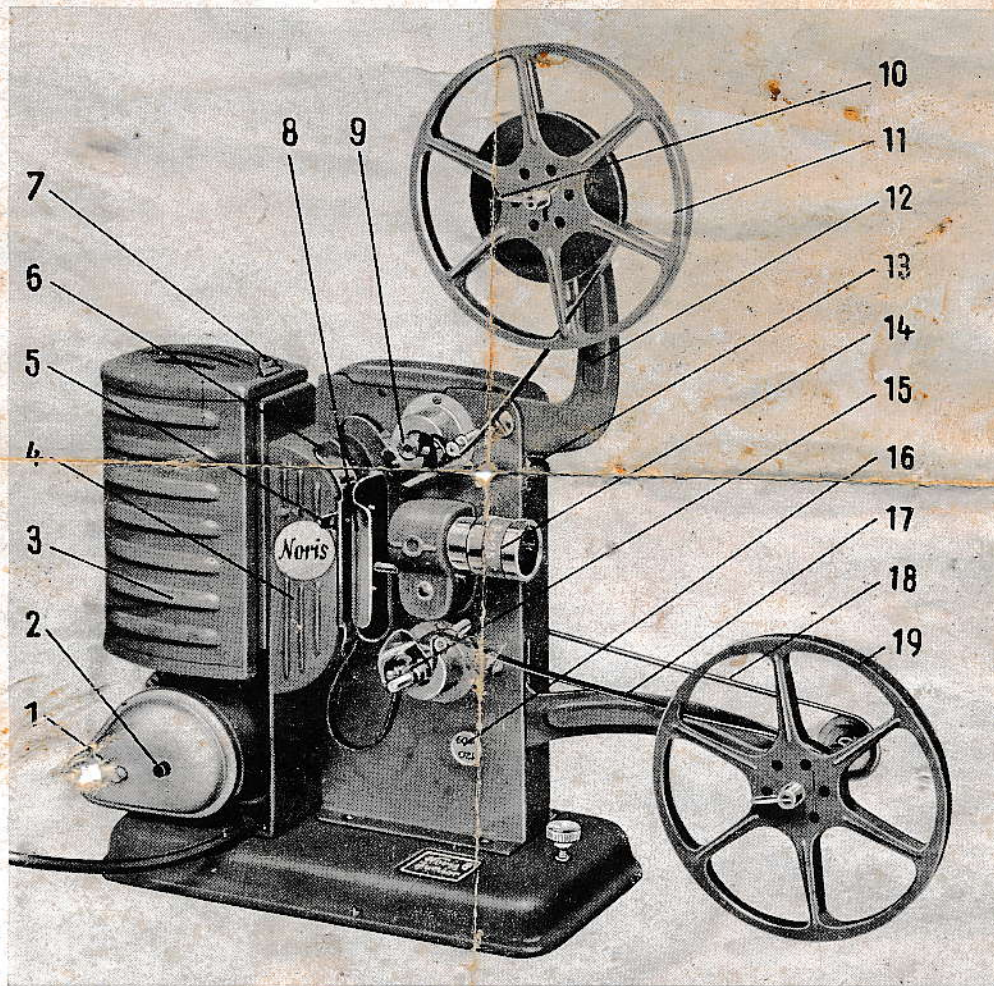


Keeping these instructions always at hand and studying all points carefully will help you spare much anger and displeasure.

Instructions for use of the "NORIS" Junior 8 mm Projector



Assembling the Projector: The Projector is to be assembled as illustrated. Put forward the lower spool arm (17) and extend it. The upper spool arm (12) serves in its resting position as a carrier. Exerting slight pressure on the lever (13), releases the upper spool arm (12) so that it can be extended for projection. The enclosed spring belt (18) serves for driving the lower spool (19) and must be connected with the pulley of the lower spool arm (17). For operating the Projector "hand turned" use the enclosed winch-handle by screwing it on to the spindle (15) which is provided with a thread.

Inserting the Lamp: Before inserting the lamp, make sure that the Projector is not connected with the electric circuit. Pressing down the small lever (7) and drawing upward, the lamp-house (3) can easily be taken off. Make sure that the projection-lamp corresponds with the power of your main. (Very important!) Insert the lamp into the socket; the two pins on both sides of the socket of the bulb must be inserted into the two slits of the fitting. Slightly pressing the lamp down and turning it to the right will secure good staying. However take great care not to bend the reflector or to alter its position; this might influence the brilliancy of the light. To replace the lamp-house, slide it down carefully until the small lever (7) clicks and grips tight.

Threading the Film: The Projector is delivered with one reel. The second reel always is supplied together with the film. Place the full reel of film (11) on to the spindle of the upper spool arm, line up the pin in the centre of the spindle with slit in the centre of the spool and gently push home the reel. To prevent slipping of the spool, secure by turning clip (10). In the same way attach the empty reel (19) to the lower spool arm. Take care that the film always runs on both reels in clockwise direction as picture shows. Using an empty reel with a capacity of only 60 metres, the button (16) should be turned to fig. 60 just readable; using however a reel with a capacity of 120 metres, adjust it to fig. 120. This button can easily be turned by slightly lifting the lower spool arm. - Pull out approx. 3 feet of the film from the reel. Before threading the film take care that the claw of the film-transport mechanism is withdrawn from the guideway (film channel) (6). This is the case if the red mark on the pulley of the Projector points forward in direction of the objective. The film channel being made free now, lay the film on to the guiding roll, exactly as picture shows and place it from sideways under the upper transport mechanism between sprocket-wheel (9) and glide-wheel, arounding the perforation of the film into the teeth. Having formed a loupe, take the film with both hands corresponding to the length of the film channel, stretch it and bring it from sideways into the film channel. The film channel can be made open wider by pressing off the springy side plate (8); thus the film can easily be inserted into its guidance. Having done this, form again a loupe and place the film into the lower transport-mechanism (15) as described above. Then fasten the film in the centre of the lower reel. The machine now is ready for projection; but make sure by either carefully turning the handle or the main driving wheel, that the film is properly transported and the loupes near top and bottom of the guideway (film channel) remain in the same position whilst operating the machine. The film must be transported by jerks through the film channel (6) without vibration of the springy side plate (8).

Connecting Mains Supply: Before connecting the Projector to your mains supply, make sure that the lamp as well as the motor (indicated at the frame of the motor) have the correct voltage. The black switch button (2) is for operating the motor, the white button (1) for lighting the lamp. The white knob at the back of the motor controls the speed from 16—24 pictures per second.

To avoid fusing of the bulb prevent the machine from shocks. Keep it in an absolute steady position whilst projecting.

Placing the Projector and Projecting: Put the machine on a table mat to prevent slipping, also to avoid heating or scratching of the table, facing the objective at a height approx. to that of the middle of the screen. The lesser the distance from the screen the smaller the picture, but the greater the brightness. A distance of 3 metres from the screen gives a picture 54 x 40 cm, a distance of 4 metres enlarges the size of the picture to 72 x 54 cm. Smooth white paper is quite sufficient for projecting. Desiring pictures more brilliant, use our special projection screen.

Focussing the Picture: To focus the picture on the screen, twist the objective (14) forward and backward until the image on the screen is sharply defined. To control the edges of the picture frame, a small lever (5) is mounted next to the film gate and works up and down until the picture is in the right position.

Viewing the Film backwards: To achieve a particularly astounding cinematographic effect the film can also be projected when transported backwards. Take off spring belt (18) from lower spool arm and connect with pulley on upper spool arm. Before using this way "motorised", it is necessary to cross over spring belt from motor to Projector.

Rewinding the Film: When a film has been projected, rewinding is necessary before it can be used again. It is advisable to complete the whole programme and rewind all the films together at the end. For this purpose connect the spring belt (18) crossed to the upper spool arm pulley, fasten the film on to the top spool and switch on motor (To save life of lamp, same should be switched off during rewinding the film).

Cleaning the Projector: Keep Projector clean in all parts with the help of a soft thin brush and a small flannel. Use also a small lens cleaner for rubbing the outside surface of the lenses. It is also advisable to clean from time to time the condensor surface. The front of the condensor is accessible when removing the protecting cover (4) sideways. The surface should be cleaned with the same care as the lenses. To clean the guideway (film channel) (6), the springy plate (8) can be taken out by lifting it sideways. Dust at the edge of the picture frame can be removed with the help of a thin brush. By taking out the film, but leaving the light on, the cleaning can be watched on the projection screen. It is however, very important not to scratch the surface of the gate and the film channel. It is advisable to occasionally use good machine oil in the little holes marked "red" for this purpose. For oiling the claw and shutter mechanism, the protecting cover (4) can be removed.

Using the Motor: The motor is universal A. C. & D. C. and works from 200—250 Volt. As explained before, the black button switches on the motor, the white knob at the back of the motor regulates the speed by turning same as required. Please note that the motor will run slowly until it is warmed up.

Re-Packing the Projector: Press down lever (7) at lamp house, remove same, and take off lamp. Replace lamp house, fold up lower spool arm and re-angle upper spool arm into "carrier" position. Then unscrew handle and take off empty reel. You will be able to put back the projector into the original cardboard-box or fibre carrying case as supplied by the makers.