

Rank Aldis

**TUTOR
PROJECTORS**

Instructions
for
operation



Setting up the Projector

1 TAKE OFF THE LAMPHOUSE COVER

Pull up at the front and unhook from the back.

2 INSERT CORRECT LAMP

Tutor 1000

Any of the following lamps with Trufocus G17q bases may be used in the Tutor 1000.

- 1000 watt, reference A1/199.
- 1000 watt, proximity reflector, reference A1/207.
- 750 watt, reference A1/196.
- 500 watt, reference A1/180.
- 500 watt, proximity reflector, reference A1/205.
- 300 watt, reference A1/178.
- 300 watt, proximity reflector, reference A1/201.

NOTE.—The voltage rating of the lamp must be the same as the supply to which the projector is connected.

Tutor 500

Any of the following lamps with Trufocus G17q bases may be used in the Tutor 500.

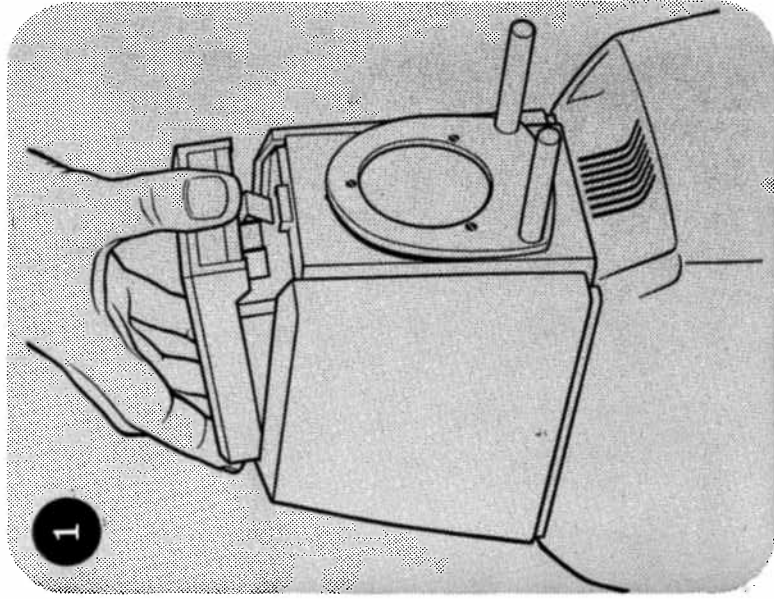
- 500 watt, reference A1/180.
- 500 watt, proximity reflector, reference A1/205.
- 300 watt, reference A1/178.
- 300 watt, proximity reflector, reference A1/201.

NOTE.—The voltage rating of the lamp must be the same as the supply to which the projector is connected.

* The key on the valve base peg must enter the keyway on the lampholder before the lamp is pushed home.

* Ensure that the metal base of the lamp is pushed down into firm contact with the moulded surface of the lampholder. In the correct position the metal tongues of the lampholder must clip over the three swellings on the lamp base.

† For changing the voltage on Dual Voltage models, see Appendix B.



3 REPLACE LAMPHOUSE COVER

Hook the tongue at the back of the cover into the hole at the back of the projector and push the front down until it clicks into position.

4 FIT THE SLIDE CARRIER

The plate carrying the two bars at the front of the projector can be swivelled round. Before fitting the Slide Carrier Assembly, make sure that the plate is in such a position that the two bars are at the bottom. Fit the Slide Carrier Assembly on to the bars with the sliding carriage facing away from the projector. Push the assembly on as far as it will go and tighten the knurled screw.

* The sliding carriage is fixed permanently in the Slide Carrier Assembly and should not be removed.

† For optional accessories see separate section later.

5 FIT THE LENS

Fit the Lens Assembly on to the bars at the front of the projector and push it on as far as it will go. Tighten the two knurled screws.

† For interchangeable lenses refer to the section on optional accessories.

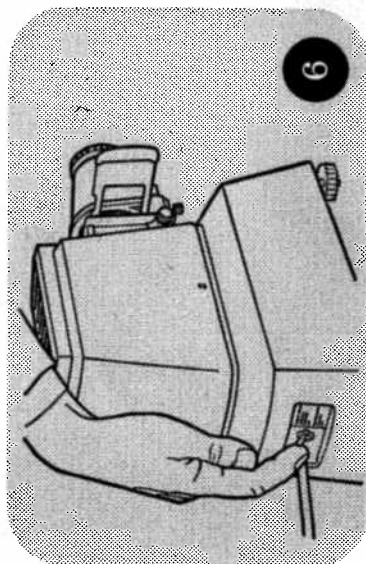
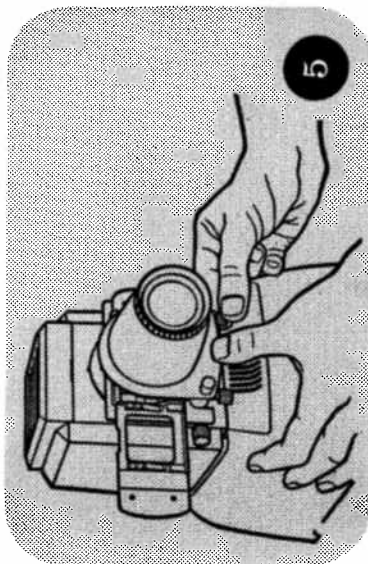
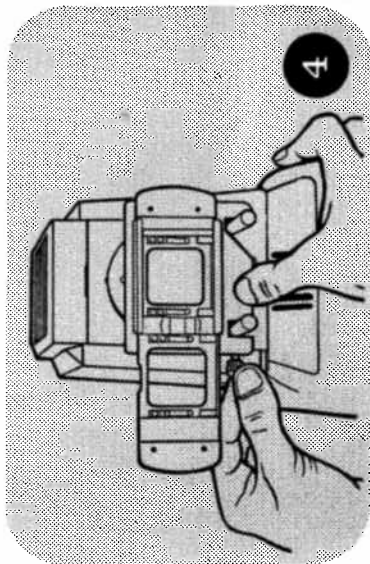
6 SET THE SWITCH AT THE BACK OF THE PROJECTOR UP AND PLUG INTO CORRECT VOLTAGE SUPPLY

The blower motor should then start running.

* Projector must only be operated from an alternating current supply of correct voltage and frequency. See rating label at back of projector.

† For connection of plug to mains cable, see Appendix A.

ALWAYS DISCONNECT MAINS ELECTRIC SUPPLY BEFORE REMOVING BASE COVER



Operating the Projector

7 SWITCH ON

Push the switch at the back of the projector down.

- ★ The lamp should light.

8 INSERTING SLIDES

Make sure the Slide Carrier Assembly is the right way up [see paragraph (4)].

Pull the slide carriage out as far as it will go, either side of the projector, thus enabling the slide to be pushed down into the pocket behind the springs. Then push the slide carriage in as far as it will go, thus exposing the second pocket the other side of the projector for the next slide, and so on.

- ★ The emulsion side of slides should face towards the front of the projector and the picture should be put in upside down.

- ★ The Slide Carriage will take card, metal or glass slides.

9 FOCUS THE PICTURE

Turn the front of the lens until the picture is sharply focussed.

10 TILT CONTROL

Turn the front feet to adjust the position of the picture on the screen.

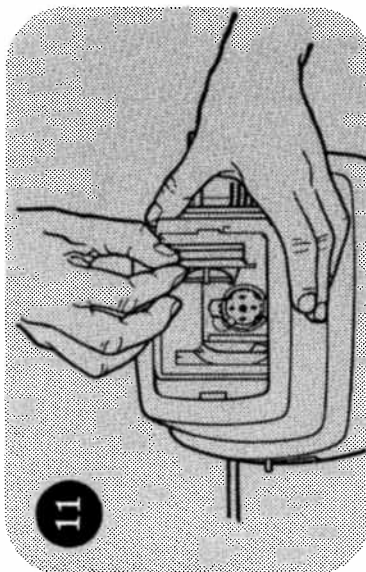
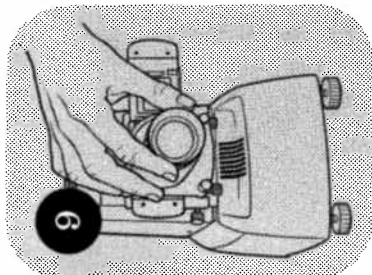
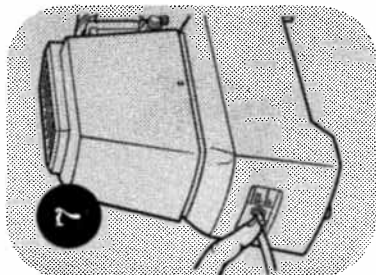
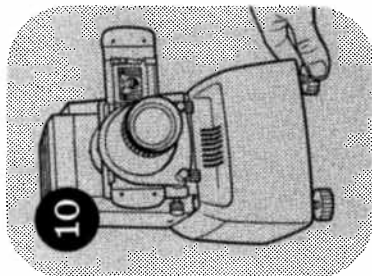
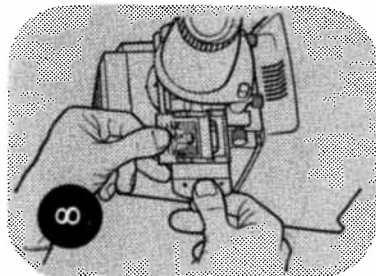
11 TO CLEAN CONDENSERS, HEAT FILTER AND MIRROR

Disconnect the mains electric supply cord. Take off the lamphouse cover, [see paragraph (1)] and take out the lamp by pulling it vertically upwards as gently as possible. Do not rock it from side to side.

The rear condenser and heat filter assembly plate can be removed but the front condenser and mirror must be cleaned in their fixed positions.

- ★ For cleaning, it is suggested that you use a lintless dry soft cotton cloth, such as a well washed handkerchief.

- ★ Make sure you return the rear condenser and heat filter assembly plate into its correct position.



Accessories and Alternative Lenses

The following accessories are available as optional extras and are fitted in place of the Slide Carrier Assembly referred to in paragraph (4). Full operating instructions are provided with each accessory.

I 35 mm. INDEXING FILMSTRIP ACCESSORY

This accessory is used for showing 35 mm. filmstrips. Masks for both 18 mm. $\times$ 24 mm. and 24 mm. $\times$ 24 mm. are provided and, as the whole of the lens carrier will rotate, both pictures taken across the filmstrip and along the length of the filmstrip can be projected.

II AIREQUIPT SLIDE CHANGER ACCESSORY

This attachment enables slides to be magazine loaded and changed semi-automatically. With this assembly an adaptor is required.

III ALTERNATIVE LENSES

5 cm. (2") f/3 with matched condenser.*

8.5 cm. (3.4") f/2.5 Aldis Anastigmat.

10 cm. (4") f/2.8 Aldis Anastigmat.

15 cm. (6") f/3.2 Aldis Petzval.

15 cm. (6") f/2.8 Aldis Anastigmat with lens panel.

20 cm. (8") f/3.8 Aldis Petzval with matched condenser and lens panel.†

25 cm. (10") f/4.7 Aldis Petzval with matched condenser and lens panel.†

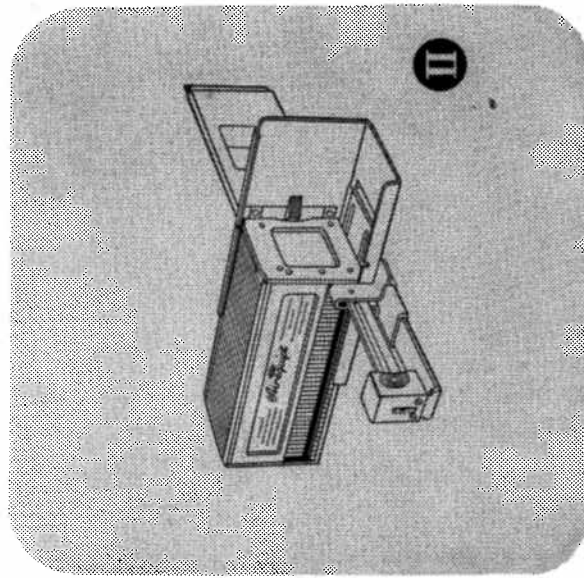
30 cm. (12") f/5.7 Aldis Petzval with matched condenser and lens panel.†

* A short lens cone, fitted in place of the lens assembly referred to in paragraph (3), is required for this accessory.

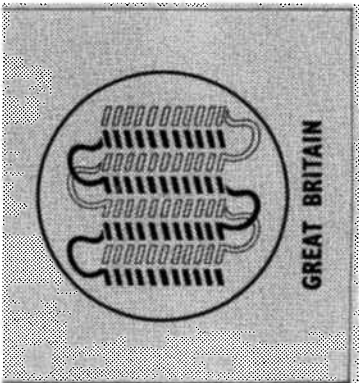
† It is advisable to use a special lens support in each case to prevent the bearer bars from being strained by the weight of the lens.



I



II



A

CONNECTION OF PLUG TO MAINS CABLE

If a plug is not already fitted and where standard 3-core cable with red, black and green covered wires is used, proceed as follows:—
Connect the red and black covered wires to the live terminals of a suitable plug. The green covered wire marked 'earth' is to be connected to the earth terminal. If the cable is not standard as described above, and you are in doubt, please consult a qualified electrician.

B

CHANGING VOLTAGE ON DUAL VOLTAGE MODEL

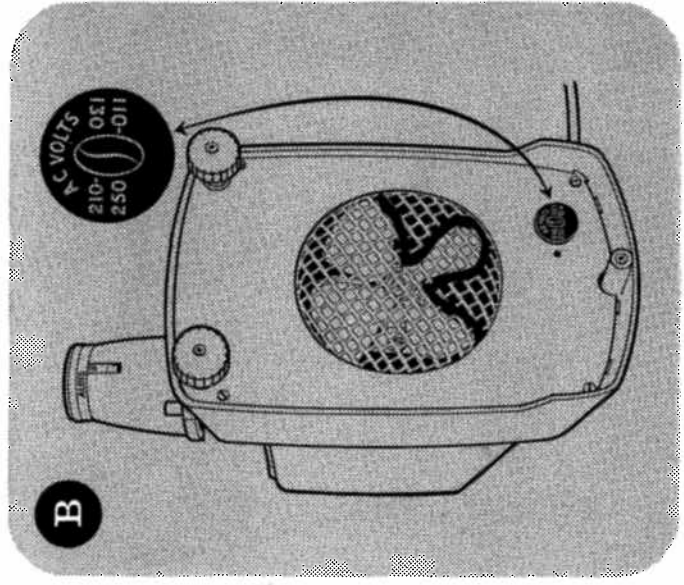
Remove the plug in the underside of the projector, turn it round to the correct voltage range and then insert it again.

APPENDIX

C

LAMP ADJUSTMENT

To obtain maximum and even illumination on the screen, it is necessary to fill the lens with an even and maximum amount of light. The position of the lampholder is adjustable so that the lamp can be moved up and down and from side to side in order to achieve this.



D

TO OBTAIN EVEN AND MAXIMUM ILLUMINATION

Put the pinhole slide which is provided (see sketch) into the slide carriage and place the plastic lens cap over the front end of the projection lens. With the lamp in the correct position in the lampholder [see paragraph (2)] switch on the projector. The position of the filament image, seen projected on to the lens cap, can be altered by adjusting the screws at either side of the lampholder by means of a screwdriver. The lamp is correctly adjusted when you can see, projected on to the lens cap, the largest area of filament coils that it is possible to obtain.

D

PICTURE SIZE

The relationship between picture size and projection distance is given by the following formula:—

$$\text{Screen Picture Size} = \frac{(\text{Projection distance} - \text{Lens Focal Length}) \times \text{Size of projected area of slide}}{\text{Lens Focal Length}}$$

For example:

Using a lens of focal length 8.5 cm. and projecting a 3.6 cm. wide transparency at 10 feet (305 cm.), the width of the picture on the screen will be approximately

$$\frac{(305 - 8.5) \times 3.6}{8.5} = 125 \text{ cm. (4 ft.)}$$

a Always disconnect the mains electric supply cord before removing the base cover.

b The projector must always be operated from an alternating supply and the voltage of the supply must be the same as that indicated on the rating label at the back of the projector.

c The lamp must not be greater than 1000 watts in the case of the Tutor 1000, or 500 watts in the case of the Tutor 500. To ensure the maximum lamp life, it is recommended that the projector is not moved whilst the lamp is switched on.

d Make sure that both Lens Assembly and Slide Carrier Assembly are pushed on to the bars as far as they will go.

e Do not lift or attempt to carry the projector by its Lens Assembly. Carry it by holding its base.

f Avoid touching any glass surfaces and keep the projector free from dust by always keeping it covered when not in use. If a lens requires cleaning, use a camel hair brush or clean soft cloth.

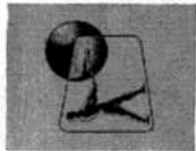
g Never attempt to take the projection lens to pieces, clean only the outer surfaces.

h Care should be taken to ensure that transparencies remain dry and free from dust.

The gelatine of slides just back from processing contains quite a high percentage of water. If you wish to mount these slides between cover glasses the water should be allowed to evaporate or to be dried off in a desiccator. A sealed tin containing activated Silica Gel would do this: there is then no danger of moisture getting trapped. If moisture does get trapped within the bound slide this could result in buckling of the transparency which in turn could lead to permanent damage.

**ALWAYS DISCONNECT MAINS ELECTRIC SUPPLY
BEFORE REMOVING BASE COVER**

PLEASE REMEMBER



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RANK AUDIO VISUAL

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Manufactured by: **RANK ALDIS, GREAT BRITAIN**

Part No. 6183/040562

PRINTED IN ENGLAND