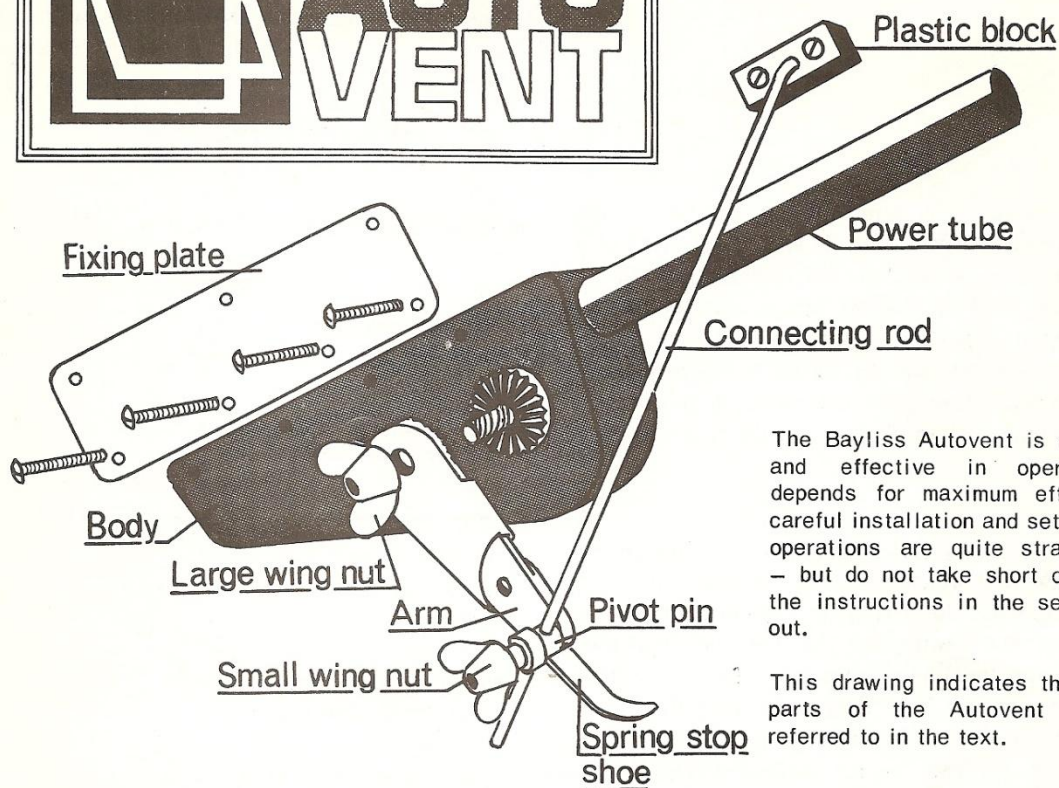


## SETTING INSTRUCTIONS Mk I and Mk II UNITS



The Bayliss Autovent is very simple and effective in operation, but depends for maximum efficiency on careful installation and setting. These operations are quite straightforward – but do not take short cuts, follow the instructions in the sequence set out.

This drawing indicates the principal parts of the Autovent which are referred to in the text.

### ★ Notes before installation

The Autovent may be fixed to either side of the ventilator which means that the power tube may point upwards or downwards (fig. 1). The plastic block on the connecting rod is fixed to the side of the ventilator and the body of the Autovent is attached to the frame-work of the vent opening.

It is most important that the connecting rod and arm move freely, and this means that they must work in line with each other. Figures 2-5 show four ways in which the Autovent can be mounted to different types of glazing bars and vent designs to achieve this 'in-line' principle.

FIG. 1

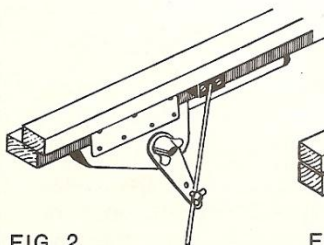
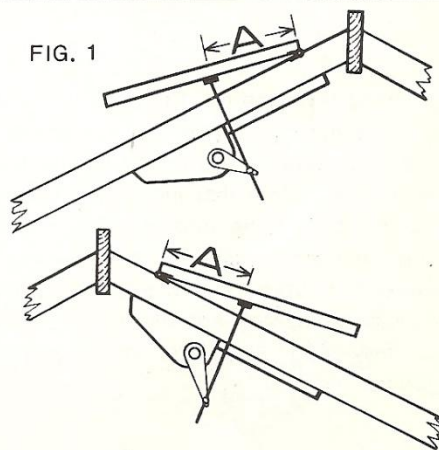


FIG. 2

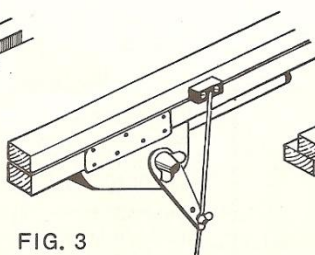


FIG. 3

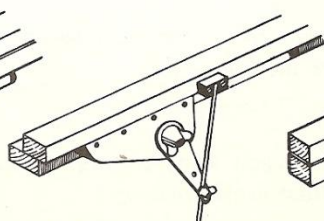


FIG. 4

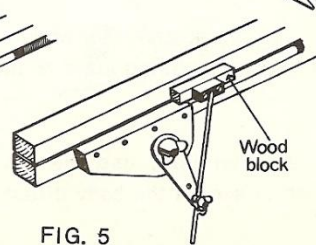


FIG. 5



## SETTING YOUR AUTOVENT

Setting is best undertaken in the evening when variations in temperature are not too rapid. To set the Autovent you **must** wait until the temperature of the unit is steady at the temperature at which you wish the vent to start opening – we recommend 60°F.

Fasten a thermometer temporarily to the power tube, a strong elastic band is perfect for the purpose, cover the tube and thermometer from direct sunlight using a piece of paper folded tent-like and wait until the correct temperature is reached, then remove the thermometer and proceed as follows.

Disconnect the connecting rod from the arm, tighten the larger wing nut and pull the arm round in a clockwise direction until a 'springy' resistance is felt. The maximum force you can exert with two fingers and thumb is sufficient – see figure 9. Do not pull on the Spring Stop Shoe!

Loosen the larger wing nut, lift the vent and slip the connecting rod through the hole in the pivot pin. Now with the vent supported about  $\frac{1}{4}$ " open, position the arm so that it lies between the lines on the label and tighten both wing nuts. Take away the support from the vent which may now shut completely. If it does so, slacken **only the larger wing nut** and move the arm round one notch anti-clockwise and retighten. Repeat this procedure if necessary until the vent stays slightly open with all its weight taken by the unit. It is important that when setting is completed the arm should lie between the lines on the label when the vent is just open (fig. 10).

Check that the vent is free to the maximum movement of the Autovent arm i.e. rotate the arm by one hand, supporting the vent with the other until the connecting rod comes into contact with the spring stop shoe. Reduced vent movement can be obtained by carefully removing the spring retainer from the pivot pin and inserting this pin through the hole in the arm further from the narrow end. Refit the spring retainer to the pivot pin. Now repeat the setting procedure.

**DON'T FORGET TO REMOVE THE STAY FROM YOUR VENTILATOR – IT MAY DAMAGE YOUR AUTOVENT IF IT IS SECURED.**

**FINALLY** – It is vital that sunshields should be tacked into position to protect the power tube from direct sunlight, as this ensures that the unit acts on true greenhouse temperature. Two pieces of alloy sheet are supplied which should be bent to a suitable shape and tacked in position on each side of the tube. A gap of at least  $\frac{1}{8}$ " should be left between the sun shields and the tube to allow free circulation of air.

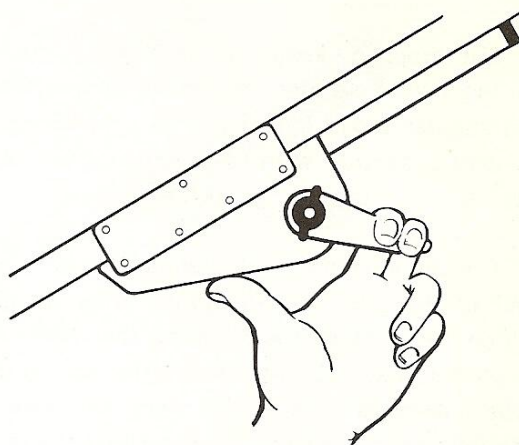


FIG. 9

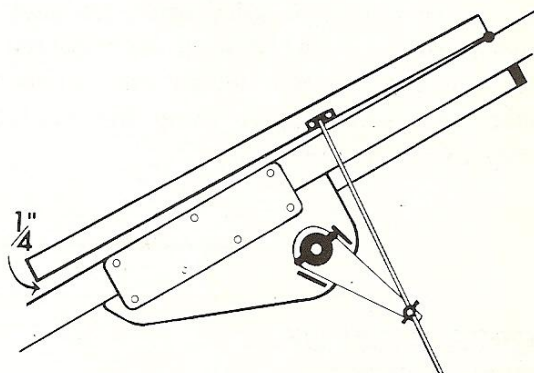


FIG. 10

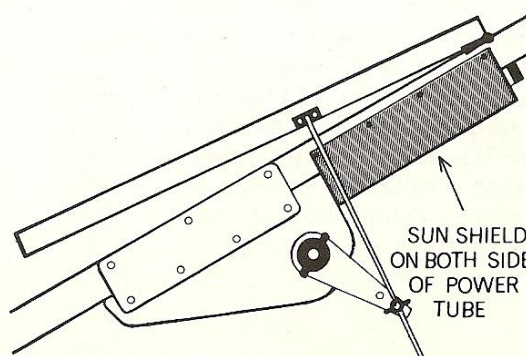


FIG. 11

## FIXING INSTRUCTIONS

### Wood framed roof ventilators

The first step is to determine the position of the plastic block on the vent side. It should be fitted at a point where the weight on the connecting arm is between 5 lbs. and 15 lbs. We recommend 10 lbs. for greatest sensitivity. Use a kitchen scale or spring balance to check the load as shown in figure 6. Note that the distance from the vent hinge to the plastic block (Dimension 'A' in Fig. 1) should never be less than 5 inches.

Use the two middle sized wood screws to fasten the plastic block and connecting rod in position. This should be detached for fixing by loosening the small wing nut and withdrawing the rod from the pivot pin. You will notice that the plastic block is drilled both ways so that it can be fixed side on or from below. It is advisable to fix from below where this is possible as the weight of the vent is not taken entirely by the wood screws.

Having fixed the plastic block to the vent, close the vent and refer to figure 7. This shows how the body of the Autovent is positioned on the framework of the vent opening. Note that the edge of the body is in line with the end of the plastic block. If the fixing plate is to be used attach this to the body with the four screws and nuts – the nuts are intended to fit tightly into the hexagonal sockets in the back of the body and they will pull into these as the screws are tightened.

The three shortest wood screws can then be used to fasten the fixing plate to the framework.

Alternatively, use the longest wood screws if you wish to secure the body direct to the framework.

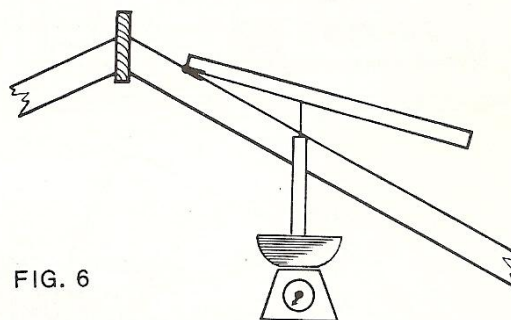


FIG. 6

Note: measuring vent weight using a nail in the end of a piece of wood to prevent slipping and breaking glass.

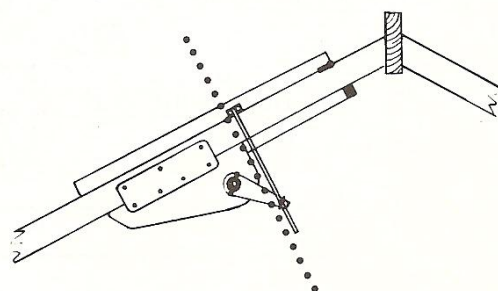


FIG. 7

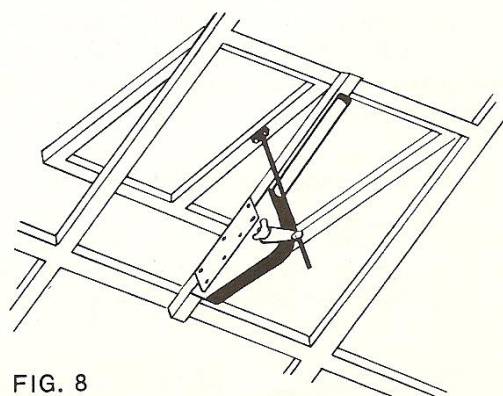


FIG. 8

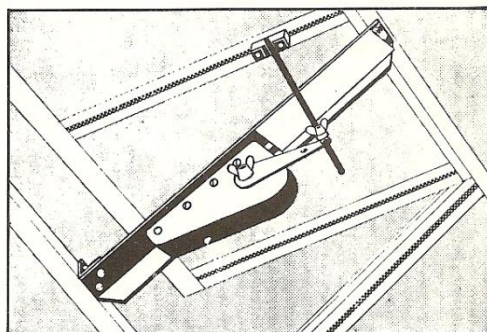
If a centre glazing bar is already fitted to the vent it is sometimes worthwhile to attach the plastic block and connecting rod to this and to install an additional wooden bar across the vent opening, parallel to the glazing bar on which the body can be mounted (fig. 8). This method gives central lift and avoids twisting of wide vents.



## INSTALLATION IN MINIBRITE GREENHOUSES

Slip cropped-headed  $\frac{1}{4}$ " whit bolts into slot in the centre section of ventilator and fasten rectangular block at the end of connecting rod to centre section with the middle of the block  $4\frac{1}{2}$ " from the upper edge of the window.

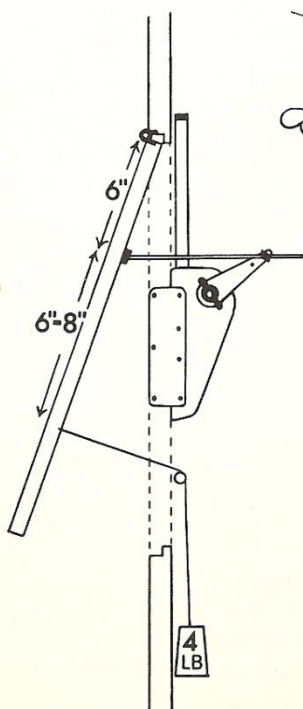
Fix the aluminium alloy angle bracket to the end of the piece of aluminium alloy angle to which the unit is fixed, using the 2BA round headed screws provided. Now offer up the unit, tube uppermost, under the vent and slip the connecting rod through the pivot pin at the end of arm. Position the unit so that the arm and connecting rod are in line. Using the holes in the upper end of the aluminium alloy angle and in the aluminium alloy angle brackets as guides drill  $\frac{3}{16}$ " dia. holes in the ridge and in the vent support. Now fasten the unit to the ridge and vent support using the two 2BA screws and nuts provided.



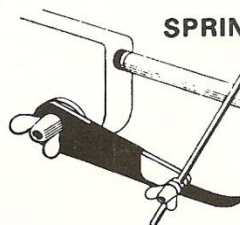
Proceed with setting as printed overleaf. N.B. When the Autovent is set to start opening the ventilator at  $60^{\circ}\text{F}$  or below and when temperatures in excess of  $90^{\circ}\text{F}$  are likely to occur inside the greenhouse, it is advisable to use the hole nearer the centre of the arm. This is because the upward movement of the Minibrite vent is limited on the hinge.

### OPERATION OF SIDE VENTS

As the Mk. I and Mk. II units are designed primarily for fitting to roof vents which close under their own weight on cooling, it follows that an artificial load must be applied to a side vent to obtain the same operation. This can easily be achieved as shown in the adjoining illustration using suitable pulley and weight obtainable at most ironmongers.



### SPRING STOP SHOE



This is fitted to Mk. I and Mk. II units. It prevents the arm rotating past the in-line position with the connecting rod. Should operate only when temperature exceeds  $105^{\circ}\text{F}$ .

Manufactured by  
**BAYLISS  
PRECISION  
COMPONENTS LTD.**

**COMPTON  
ASHBOURNE  
DERBYSHIRE**