

## INSTRUCTIONS FOR INSTALLING THE CONCERTINA LOFT LADDER

Loft entrance must not be less than 14" wide by 18" long and the trap door should be hinged flush with the ceiling using 3" butt hinges, or piano hinge. The door should be constructed in strong, but light material and we recommend 3/4" block board as being ideally suitable. Strips of a 1/2" thick wood should be fixed to the sides of the trap opening for the door to close against and to form a draught excluder. The joist face, on which the ladder hinges will be fixed, should be flat and provide a good anchorage for the screws.

No installation difficulties should be encountered providing the following instructions are carefully carried out.

1. Make a cut-out in the edge of the trap door, opposite the hinges and on the centre line in accordance with (Fig. 1). Fix the trap door in position as described above.
2. Offer catch 'A' to the trap door and mark the position of the three fixing holes. Drill through the door using a 5/32" diameter drill. Fix the catch to the door using the three 4 BA x.11/4" countersunk head screws, fit the back plate and square nuts to the screws on the top face of the door and tighten.
3. Sink catch plate 'B' (Fig. 2) into the architrave to line up with the catch and screw in position using the two No. 4 x1 1/4" countersunk head wood screws.
4. Extend the ladder and ensure that the locking bars 'C' (Fig. 3) are fully locked. Now stand the ladder, with thumb tags of the locking bars facing you, and with the hinge plates 'D' (Fig.3) resting against the face of the joist, so that the ladder is approximately in the centre of the trap opening. NOTE: Do not stand on ladder until the hinge plates are screwed in position.
5. Screw the hinge plates to the joist using the six plated No. 12 x 1 1/8" round head wood screws provided, so that the bottoms of the plates are 1" above the ceiling level or 1/4" above the top face of the trap door. Ensure that the plates are vertical when viewed from the front.
6. If the treads are not level, remove the ladder from the hinge plates and refit to the hinge holes, which give the best results, ensuring that the pivot bolts, nuts and spacers are fitted in the correct sequence. If so desired, any surplus plate above the pivot holes chosen may be cut off using a suitable hacksaw.
7. Screw the support hook 'E' (Fig. 3) to the face of the joist on the centre line using two zinc plated No. 6 x 11/4" countersunk head wood screws provided.
8. Fold the ladder up and rest the bottom rod on support hook.
9. Fit the pole hook to the flat end of a 1" diameter broom stave and screw in position with the two remaining zinc plated No. 6 x 11/4" countersunk head wood screws provided. Fit rubber end pad to the other end.

## OPERATING INSTRUCTIONS TO LOWER THE LADDER

1. Release the catch with the spike of the rubber pole pad - supporting the weight – lower the trap door carefully until it reaches hand level, then remove the pole and allow the door to hang vertically.
2. Place the 'V' of the pole hook in the slot in the centre of the 3rd tread from the bottom, and lift the ladder off the support hook. Allow the ladder to descend to a point where it can be lowered to the ground by hand, make sure the locking bars are engaged by applying pressure to the thumb tags. The ladder is then ready for use.

## TO CLOSE THE LADDER

Release the locking bars, and raise the ladder by hand to a height where the 'U' of the pole hook will again engage with the slot in the tread. Using the pole, return the ladder to its housing, resting the bottom rod firmly on the support hook. Close the trap door, firstly by hand as far as possible, after which using the poles with the rubber end pad held firmly against the trap door. It is important to ensure that the trap door is completely closed and the catch securely engaged before the pole is removed.

