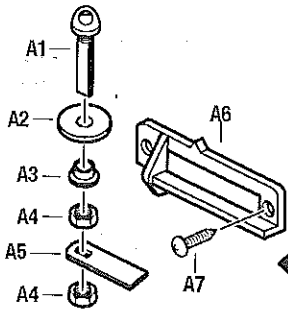


Installation and Operating Instructions

Read Carefully Before Installation

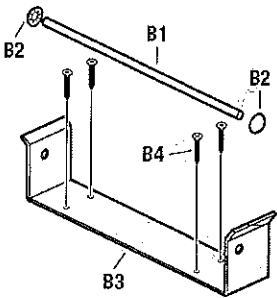
Please check you have all components listed (tick boxes)

TWIST CATCH ASSEMBLY



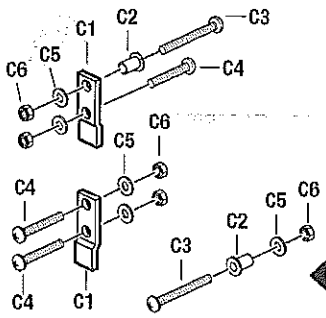
- A1 Twist catch pivot pinx1
- A2 Large twist catch collar ...x1
- A3 Small twist catch collar ...x1
- A4 Nut (M10)x2
- A5 Twist catch leverx1
- A6 Catch location bracket ...x1
- A7 Screw (19mm)x2

ROLLER BAR ASSEMBLY



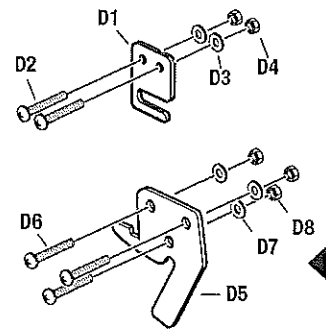
- B1 Roller bar x1
- B2 Roller bar end cap x2
- B3 Roller bar bracket x1
- B4 Screw (4mm x 40) x4

STOP ASSEMBLIES



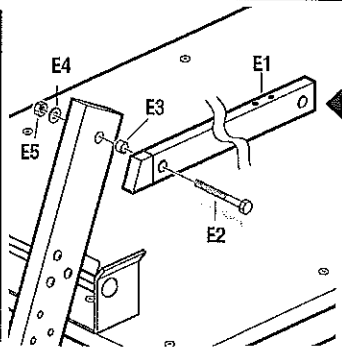
- C1 Stop x2
- C2 Shoulder washer x2
- C3 Screw (M6 x 45mm) ... x2
- C4 Screw (M6 x 35mm) ... x3
- C5 Washer (M6) x5
- C6 Nut (M6) x5

ANCHOR & LOCATION PLATES



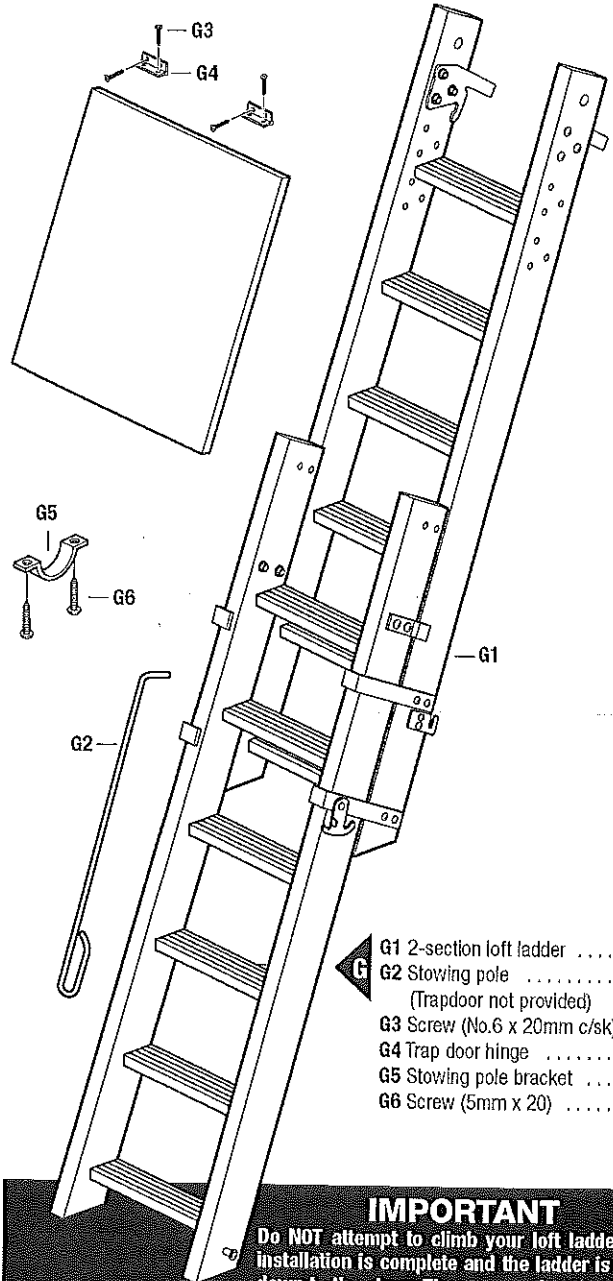
- D1 Anchor plate x2
- D2 Screw (M4 x 30mm) ... x4
- D3 Washer (M4) x4
- D4 Nut (M4) x4
- D5 Location plate x2
- D6 Screw (M5 x 30mm) ... x6
- D7 Washer (M5) x6
- D8 Nut (M5) x6

POWER ARM ASSEMBLY



- E1 Power arm x2
- E2 Bolt (M8 x 65mm) x2
- E3 Spacer x2
- E4 Washer (M8) x2
- E5 Nut (M8) x2

- F1 Spring house assembly .x1
- F2 Screw (4mm x 40) x6
- F3 J bolt (M5) x2
- F4 Washer (M5) x2
- F5 Nut (M5) x2

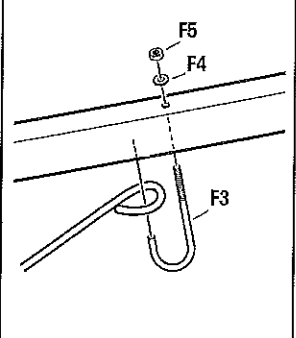
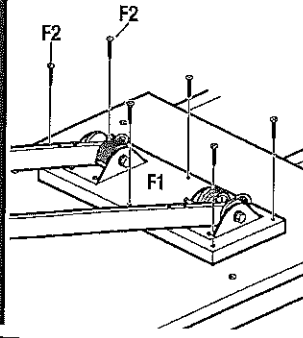


- G1 2-section loft ladder x1
- G2 Stowing pole x1
- (Trapdoor not provided)
- G3 Screw (No.6 x 20mm c/sk) x8
- G4 Trap door hinge x2
- G5 Stowing pole bracket ... x1
- G6 Screw (5mm x 20) x2

IMPORTANT

Do NOT attempt to climb your loft ladder until installation is complete and the ladder is pulled down to the stops. Then ensure that the locking catch is engaged.

SPRING HOUSING ASSEMBLY



Safety Instructions

Before commencing the installation or operation of this product, read these instructions carefully and completely, noting in particular the instructions regarding Safety (below).

The Abru 'Timber Sliding' loft ladder is perfectly safe when correctly installed and will support a weight of up to 150 Kgs. (23.6 stones). Please observe the following safety procedures:

- Do not attempt to climb your Abru loft ladder until installation is complete.
Use a second ladder to gain access to the loft while carrying out the work. Ensure that this is stable.
- If in any doubt when building or adapting the loft opening, seek expert advice or use a suitably qualified joiner or builder.
- During installation and operation, follow all instructions step by step to ensure your safety and the optimum performance of the loft ladder.
- Observe normal safety precautions when working in the loft space. Place weight only on the main ceiling joists. Do not drill above head height. Avoid contact with electrical wiring and service pipes.
- Ensure someone else is on the premises and knows where you are in case of an accident.
- Do not modify any component supplied with this product or substitute any loft ladder component with anything other than genuine Abru replacement parts.
- When installation is complete and before using the ladder, make sure that it is pulled fully down and that both feet are resting firmly on the floor and the catch is engaged.

Minimum space requirements:

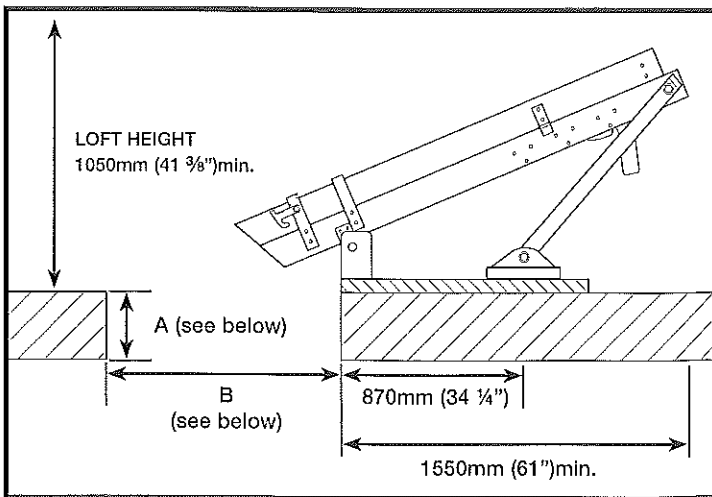
When stowed, the ladder will occupy a space approximately 1550mm (61") x 500mm (19⁵/₈") and in the loft a minimum height of 1050mm (41³/₈"). Minimum hatch opening width 450mm (18"). Ensure that the ladder is not obstructed by items stowed in the loft.

Tools required:

- Stepladder ● Bradawl ● Saw ● Drill and 13mm bit and 2mm pilot hole bit ● Crosshead Screwdriver: small and medium ● Adjustable spanner ● Pencil ● Lever to prise off any support battens
- Tape measure/Ruler ● Workbench ● Small hammer

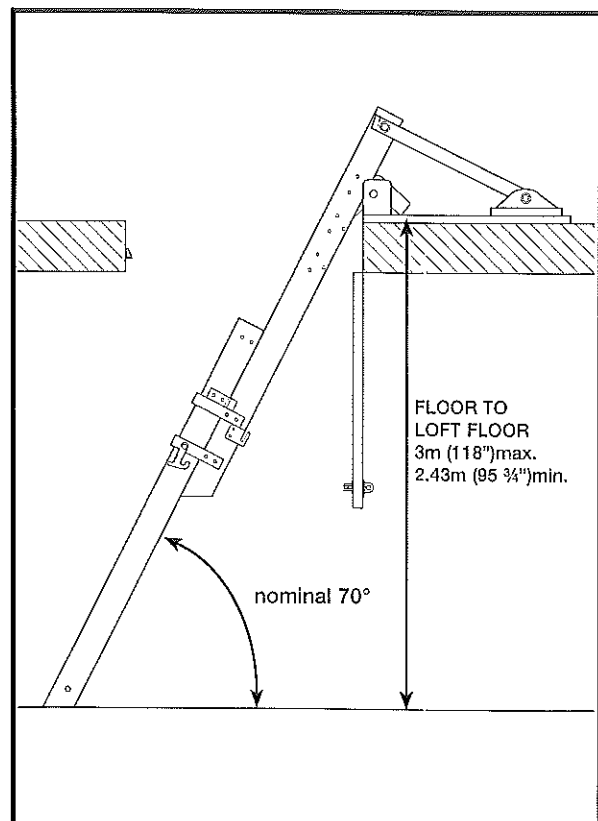
If any components are missing, contact the Abru Sales Dept. Tel: (01773) 525700

Stowed requirements



A = For depth of hatch opening of	B = Minimum length of hatch opening is
102mm (4")	570mm (22 1/2")
127mm (5")	590mm (23 1/4")
152mm (6")	603mm (23 3/4")
178mm (7")	616mm (24 1/4")
203mm (8")	628mm (24 3/4")

Deployed requirements



Adapting the trapdoor

The Abru loft ladder is suitable for a loft opening let flush into the ceiling, having a hinged trapdoor opening downwards, with a suitable fastener to keep the hatch firmly shut. If the trapdoor does not hinge downwards,

or is not hinged at all, you will need to adapt or replace it so that it does. The parts needed are enclosed. **Refer to the table on page 1 for the hatch depth and length.**

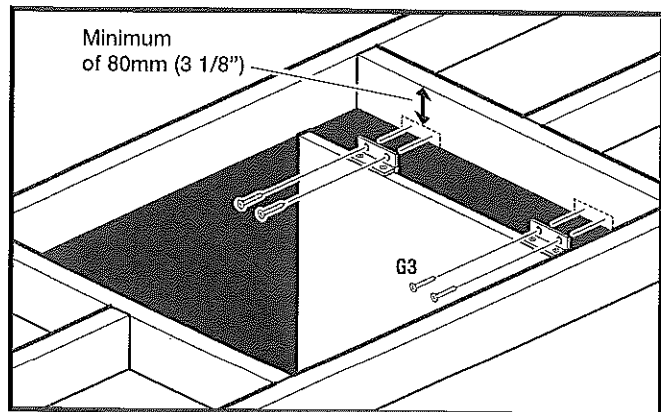
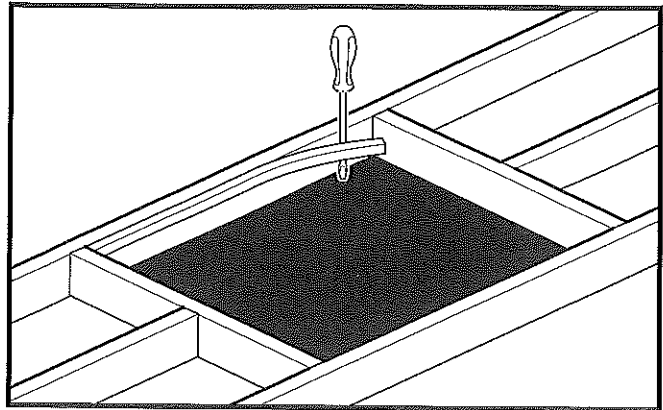
Hanging the trapdoor

1 (Minimum hatch size 450mm x 570mm / 18" x 22 1/2") If you need a new trapdoor, use 20mm (3/4") max. blockboard. Chipboard is not suitable. Use the existing cover as a template to cut out the new piece, ensuring a slightly loose fit all round (maximum 4mm gap). Your DIY store may be able to do this for you.

Remove the existing trapdoor and hinges. Prise off any support battens so that the four faces of the loft trap frame are sheer (flat).

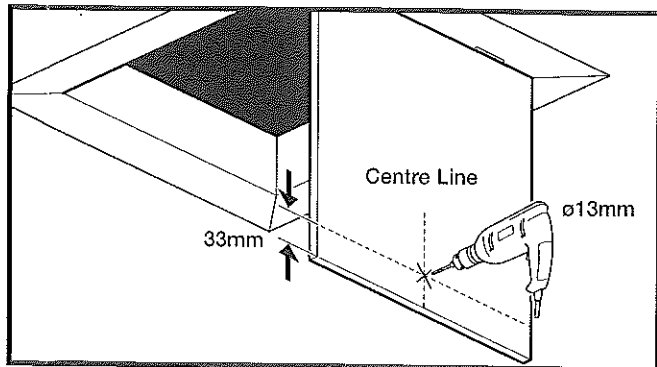
2 Screw the hinges (**G4**) provided to one edge of the trapdoor using four 20mm (3/4") counter sunk screws (**G3**). For extra permanence, fill the screw holes with wood glue.

Offer up the hinges to the face of the frame on the same end as you intend setting the ladder, and fix. Ensure that there is at least 80mm (3 1/8") clearance between the top face of the trapdoor and the top edge of the framework.



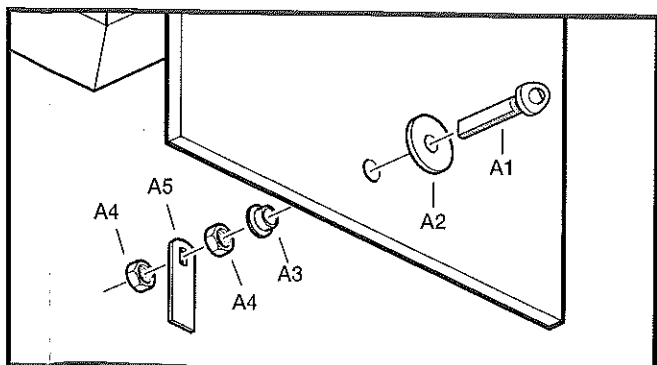
Fitting the twist catch

1 Find the mid-point of the trapdoor edge opposite to the hinged side. This will give you your centre line (see diagram). Mark with a pencil. Measure exactly 33mm in from the edge of the trapdoor. Drill a 13mm hole in the centre and sand off any rough edges.



2 Push the two plastic collars (**A2 & A3**) through either side of the hole. The wider of the two collars (**A2**) should be on the underside of the trapdoor. Then push the pivot pin (**A1**) through from the underside and secure above with a nut (**A4**). The pivot pin should still be able to turn.

Position the twist catch lever (**A5**) over the pivot pin and secure it, using the second nut (**A4**). Make sure the pivot pin can still turn.



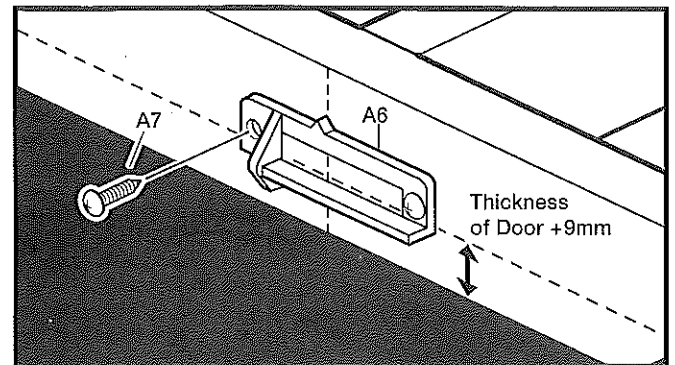
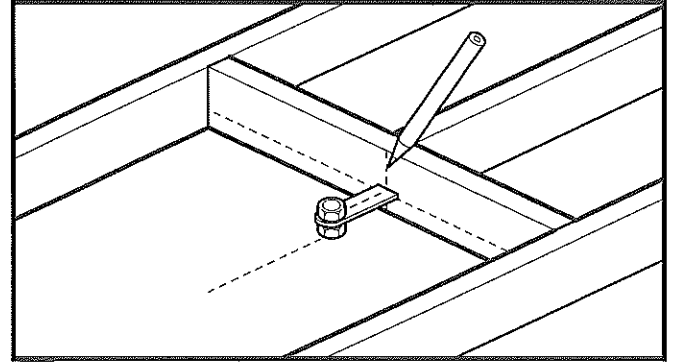
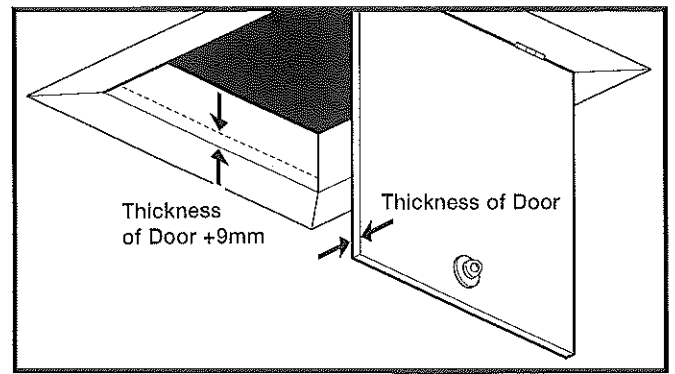
Fixing the location bracket

When turned to the correct position, the locking lever will engage in the location bracket to hold the trapdoor shut. Fix as follows:

1 Measure the thickness of the trapdoor, add 9mm to this and on the closing edge of the hatch opening draw a line this distance up from the bottom edge parallel with the opening.

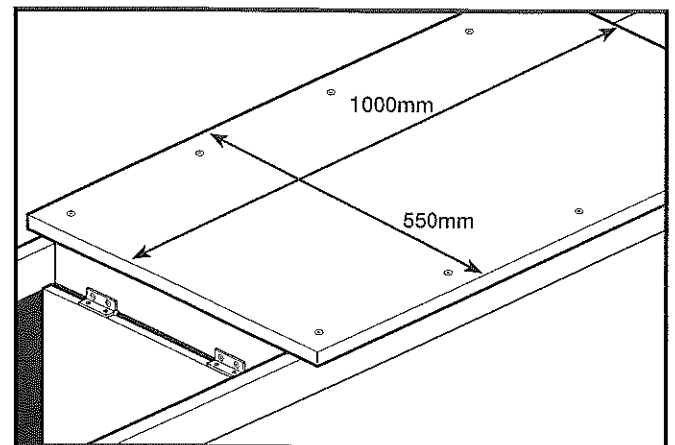
2 Close the trapdoor and mark a vertical line on the inside of the trapdoor frame corresponding with the centre line of the trapdoor twist catch.

3 Position the location bracket (**A6**) as shown in diagram, along the horizontal line. Match up the indent mark on the bracket with the vertical centre line. Make guide holes with a bradawl and fix, using two 19mm wood screws supplied (**A7**).

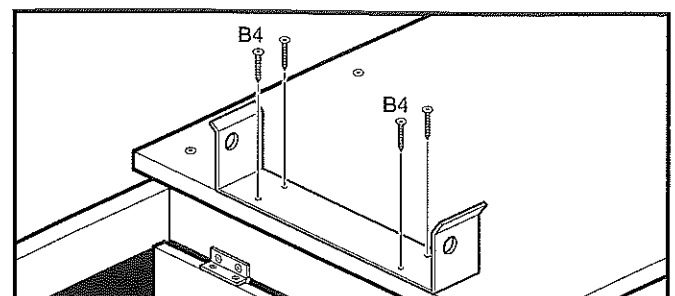


Fitting the roller bar

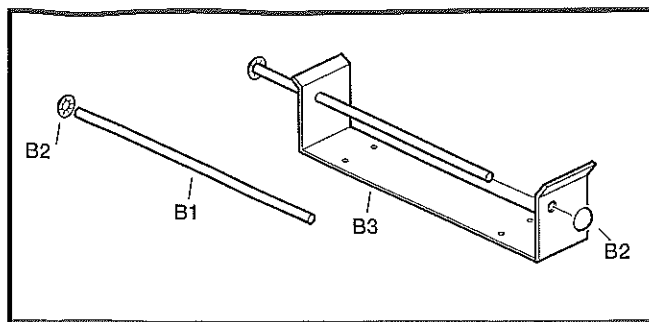
1 Before fixing the roller bar bracket you must be sure that the loft floor where the ladder assembly is to be fixed is substantial. An extra board to strengthen the loft area should be fitted (a minimum of 20mm thick, 550mm wide and 1000mm long plywood. Chipboard is not suitable).



2 IMPORTANT: The bar side of the roller bar bracket **MUST** be nearest to the hatch. Fix the bracket centrally using four 40mm screws (**B4**) study diagram closely. The edge of the bracket must be positioned right up to the edge of the hatch opening.

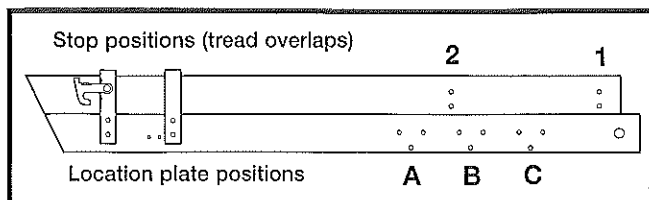


3 Using a small hammer, tap a roller bar end cap (B2) onto one end of the roller bar (B1). Slide the roller bar through the holes on the roller bar bracket (B3) and fit the remaining roller bar end cap (make sure they are both fitted securely).



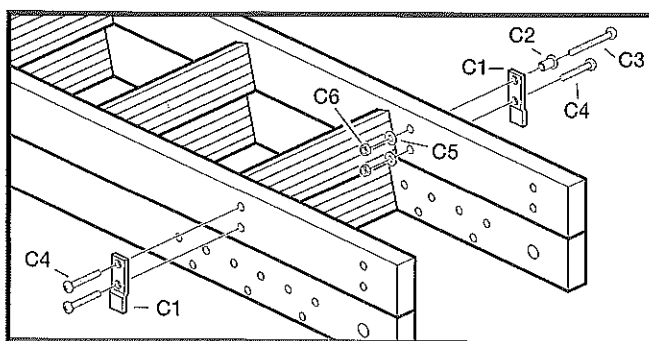
Assembling the ladder and fittings

Measure the floor to loft floor height and use the table below to determine the correct positions for the stops (1 or 2) and the location plates (A, B or C).

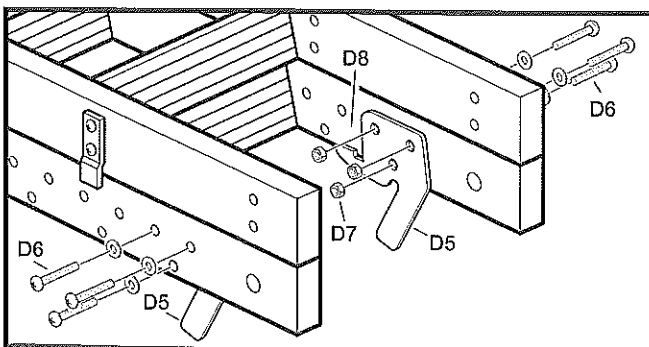


Tread overlaps	Floor to loft floor height (m)	Locking brackets position	Side stops position	Tread overlaps	Floor to loft floor height (m)	Locking brackets position	Side stops position
2	2.43 to 2.51	A	2	1	2.70 to 2.78	A	1
	2.52 to 2.59	B			2.79 to 2.86	B	
	2.60 to 2.69	C			2.87 to 3.00	C	

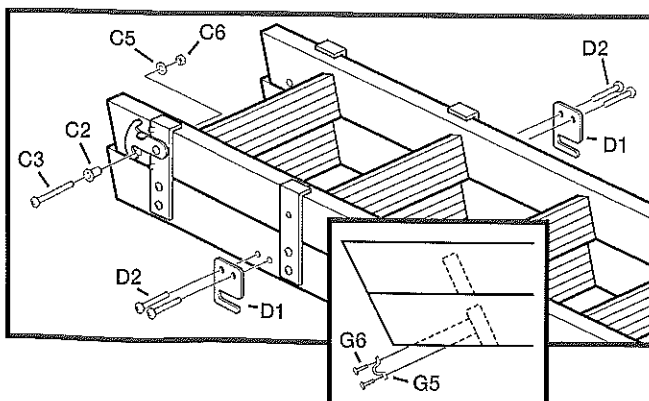
1 (At top of ladder) fit the stops (C1) to the ladder sides in their required positions as shown (position 2 shown). The near side (top right hand side) stop (C1) is fixed using 35mm screws (C4), washers and nuts (C5 & C6). On the opposite side the top screw should be a 45mm screw (C3) with a shoulder washer (C2) in-between the screw and the stop. The bottom screw is a 35mm screw (C4) with both screws being attached using washers and nuts (C5 & C6).



2 Fit the location plates (D5) in their required positions (position C shown) using 30mm screws (D6), washers and nuts (D7 & D8).



3 At the bottom of the ladder fit the remaining shoulder washer (C2) using 45mm screws (C3), washers and nuts (C5 & C6). On either side of the ladder fit an anchor plate (D1) using 30mm screws (D2), washers and nuts (D3 & D4). Fit the stowing pole bracket (G5) to the underside of the bottom tread on the lower section of ladder using 20mm screws (G6) as shown.

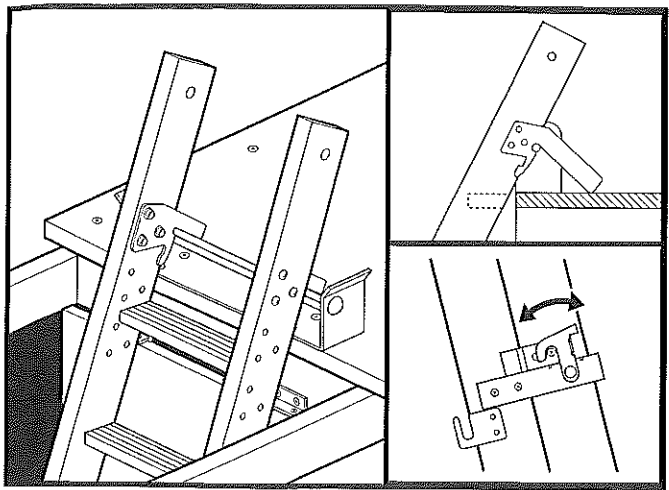


Installing the ladder

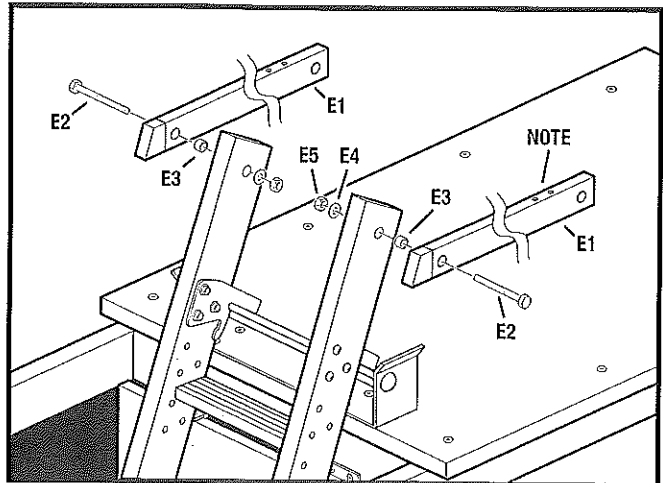
1 Lift and hang the extended ladder onto the roller bar assembly in the loft ensuring the top locking catch is engaged and the ladder is positioned centrally. Ensure location plates are correctly located on the roller bar.

WARNING:

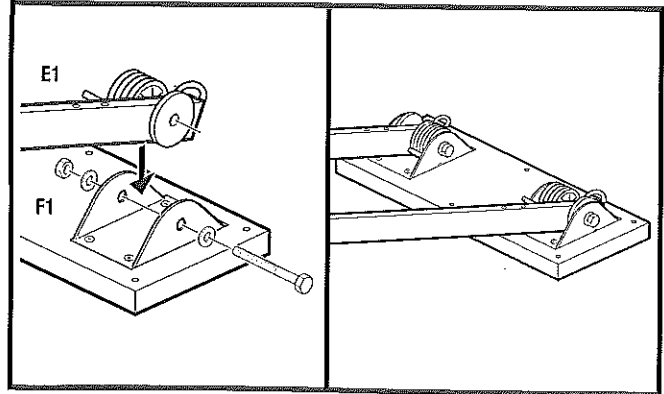
Do not stand on the ladder to do this. Either use a second ladder or work from inside the loft space.



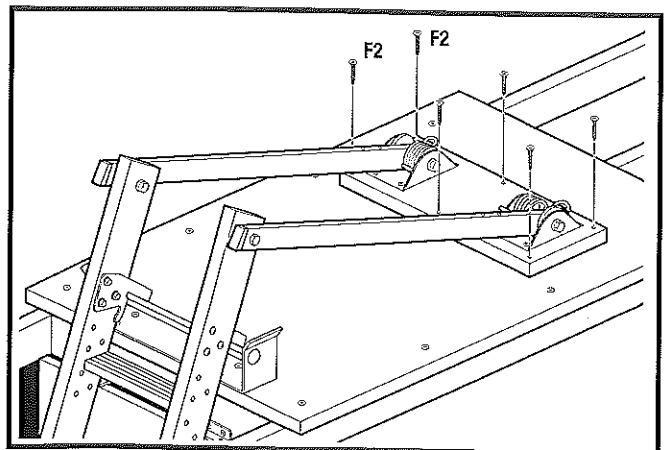
2 Attach the power arms (E1) to the top of the ladder using 65mm bolts (E2), spacers (E3) washers and nuts (E4 & E5) as shown. Note: The two holes on the opposite end of the power arms MUST face upwards.



3 Attach the power arms (E1) to the spring housing assembly (F1) with the loop end of the springs pointing away from the hatch. Remove the bolts holding the springs and insert the power arm in-between the plastic spacers then refit. Ensure the spacers locate in the power arm holes.

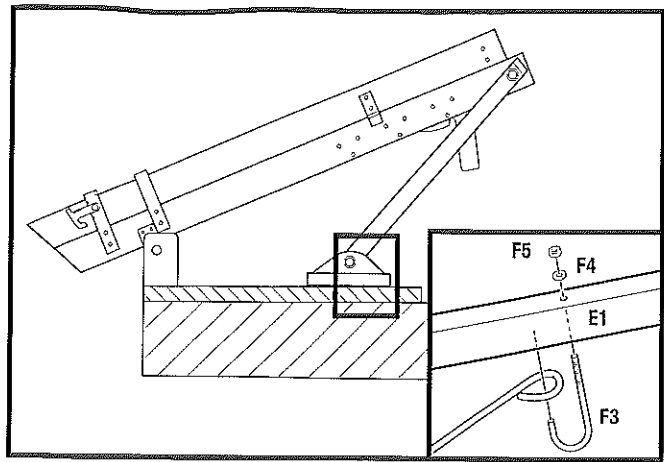


4 With the spring housing assembly in line with the ladder, fix it in position using six 40mm screws (F2).



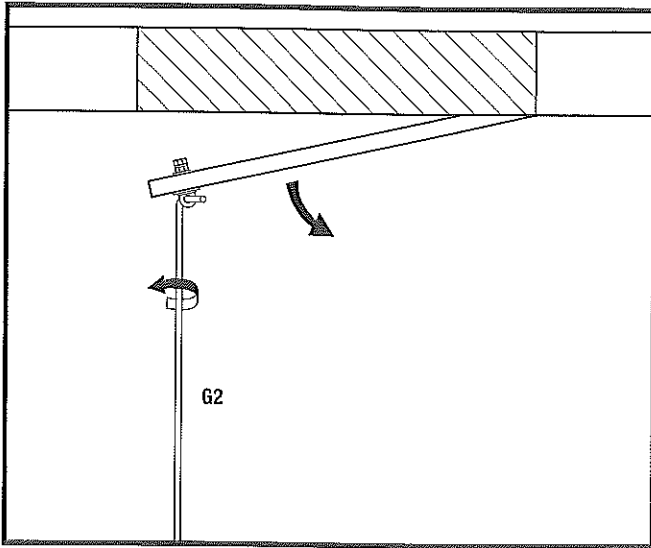
5 Release the top locking catch and slide the front section of ladder up until the latch engages. Pull or push the complete ladder assembly up into the loft until the anchor plates (**D1**) locate onto the roller bar. Fix the loop of each spring to the underside of the power arms using the J bolts (**F3**), washers and nuts (**F4 & F5**).

Before using, check that all the fixings are secure.

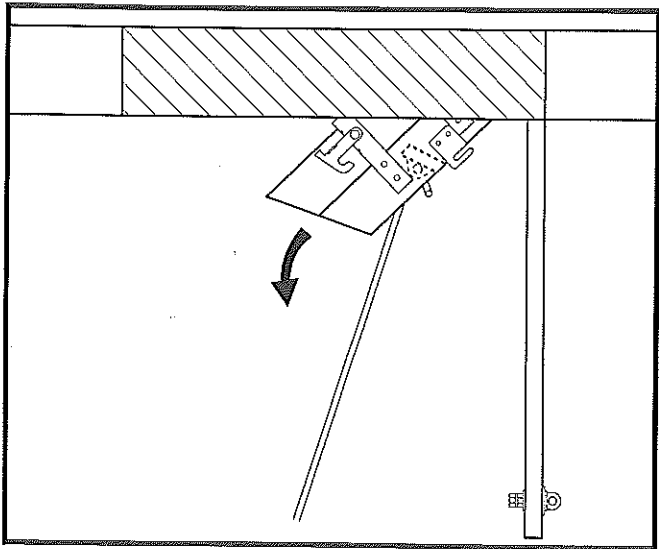


Operating the ladder

1 To open the trapdoor, use the stowing pole (**G2**) and turn the twist catch pivot pin (**A1**) anticlockwise to open and lower the trapdoor.



2 Hook the stowing pole bracket at the foot of the ladder and pull it outwards and downwards.



3 Care is needed when fully extending the ladder. Release the bottom locking catch 'A' and slide the front frame downwards until the top stops reach the upper guide brackets. Lower the ladder until the feet rest firmly on the floor. Engage locking catch 'B'. Ensure location plates are correctly located on the roller bar.

Stowing the ladder

To stow the ladder, release the locking catch, slide the front frame upwards until the bottom locking latch engages again. Use the stowing pole to slide the ladder into the loft opening. Raise the trapdoor and turn clockwise to close.

Do not use the ladder with the locking catch disengaged. Read the safety labels on the product.

WARNING:

DO NOT attempt to climb your loft ladder until you have:

Checked that it is pulled down to the stops.

Fully read all safety labels.

Ensured that the locking catch is fully engaged.

