

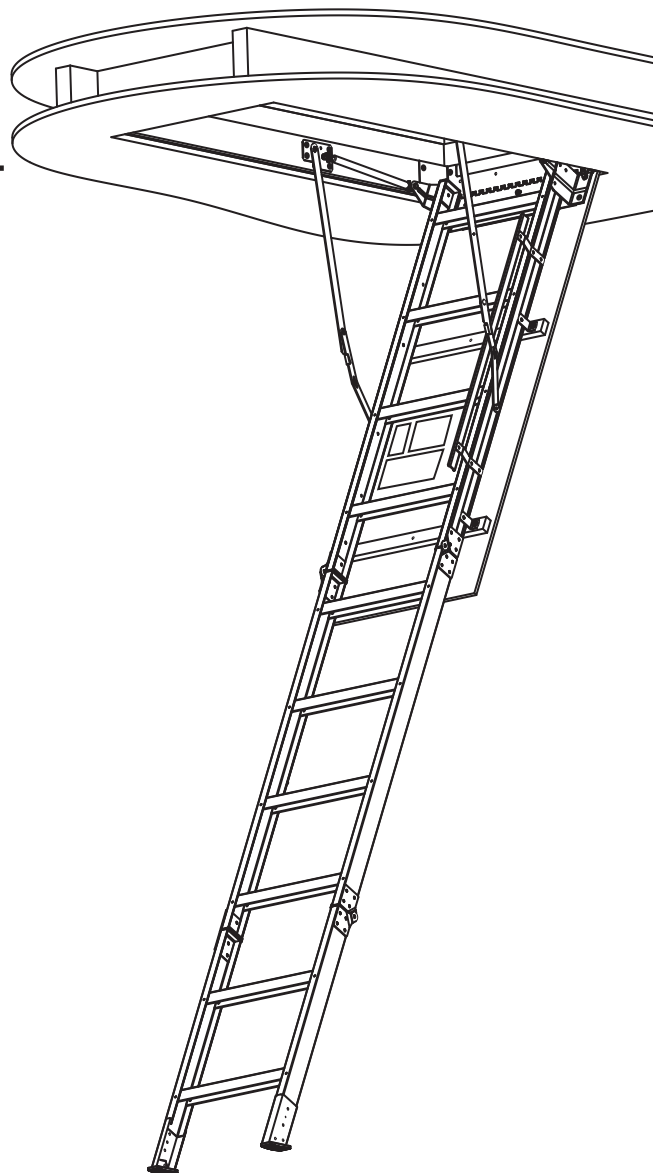
FS13560 Aluminium Attic Ladder

Installation Instructions

FAILURE TO COMPLY WITH ALL INSTRUCTIONS MAY RESULT IN SERIOUS INJURY

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Parts and Tools For FS13560 Aluminium Attic Ladder

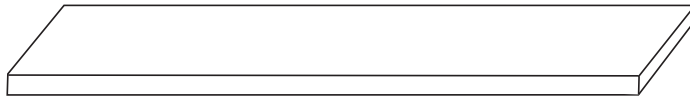
DO NOT REMOVE NYLON TIE HOLDING THE LADDER SECTIONS TOGETHER UNTIL INSTRUCTED

ADDITIONAL MATERIALS NEEDED

(10) #8 Deck Screws, 5.08 cm



2.5 cm x 10.1 cm Temporary Support Boards
(2 pieces approximately 0.81 m long)



Shims

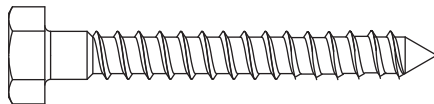


TOOLS NEEDED

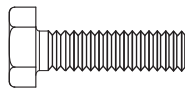
Carpenter's Square
Drill
Hammer
Hacksaw
Drill Bit, 1/8"
Drill Bit, 9/32"
Pencil
Stepladder
Tape Measure
Wrench, 7/16" (2)
Phillips Driver

INCLUDED FASTENERS

(10) 1/4" x 20 Hex Head
Lag Screws 5.08 cm Long



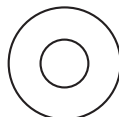
(2) 1/4" - 20
Hex Head Cap Screws
1.91 cm Long



(2) 1/4" - 20 Lock Nut

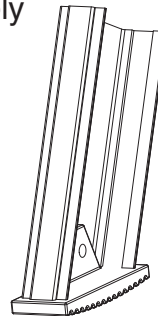


(11) 1/4" Washers

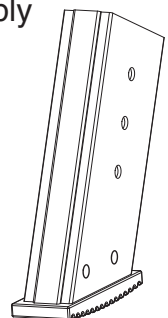


INCLUDED COMPONENTS

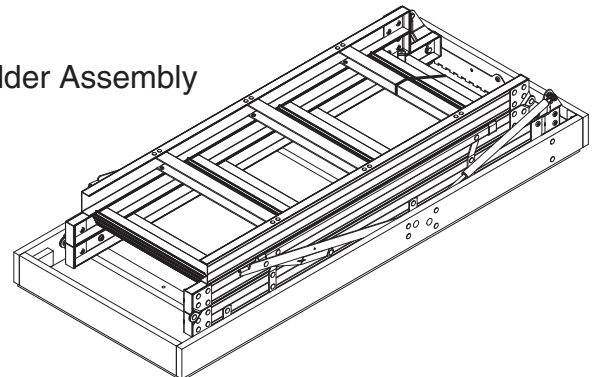
(1) Left Foot
Assembly



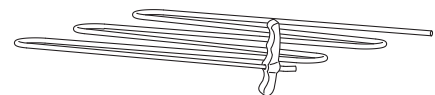
(1) Right Foot
Assembly



(1) Ladder Assembly



(1) Pull Rope
Assembly



BEFORE YOU BEGIN:

Read instructions completely before beginning. This is necessary to ensure that you have a suitable location for the attic ladder and the ability to safely and properly install it.

Are you capable of installing this attic ladder?

To install this attic ladder you should have sawing, squaring, and aligning skills similar to those required to install a window or a door frame. If you do not have these skills you should hire a professional carpenter to install this unit (see the Yellow Pages under “Building Contractors, Carpenters, Home Builders, Home Improvements, or Contractors-General”).

Does this attic ladder meet your needs?

This attic ladder is for residential use only. Installing this attic ladder in commercial buildings and apartments may violate building codes that require fire-rated ceilings and prohibit storing materials in the overhead space! Check with your local fire marshal or building department before installing the attic ladder.

The capacity of the attic ladder (person plus materials being carried) is 170 kg.

This attic ladder is made for the range of ceiling heights 2.34 m to 3.12 m. Do not install the attic ladder in a ceiling that has a height outside of this range. Altering the attic ladder to accommodate other heights is unsafe.

a. To save time and prevent accidents, inspect the attic ladder for shipping damage before beginning the installation.

- **Check wooden door panel for splits and warpage**
- Check all metal parts for damage such as bends and cracks
- Check that all rivets are tight

If any items are missing or damaged, contact the point of purchase.

b. You must have

- 2 people who are capable of lifting the 22.7 kg attic ladder into the overhead space

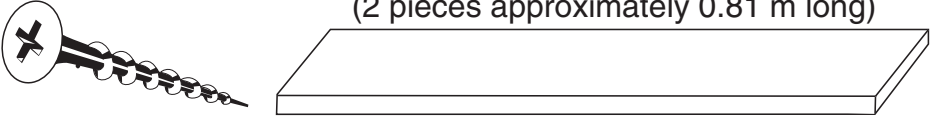
c. You must have:

- A rough opening in the ceiling measuring 0.57 m x 1.37 m. If not, proceed to the Appendix, Section 1.1, page 12.

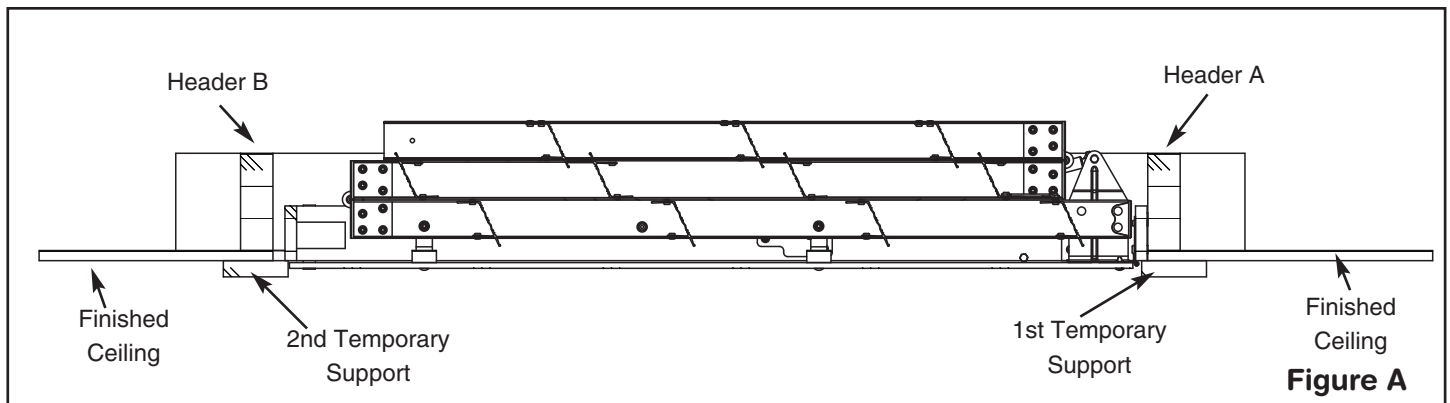
d. Verify clearance requirements:

- See Appendix, Section 1.3, Figure 3, page 14

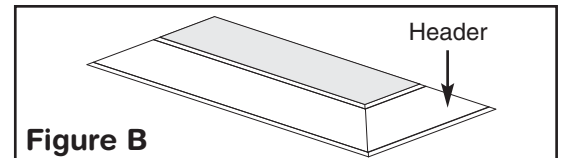
Step 1 PREPARING EXISTING ATTIC LADDER OPENING FOR INSTALLATION

ADDITIONAL MATERIALS NEEDED	TOOLS NEEDED
<p>(6) #8 Deck Screws, 5.08 cm</p> <p>2.54 cm x 10.16 cm Temporary Support Boards (2 pieces approximately 0.81 m long)</p> 	<p>Stepladder Hammer Tape Measure Pencil Carpenter's Square Drill Phillips Driver</p>

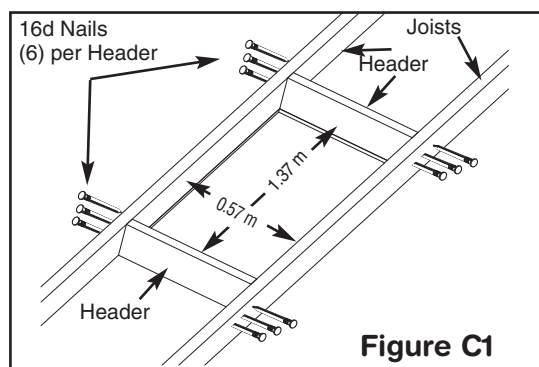
At completion of Steps 1 & 2 the frame of your ladder will be installed flush with the underside of the finished ceiling. (See Figure A)



1. PREPARING EXISTING OPENING: (See Figure B)
 - a. Remove any trim and hardware surrounding the opening.
 - b. Inspect existing attic ladder opening to make sure it meets minimum construction requirements and is 0.57 m x 1.37 m (Figure C1)
 - c. If it is necessary to modify or create a new opening, please refer to Appendix, Section 1.1, page 12.



For best results make sure the ceiling around the opening is flat and in good repair and that all sides of the opening are flat, plumb and in good repair.



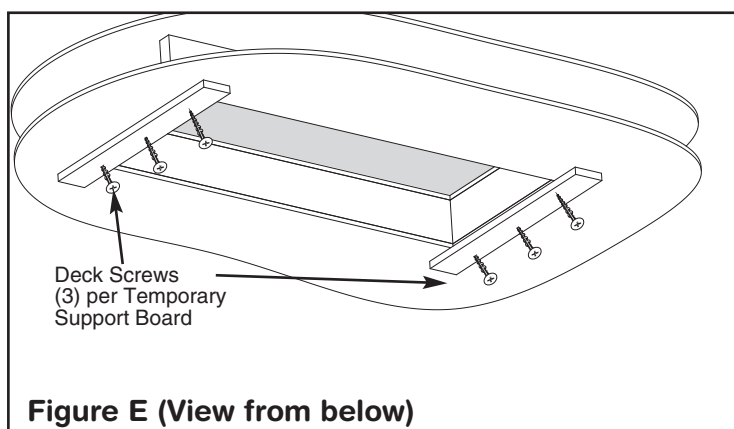
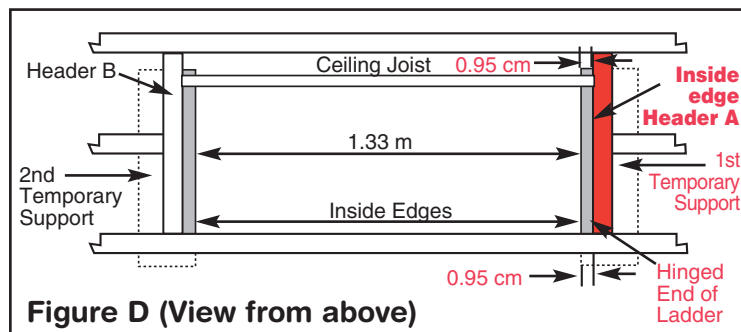
Step 1 (continued)

PREPARING EXISTING ATTIC LADDER OPENING FOR INSTALLATION

2. ATTACHING TEMPORARY SUPPORT BOARDS:

It is necessary to temporarily support the ladder in the prepared rough opening by using 2.54 cm x 10.16 cm x 0.81 m boards that extend from edge to edge across each end of the rough opening. The boards form a ledge to support the ladder before it is permanently secured. Care is important in positioning the boards.

- Secure first temporary support 0.95 cm from the inside edge of Header "A". Header "A" is the end where the hinge of the ladder will go. Make sure all (3) screws penetrate header. (See Figure D & E).
- Measuring from the inside edge of first temporary support, secure second temporary support so that the inside edge is 1.33 m from inside edge of the first temporary support. (See Figure D)
- Be certain both first and second temporary supports are secured firmly into respective headers. (See Figure E).



WARNING

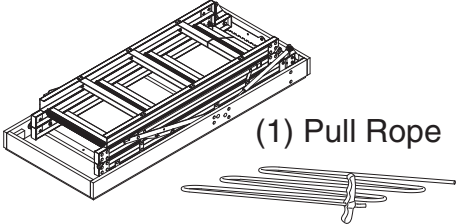
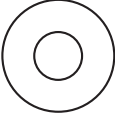


Make sure that the temporary support boards are 1.33 m apart on both sides of opening. The attic ladder is likely to fall from the ceiling if the temporary support boards are not properly spaced.

WARNING

Support boards must be fastened securely to temporarily support the weight of the ladder when it is placed in the rough opening.

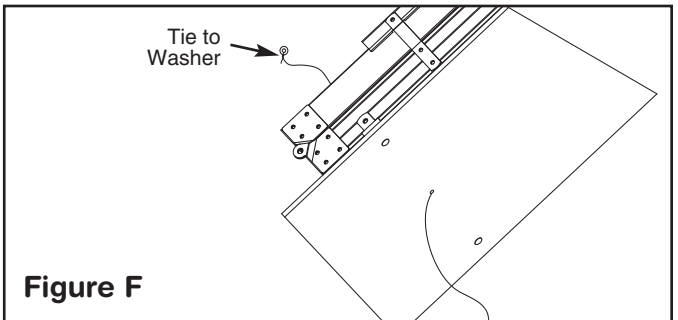
**YOUR ATTIC LADDER OPENING IS NOW PREPARED FOR INSTALLATION.
PROCEED TO STEP 2 - PLACING LADDER INTO PREPARED OPENING**

Step 2 PLACING LADDER INTO PREPARED OPENING

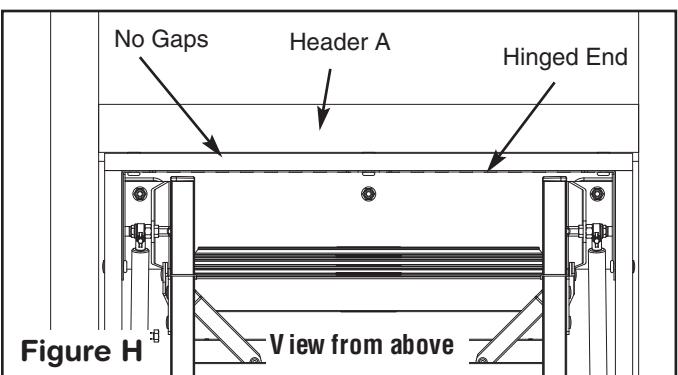
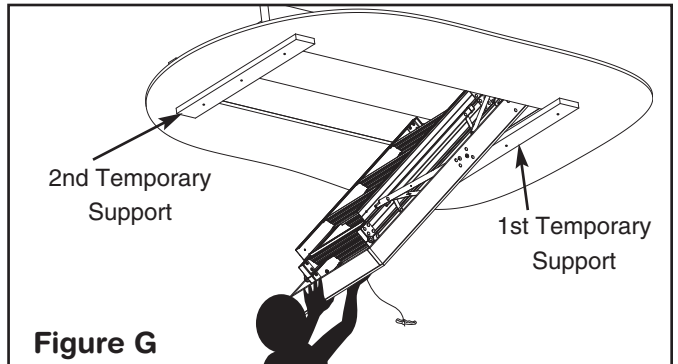
INCLUDED COMPONENTS	INCLUDED FASTENERS	ADDITIONAL MATERIALS NEEDED	TOOLS NEEDED
(1) Ladder Assembly  (1) Pull Rope	(1) 1/4"-20 Washer 	Shims  (4) #8 Deck Screws, 5.08 cm 	Stepladder Tape Measure Hammer Drill Phillips Driver

WARNING
 DO NOT remove the nylon tie holding the ladder sections together until after the ladder has been properly installed and secured.

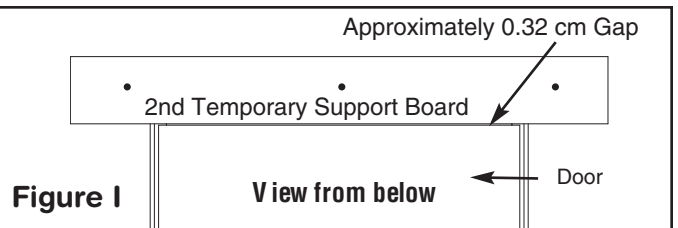
WARNING
 Be careful when using a stepladder to climb into and out of the overhead space.



1. ATTACHING PULL CORD: (See Figure F)
 - a. Thread small end of supplied pull rope through pre-drilled hole in door and tie to the washer. You can adjust length of pull rope after ladder is completely installed.
2. RAISING LADDER INTO ROUGH OPENING:
 - a. One person should be in the attic before raising the ladder.
 - b. Raise ladder through rough opening at an angle so the ladder clears the temporary support boards. (See Figure G)
 - c. Position the ladder in the rough opening so it rests securely on the temporary support boards. Slide the ladder so that the hinged end of the wood frame is resting tightly against Header "A" (See Figure H). Make certain the plywood door is not prevented from opening by the support boards. (See Figure I) If it is obstructed check the position of the support boards from Step 1.



WARNING
 Do not place any weight on the ladder until permanently installed in Step 3, page 8.
 The person in the overhead space must remain there until installation is completed.



Step 2 (continued)

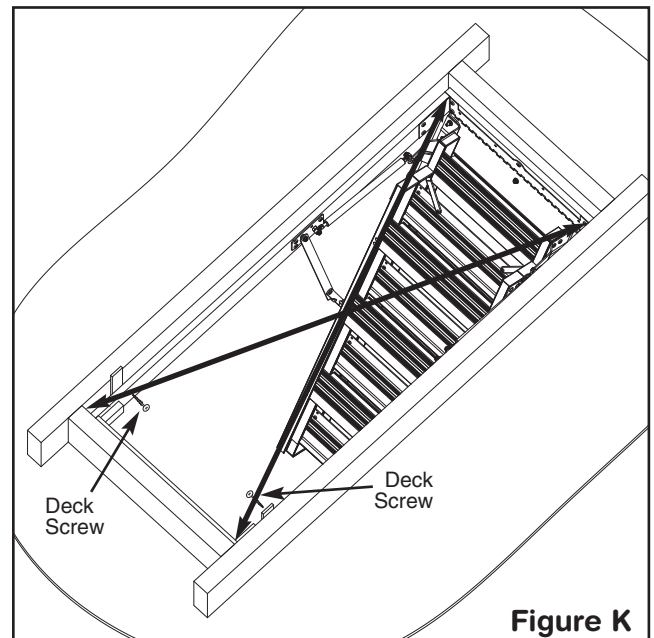
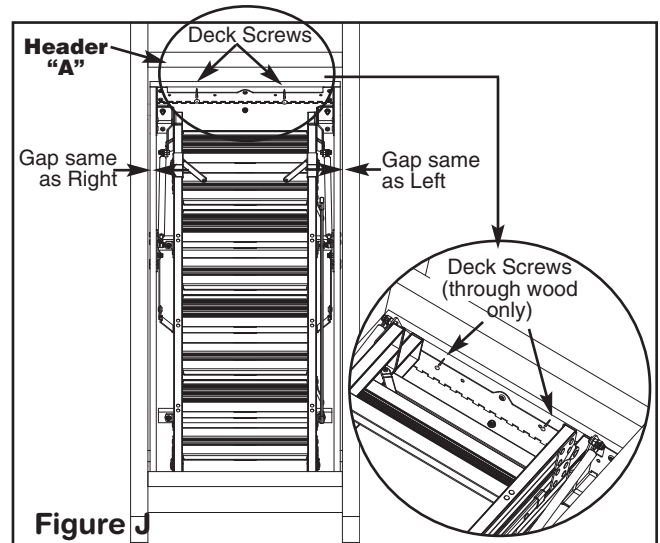
PLACING LADDER INTO PREPARED OPENING

3. SQUARING THE LADDER IN OPENING:

- a. Centre the hinged end of the ladder on Header "A" so that there is equal space on both sides (See Figure J). Drive (2) screws, (See Figure J), to hold the frame to Header "A". Screws to go through wood frame only. Holes in steel hinge plate are for use in Step 3.
- b. Open ladder door by pulling straight down on the pull rope. Ladder sections should remain folded with nylon ties attached.
- c. Shim the frame at corner locations if needed (See Figure K) so that the two diagonal dimensions are equal. The frame is square when the dimensions are equal. If dimensions cannot be made equal within 0.32 cm by shimming, the hinged end of the ladder may need to be repositioned. (See Figure K)

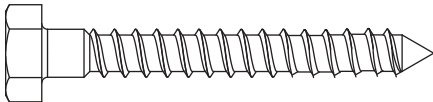
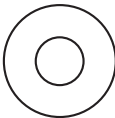

Failure to properly square the frame may result in ladder closing at an angle. If this occurs, there may be contact between the frame and ladder, causing door not to close properly. Check frame for squareness by measuring across diagonals (See Figure K). The two dimensions should be equal within 0.32 cm to be considered square.

- d. Drive (2) screws as shown at the end opposite of the hinge to hold the shims in place. Do not drive screws through blocks. (See Figure K)



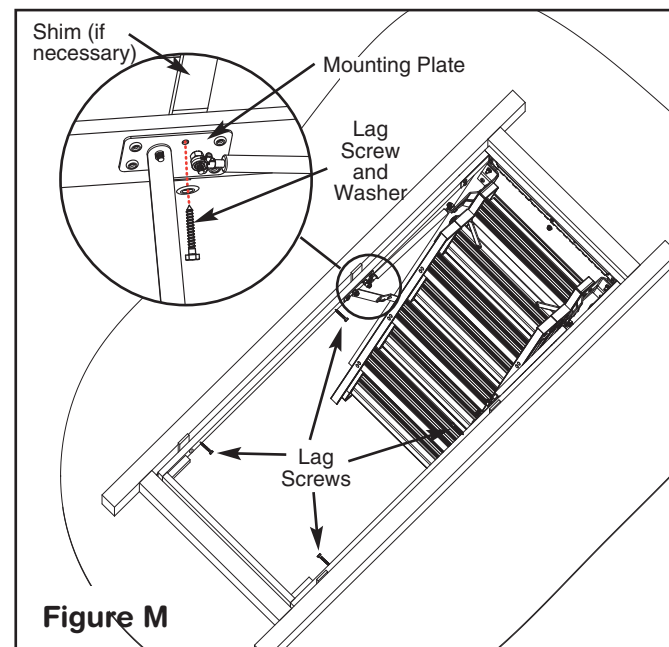
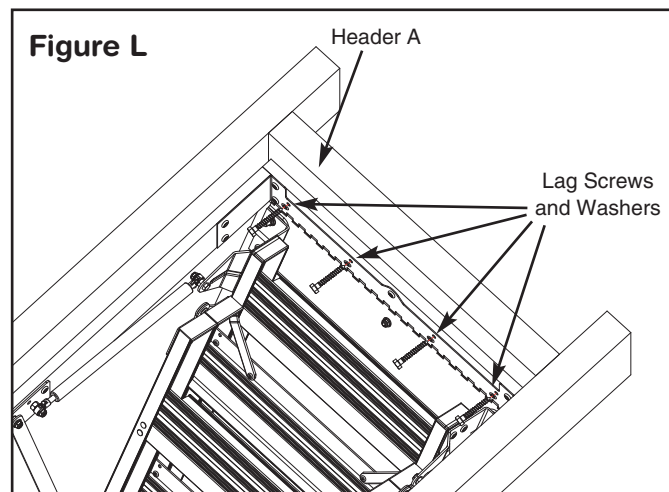
**YOUR ATTIC LADDER HAS BEEN PROPERLY PLACED INTO THE PREPARED OPENING.
PROCEED TO STEP 3 -PERMANENT MOUNTING OF LADDER.**

Step 3 PERMANENT MOUNTING OF LADDER

INCLUDED FASTENERS	ADDITIONAL MATERIALS NEEDED	TOOLS NEEDED
<p>(10) 1/4" x 20 Hex Head Lag Screws, 5.08 cm Long</p>  <p>(10) 1/4" Washers</p> 	<p>Shims</p> 	<p>Stepladder Drill 1/8" Drill Bit Wrench, 7/16" (1) Hammer</p>

1. SECURING LADDER IN ROUGH OPENING:

- a. Pre-drill (4) 1/8" pilot holes and install (4) 1/4" x 5.08 cm hex head lag screws into Header "A" using hinge plate as template. (See Figure L) (4) 1/4" washers to be used under heads of lag screws.
- b. If necessary, carefully place shims behind Mounting Plates (See inset - Figure M) Do not bow sides of ladder frame with shims. Pre-drill (2) 1/8" pilot holes and install (2) 1/4" x 5.08 cm hex head lag screws into Mounting Plates. (2) 1/4" washers to be used under heads of lag screws. (See Figure M)
- c. Pre-drill (4) 1/8" pilot holes approximately as shown. Install (4) 1/4" x 5.08 cm hex head lag screws. (4) 1/4" washers to be used under heads of lag screws.
- d. Make sure door closes without interference. Readjust shims if necessary



Trim portion of shims that stick out above and below frame. **Shims sticking out above the frame are a tripping hazard and must be trimmed.**

2. REMOVE TEMPORARY SUPPORT BOARDS

**YOUR ATTIC LADDER HAS BEEN PERMANENTLY MOUNTED INTO OPENING.
PROCEED TO STEP 4 -SETTING LADDER HEIGHT.**

Step 4 SETTING LADDER HEIGHT

TOOLS NEEDED

Hacksaw
Tape Measure

Pencil
Carpenter's Square

The lower section of the ladder may require trimming and adjusting feet to proper height.

1. TAKING YOUR MEASUREMENT: (See Figure N)
 - a. With the unextended ladder in the fully open position, measure height "Y" from bottom of the wood frame of the attic ladder to the floor. Refer to Table 1 before proceeding to the next step.

⚠ WARNING

The attic ladder must be adjusted to match the proper height where it is installed. Failure to do so may result in damage to the ladder or injury to the user.

2. TRIMMING LOWER SECTION:
 - a. Remove the nylon tie holding the ladder sections together.
 - b. Fold the lower section of the unit under the middle section (See Figure O).
 - c. Measure the required cut off distance "X", defined in Table 1, from the bottom of the lower section and mark a straight line perpendicular to rail, using a pencil and carpenter's square. (See Figure O)
 - d. With ladder properly supported, use a hacksaw to cut off excess lower section at line marked in step c.
 - e. Unfold lower section of the unit to the open position.

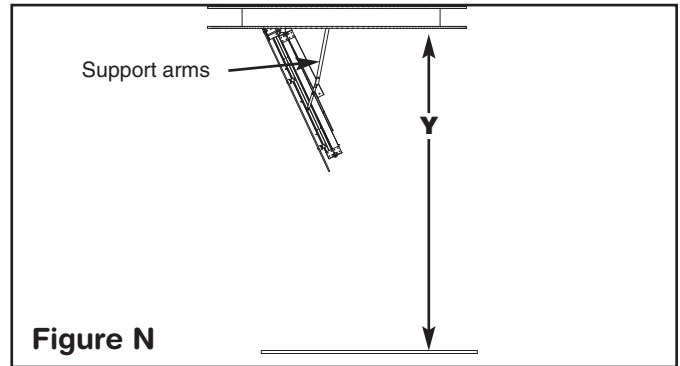


Figure N

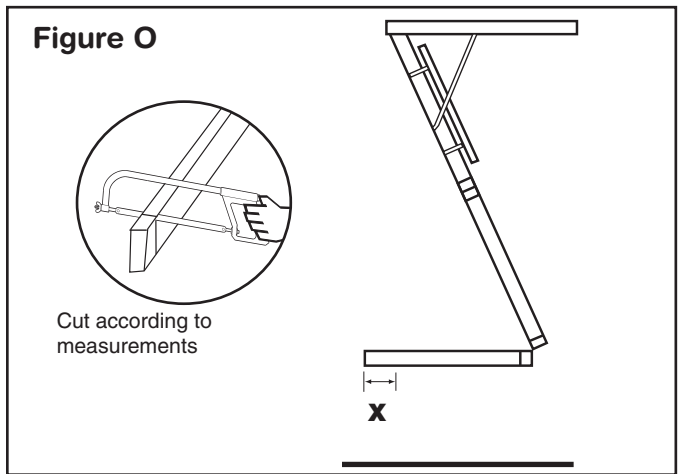


Figure O

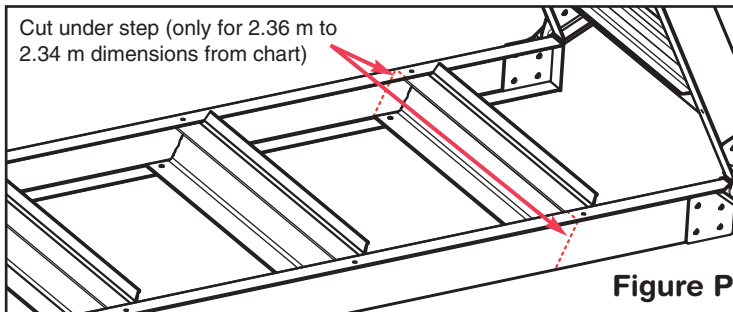


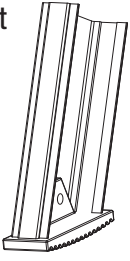
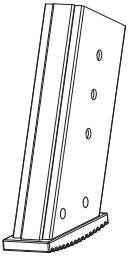
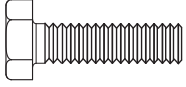

Figure P

Distance "Y" If your height is less than:	"X" But more than or equal to:	"X" Then cut off is:	Distance "Y" If your height is less than:	"X" But more than or equal to:	"X" Then cut off is:
	312.4 cm	0 cm	274.3 cm	271.8 cm	43.8 cm
312.4 cm	309.9 cm	2.5 cm	271.8 cm	269.2 cm	47.0 cm
309.9 cm	307.3 cm	5.1 cm	269.2 cm	266.7 cm	49.5 cm
307.3 cm	304.8 cm	7.6 cm	266.7 cm	264.2 cm	52.1 cm
304.8 cm	302.3 cm	10.8 cm	264.2 cm	261.6 cm	59.7 cm
302.3 cm	299.7 cm	13.3 cm	261.6 cm	259.1 cm	59.7 cm
299.7 cm	297.2 cm	15.9 cm	259.1 cm	256.5 cm	61.0 cm
297.2 cm	294.6 cm	19.1 cm	256.5 cm	254.0 cm	64.1 cm
294.6 cm	292.1 cm	21.6 cm	254.0 cm	251.5 cm	66.7 cm
292.1 cm	289.6 cm	29.2 cm	251.5 cm	248.9 cm	69.2 cm
289.6 cm	287.0 cm	29.2 cm	248.9 cm	246.4 cm	72.4 cm
287.0 cm	284.5 cm	30.5 cm	246.4 cm	243.8 cm	74.9 cm
284.5 cm	281.9 cm	33.0 cm	243.8 cm	241.3 cm	77.5 cm
281.9 cm	279.4 cm	35.6 cm	241.3 cm	238.8 cm	81.3 cm
279.4 cm	276.9 cm	38.7 cm	238.8 cm	236.2 cm	83.2 cm
276.9 cm	274.3 cm	41.3 cm	236.2 cm	233.7 cm	See Figure P

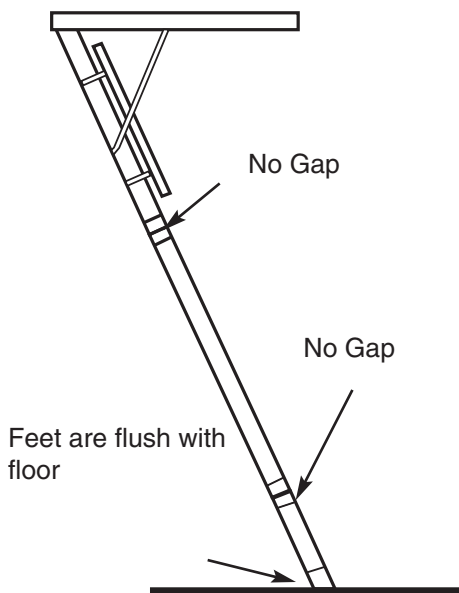
Table 1

**YOUR ATTIC LADDER HEIGHT HAS BEEN PROPERLY SET.
PROCEED TO STEP 5 - ATTACHING THE FEET**

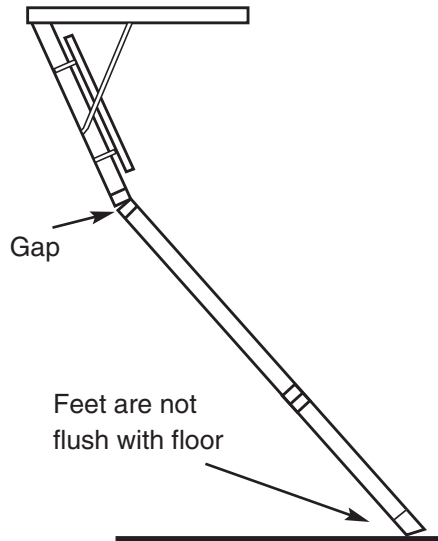
Step 5 ATTACHING THE FEET

INCLUDED COMPONENTS & FASTENERS	TOOLS NEEDED
<p>(1) Left Foot Assembly</p>  <p>(1) Right Foot Assembly</p>  <p>(2) 1/4" -20 Hex Head Cap Screws 1.91 cm Long</p>  <p>(2) 1/4" -20 Lock Nut</p> 	<p>Hacksaw Tape Measure Pencil Drill 9/32" Drill Bit Carpenter's Square Wrench, 7/16" (2)</p>

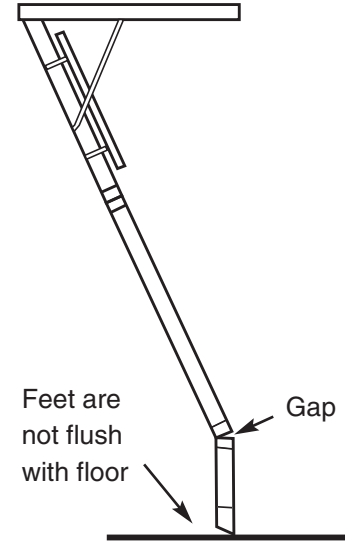
At the completion of Step 5 the hinges in your ladder should have no gaps as shown in the Correct Setup



Correct Setup



Lower Section is Too Long



Lower Section is Too Short

⚠ WARNING

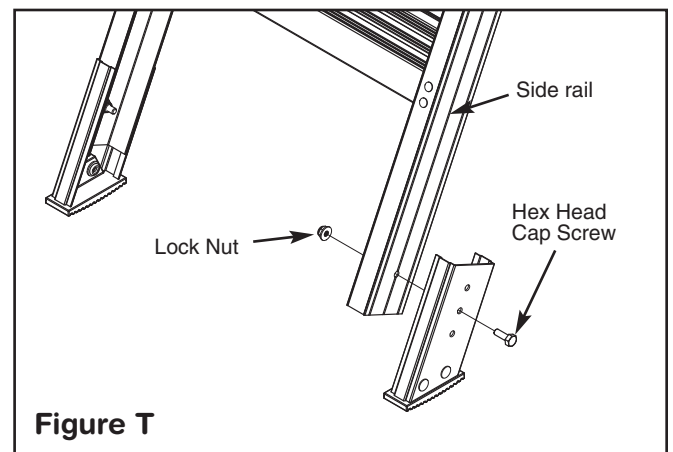
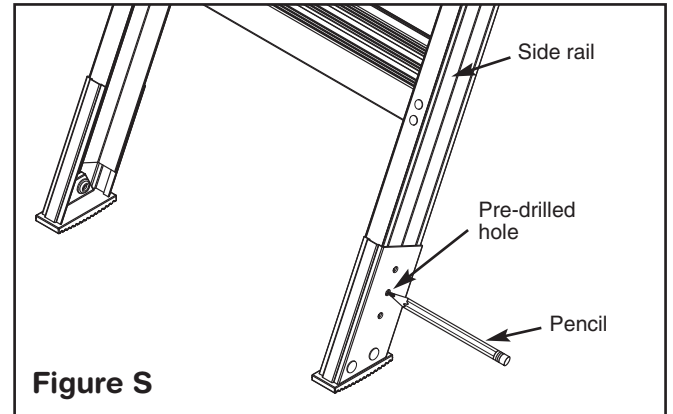
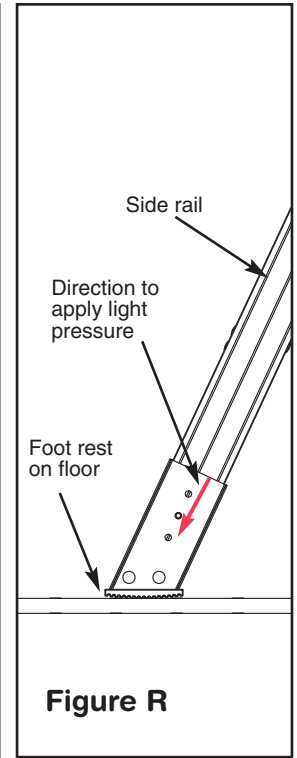
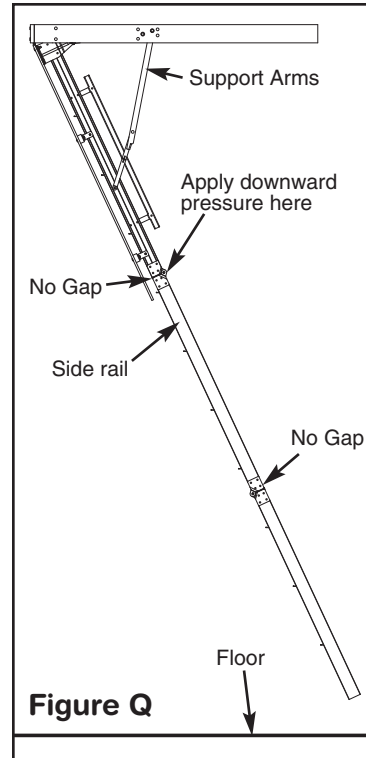
The bottom section must fit flush with the floor. Failure to properly adjust the feet on the ladder could result in unnecessary stress on the component parts, resulting in serious injury.

Step 5 (continued)

ATTACHING THE FEET

1. PROPER FOOT LOCATION:

- Be sure ladder sections are fully extended and support arms are fully open. Apply pressure as shown to make sure ladder is fully extended. (See Figure Q)
- Place foot over side rail and slide foot downward until the rubber foot pad rests firmly on the floor. Apply light pressure as shown. (See Figure R)
- Mark location to drill hole through side rail of lower section using one of the pre-drilled holes in the adjustable foot as a template. Remove foot and check position of hole before drilling. Drill 9/32" hole through the rail. (See Figure S)
- Install adjustable foot and tighten using 1/4" hex head cap screw and lock nut provided. (See Figure T)
- Repeat steps a through d for other side of ladder.



CONGRATULATIONS - YOUR LADDER IS NOW COMPLETELY INSTALLED AND READY FOR USE.

Appendix CREATING A ROUGH OPENING

Section 1.1

IMPORTANT QUESTIONS

Is your ceiling and joist structure suitable for this installation?

This attic ladder can be installed in structures with conventional wood roof frames (See Figure 1). If there is a ceiling, you must have an access hole in the ceiling that allows you to enter the overhead space for a pre-installation inspection.

Roof support structures that have braces connected to the ceiling joists or which use trusses (See Figure 1) cannot be cut without destroying the load-bearing capacity of that section of the roof. Do not cut joists that are part of a braced conventional frame or truss without first consulting an architect or structural engineer (see the Yellow Pages under "Architects or Structural Engineers").

The attic ladder should **not** be installed in a ceiling that has any of the following:

- components of heating/cooling systems embedded in the ceiling
- joists made of materials other than wood
- metal reinforced plaster
- suspended ceilings

If your ceiling contains any of the above, do not attempt to install the attic ladder. Contact a professional for assistance with your specific needs (see the Yellow Pages under "Heating and Cooling Contractors, Building Contractors, Carpenters, Home Builders, Home Improvements, or Contractors-General").

Do these instructions meet your needs?

These instructions describe how to install the attic ladder parallel or perpendicular to the ceiling joists. Contact a professional if you want the attic ladder installed in some other direction relative to the joists.

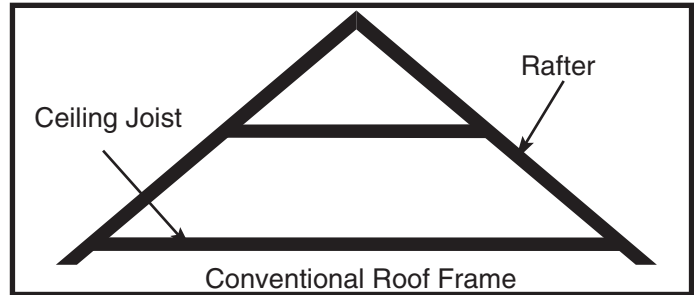


Figure 1

Is your ceiling and joist structure suitable for this installation?

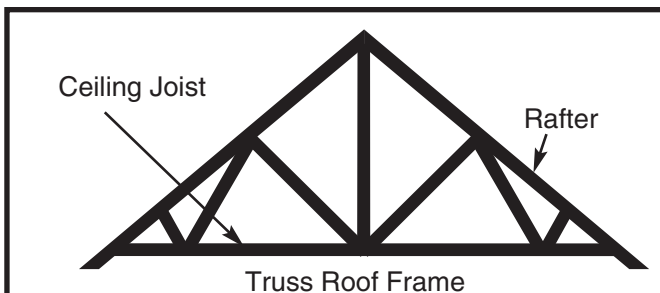
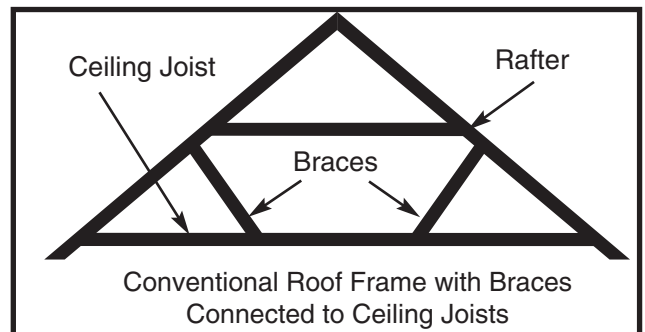


Figure 2



WARNING
Do not cut these types of structures without consulting an architect or structural engineer.

TOOLS AND MATERIALS NEEDED

Materials:

- Several pieces of joist-sized lumber (the amount depends on the specific installation).
- 16d sinker nails or screws of equivalent strength (24 - 60 depending on the specific installation).
- 20d sinker nails or screws of equivalent strength are needed for installation where joists are cut.

Stepladder:

- You need a stepladder that is tall enough so that you can get into the overhead space without stepping above the working height of the stepladder. The working height of the stepladder is two steps down from the top.
- Your stepladder must also have a Load Capacity that is greater than the sum of your weight plus the weight of the attic ladder.

 **WARNING**

Be careful when using a stepladder to climb into and out of the overhead space

Tools For Creating a Rough Opening:

- Torch or extension light
- Claw hammer
- Pencil
- Hand saw / power saw
- Tape measure
- Framing square
- Tools to cut a hole in the existing ceiling

Safety Equipment:

- Gloves
- Safety goggles
- Dust mask

FINDING A SUITABLE LOCATION

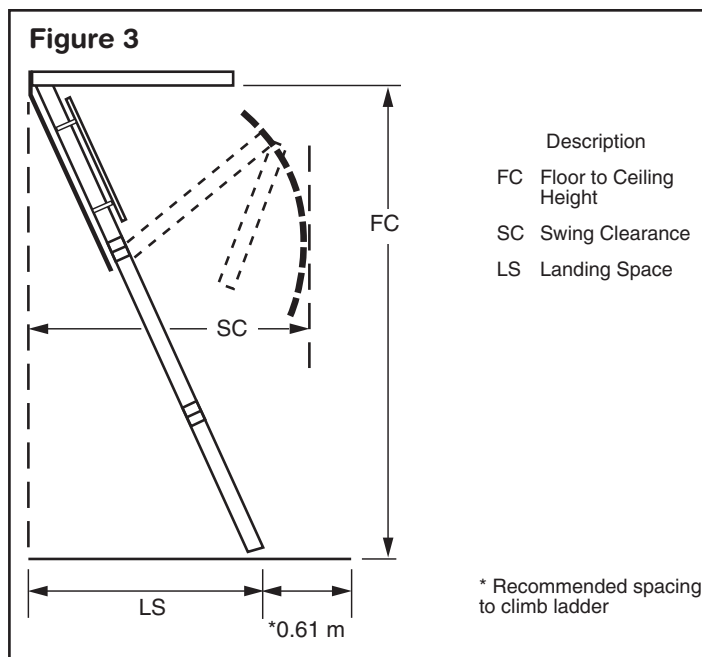
Before Proceeding: You must have: a suitable ceiling and joist structure, tools and materials needed, and a level flat location in the ceiling.

Goal: To find a location free of hazards and obstructions that will provide room for the installation and use of the attic ladder. Avoid installing attic ladder over other stairs.

Step 1. Pick a potential location for installation. Check that the size of rough opening is 0.57 m x 1.37 m .

Step 2. If there is no ceiling and the attic ladder will fit between the joists so that no joists need to be cut, go to Section 1.6 , page 17, "FRAMING THE ROUGH OPENING".
 If there is no ceiling, but one or more joists need to be cut, go to Section 1.5, page 16, "CUTTING THE CEILING JOISTS".
 If there is a ceiling at this location, you will need to inspect the area above this location as described in steps 3 and 4.

Step 3. Go into the overhead space and find the area above your chosen location. This area may be located by:
 A) Listening for tapping from below
 B) Measuring distances from walls or other objects common to the overhead space and the room below.



SC	LS	FC
1.78 m	1.22 m to 1.60 m	2.34 m Min. to 3.12 m Max.

⚠ WARNING

Do not drive metal nails or other conductive objects into the ceiling unless you are sure they will not contact electric wires. Contact with an electric wire can be deadly.

Step 4. At this location in the overhead space:

A) Check that there is enough space for you to safely move around during installation.

B) Check the overhead space for storage space adjacent to the chosen location. If walking or crawling in the overhead space is desired, make sure that there is enough room to do so.

C) Check above your chosen location for hazards and obstructions such as:

- Electric wire
- Pipes
- Heating and cooling ducts
- Furnaces
- Hot water heaters or other obstructions

NOTE: To check for hazards, you will need to move insulation away from your chosen location. Wear a dust mask, safety goggles and gloves to keep your body covered to prevent fine cuts from fibreglass. Gently push aside insulation to avoid stirring up dust that may be harmful to your eyes and lungs.

⚠ WARNING

For your safety, watch out for overhead hazards.

Do not stand or sit on the ceiling or insulation covering the ceiling - the ceiling is not made to support your weight. You can fall through the ceiling even though it looks solid. Only the joists can support weight.

Watch out for sharp nails sticking through the roof.

Step 5. If any hazards or obstructions are present at your chosen location, look for another location or have the hazards or obstructions moved by professionals (see the Yellow Pages under "Electrical contractors, Heating and Cooling contractors, and Plumbing contractors").

CUTTING A HOLE IN THE CEILING

Before Proceeding: You must have a location that:

- A) Is free of hazards and obstructions in the overhead space.
- B) Is free of hazards in the ceiling.
- C) Provides enough room for installation.
- D) Provides enough room to use the attic ladder.

Goal: To cut a correct sized hole in the ceiling at the desired location.

- Step 1.** Prepare the room by moving furniture, covering flooring with a drop cloth and removing children and pets to a safe distance away.
- Step 2.** Put on safety goggles and a dust mask. These will keep pieces of ceiling particles and dust from falling into your eyes, mouth or nose as you make a starter hole and cut into the ceiling.
- Step 3.** With a hammer and chisel, make a starter hole near the center of the chosen location (See Figure 4).
- Step 4.** Enlarge the opening with a saw until you can see a joist (See Figure 5).
- Step 5.** Draw a rectangle the size of the rough opening on the ceiling, the size of the rough opening must be 0.57 m x 1.37 m, with one edge parallel to a joist (See Figure 6). You may do this by sawing until you reach a joist and use it as a frame of reference.

Note: Locating at least one edge of the opening along a ceiling joist will allow the joist to be used as a side of the frame you will build. This will simplify framing the rough opening.

- Step 6.** Cut out the rest of the ceiling within the marked outline following these instructions:
 - A) **Do not cut any joists at this time.** Cut through the ceiling only.
 - B) Remove the ceiling in small pieces because ceiling material can be very heavy.
- Step 7.** If no joists span the hole in the ceiling, go to Section 1.6, page 17 “FRAMING THE ROUGH OPENING”.
If any joists span the hole, go to Section 1.5, page 16 “CUTTING THE CEILING JOISTS”.

WARNING
Do not saw, cut, or hammer into the ceiling until you are sure that the location is free of hazards and obstructions in the ceiling and attic. Contact with an electric wire can be deadly.

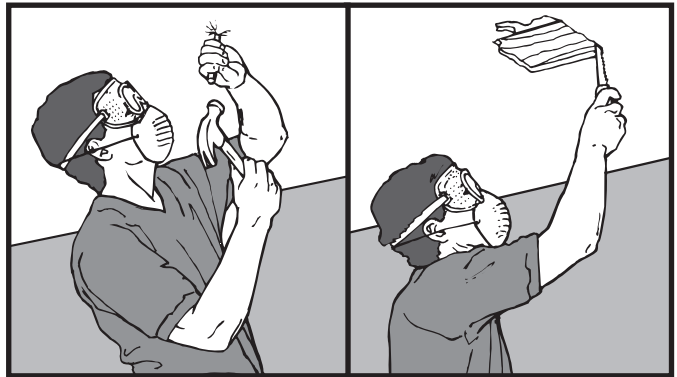


Figure 4

Figure 5



Figure 6

CUTTING THE CEILING JOISTS

Before Proceeding: You must have either: Exposed joists or a correctly sized hole at the desired ceiling location.

Goal: To cut out any joists that are in the way of your chosen location. Before cutting the joists, you must attach them to other joists in the overhead attic to keep the ceiling from sagging or completely collapsing.

Step 1. If the room has a ceiling and you have cut the required hole, go to Step 2.

If the room has no ceiling, you will need to mark the joists according to paragraph (A) or (B) below.

(A) If the chosen location is parallel to the joists, mark the rough opening length on top of the joists (See Figure 7).

Do not cut the joist at this mark.

(B) If the chosen location is perpendicular to the joists, mark the rough opening width on top of the joists (See Figure 8). **Do not cut the joist at this mark.**

Step 2. Cut (2) joist-sized boards long enough to span (2) joists on each side of your chosen location (See Figure 9). These boards will support the joists that will be cut and help keep the ceiling from sagging or completely collapsing while you are working in the overhead space.

Step 3. Place these boards approximately 0.61 m from the edge of your chosen location and nail (See Figure 9).

Note: The 0.61m distance is needed to give you room to hammer nails into the frame that you will build in the next section.

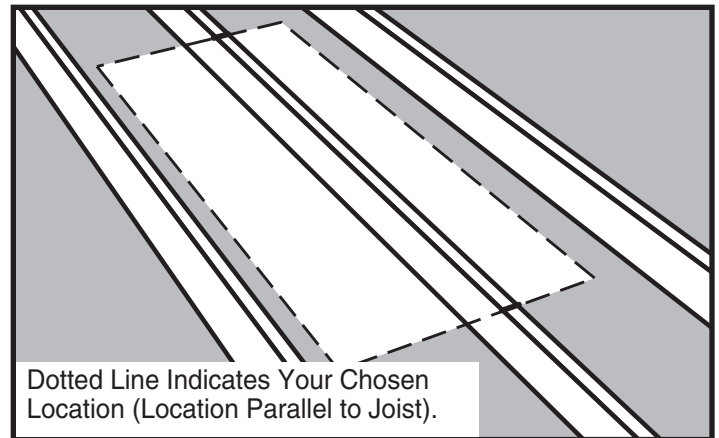


Figure 7

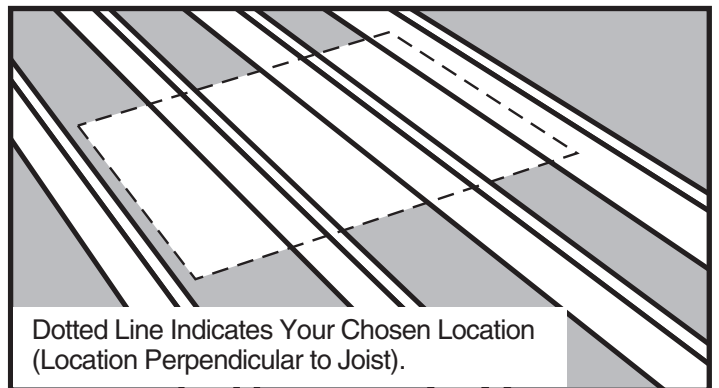


Figure 8

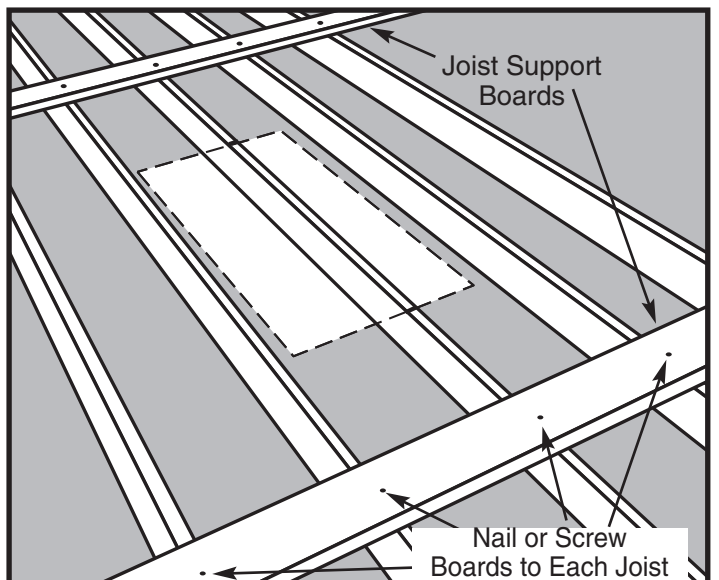


Figure 9

CUTTING CEILING JOISTS

STEP 4. Determine where the joist(s) should be cut. Figure 10 shows where to mark the joist(s) that span your chosen location. Note that the joist(s) should be marked back from the edge of your location a distance of 2 times the joist thickness (usually 7.62 cm). This leaves room for two joist-sized headers to be placed against each end of the cut joist(s) (See Figure 16 on page 19).

Note: In some homes, especially older ones, the joists may be slightly thicker than the lumber you can currently buy. If your joists have a different thickness than the lumber you will be using for the headers, you will need to mark the joists back from the edge of your location a distance of two times the *header* thickness instead of the *joist* thickness.

STEP 5. Saw through the joist(s) being careful not to cut through the ceiling and making sure the cut ends of the joist(s) are flat and vertical.

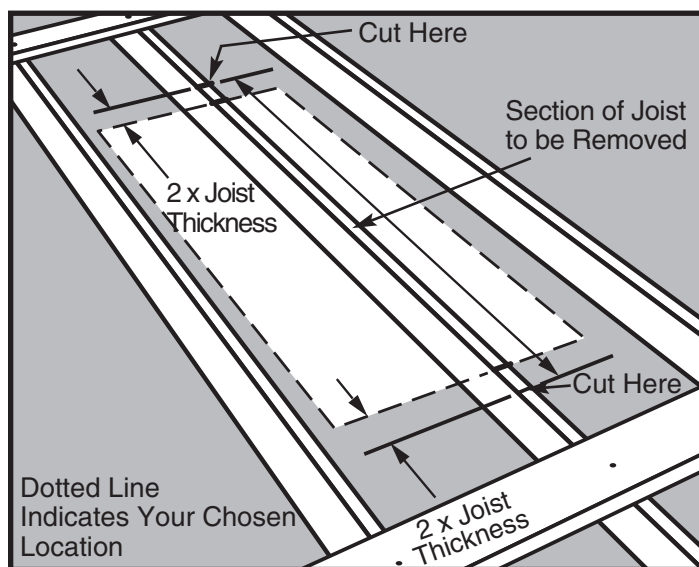


Figure 10

FRAMING THE ROUGH OPENING

Before Proceeding: You should have a space between the joists at least as large as the rough opening shown on the box. Any cut joists must be attached to uncut joists.

Goal: To create a four-sided frame the size of the rough opening using joist-sized lumber. This frame will be made of single or double thickness headers and stringers depending upon the particular installation. The frame is necessary to support the attic ladder and to reinforce the roof and ceiling structure.

⚠ WARNING

For your safety, watch out for overhead hazards.

Do not stand or sit on the ceiling or insulation covering the ceiling — the ceiling is not made to support your weight. You can fall through the ceiling even though it looks solid! Only the joists can support weight. To avoid falling through the ceiling, you may want to make a working platform by laying boards across the joist. Watch out for sharp nails sticking through the roof.

FRAMING THE ROUGH OPENING

Installing Headers

If no joists have been cut, go to “Single Headers” below.

If any joists have been cut, go to “Double Headers” on page 19.

Single Headers

- STEP 1.** Measure the header length “H” between the joists (See Figure 11).
- STEP 2.** Cut 2 headers this length. Use joist-sized lumber.
- STEP 3.** Place one of these headers at one end of your chosen location (See Figure 12). The header must fit snugly between the joists. Hammer it into position if necessary; if it is more than 1.59 mm too long, trim it. If it is more than 1.59 mm too short, cut another piece.
- STEP 4.** Square the header to one joist and drive (3) 16d nails through the joist and into the header. Check for squareness and drive (3) 16d nails through the other joist and into the header (See Figure 12). **It is very important that header board is vertically plumb as well as horizontally square to side joists.**
- STEP 5.** Position the second header 1.37 m from the first one and repeat Step 4 (See Figure 13).
- STEP 6.** The frame for the rough opening requires four sides. The headers make up two of those sides. If your ceiling joists are spaced so that they make up the other two sides of the rough opening, check the opening for squareness by measuring across the diagonals. The measurements should be within 3.2 mm to be considered squareness (See Figure 13).

If your ceiling joists do not make up the other two sides of the rough opening, you need to install one or two additional pieces of lumber to frame the other side(s) of the rough opening, go to “Installing Stringers” on page 20.

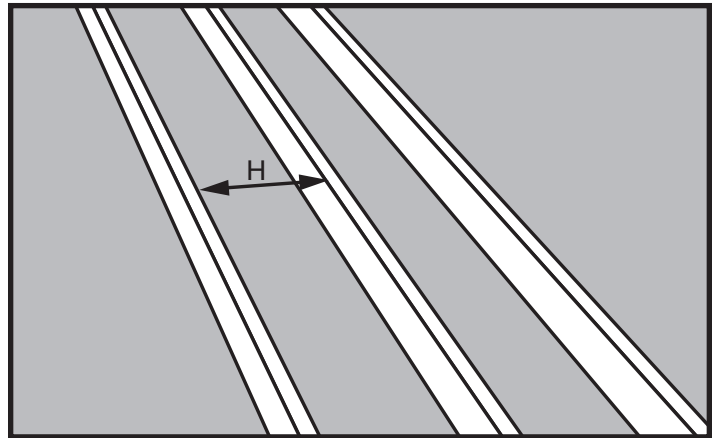


Figure 11

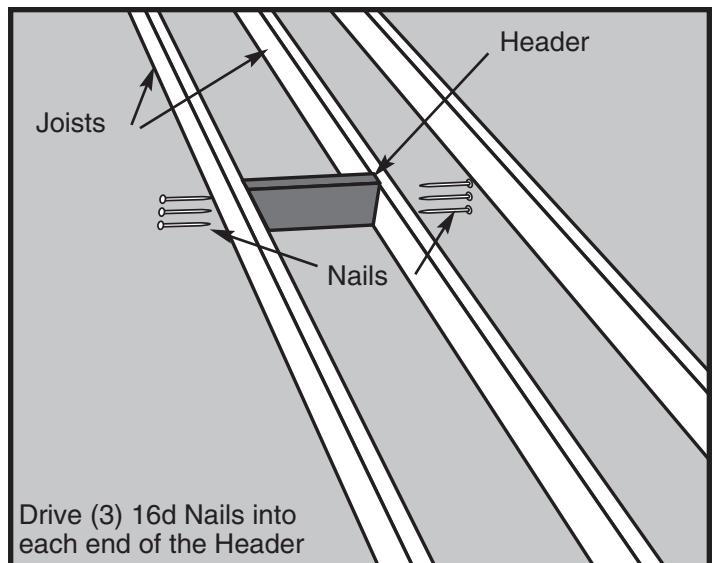


Figure 12

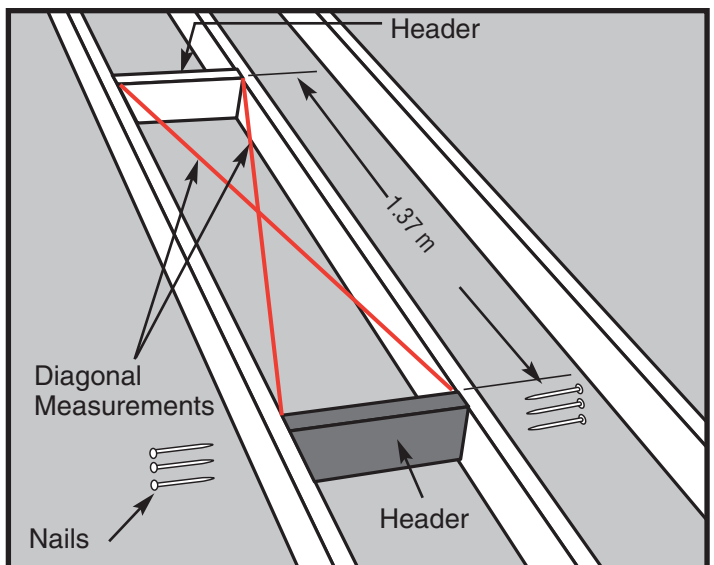


Figure 13 How to check for square

FRAMING THE ROUGH OPENING

Double Headers

- STEP 1.** Measure the header length “H” between the uncut joists (See Figure 14).
- STEP 2.** Cut 4 headers this length. Use joist-sized lumber.
- STEP 3.** Place one of these headers against the end of the cut joist(s) (See Figure 15). It must fit snugly between the uncut joists. Hammer it into position if necessary; if it is more than 1.59 mm too long, trim it. If it is more than 1.59 mm too short, cut another piece.
- STEP 4.** Square the header to the uncut joist and nail the header to the end of the cut joist(s) with (3) 16d nails (See Figure 15).
- STEP 5.** Check header for squareness then drive (3) 16d nails through each joist into each end of the header (See Figure 15).
- STEP 6.** Place a second header against the first header and nail it to the first header with (3) 16d nails between each joist (See Figure 16).
- STEP 7.** Drive (3) 16d nails through the joists into each end of the second header (See Figure 16).
- STEP 8.** Repeat steps 3-7 to install headers at the opposite end of the opening.
- STEP 9.** To frame the other side(s) of the rough opening, go to “Installing Stringers” on the next page.
- STEP 10.** Remove temporary support boards.

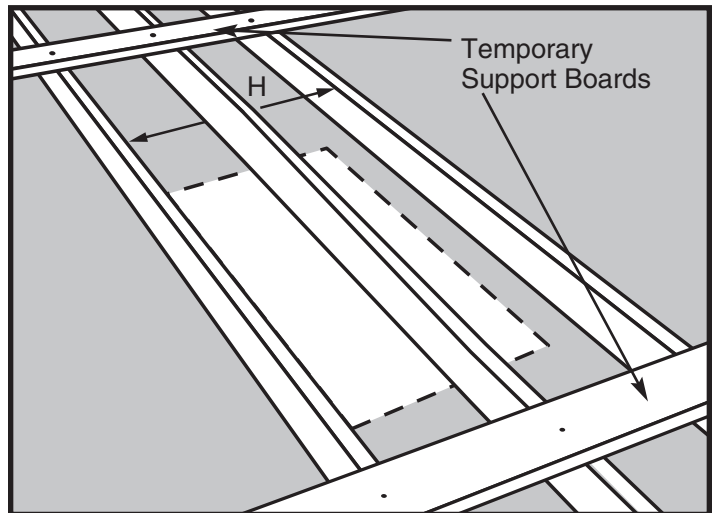


Figure 14

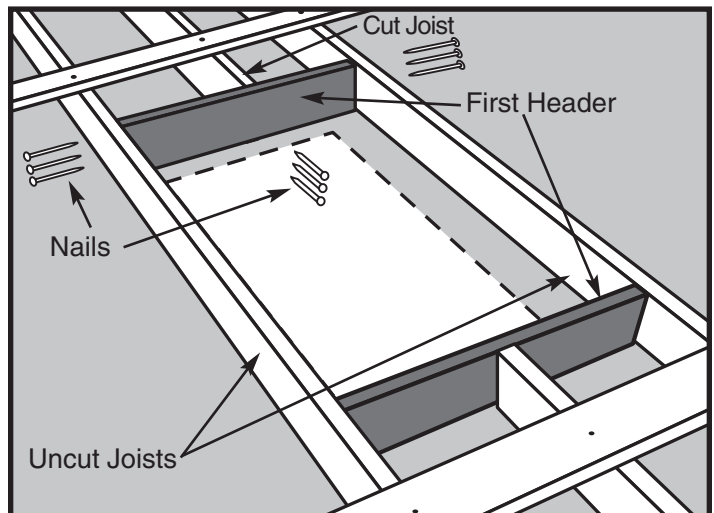


Figure 15

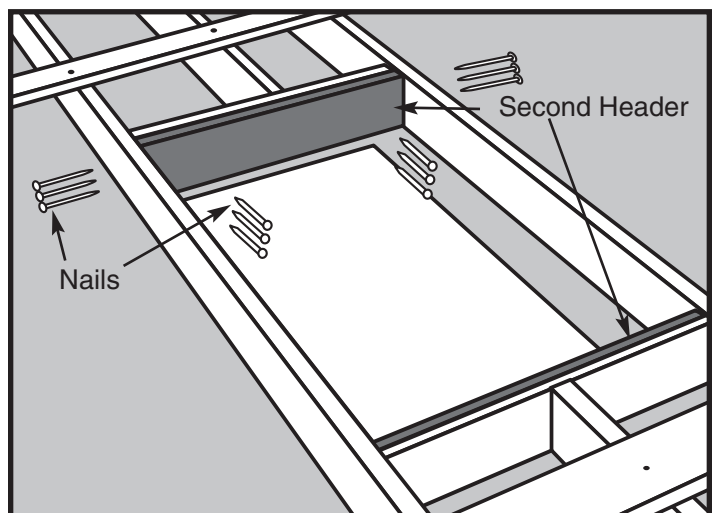


Figure 16

FRAMING THE ROUGH OPENING

Installing Stringers

- STEP 1.** Measure the stringer length “S” between the headers (See Figure 17).
- STEP 2.** Cut a stringer to this length. Use joist-sized lumber.
- STEP 3.** If the ceiling joist does not provide one side of the frame, then cut a second stringer the same length as the first one. Note that only one stringer is needed in Figure 17 because the ceiling joist provides one side of the frame.
- STEP 4.** Position the stringer(s) along the unframed side(s) of your location (See Figure 18). Check that the inside dimensions of the frame are 0.57 m x 1.37 m.
- STEP 5.** To attach the stringer(s) to the headers, use nails that are long enough to go through both headers and into the stringer at least 2.54 cm. Square the stringer(s) to the headers at one end and drive (3) 16d nails through the headers and into the stringer.

Check for squareness, then nail the other end. Check the rough opening for squareness by measuring across the diagonals. **The two measurements should be within 0.32 m to be considered square** (See Figure 18).

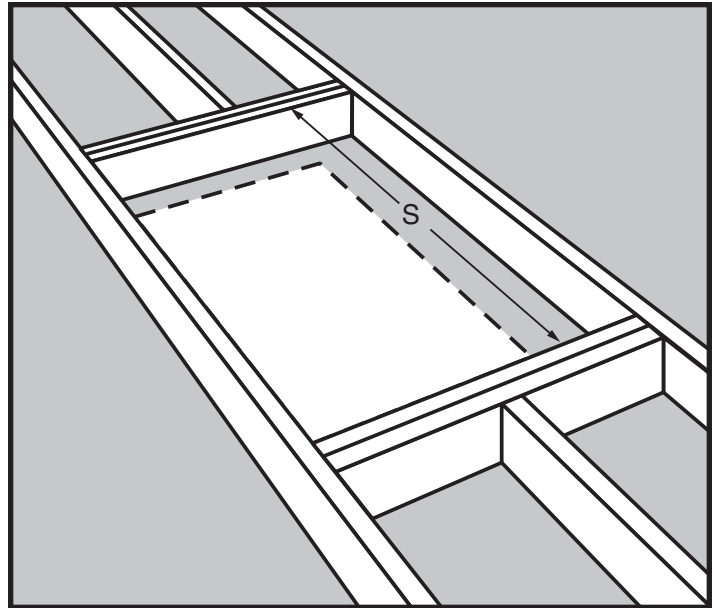


Figure 17

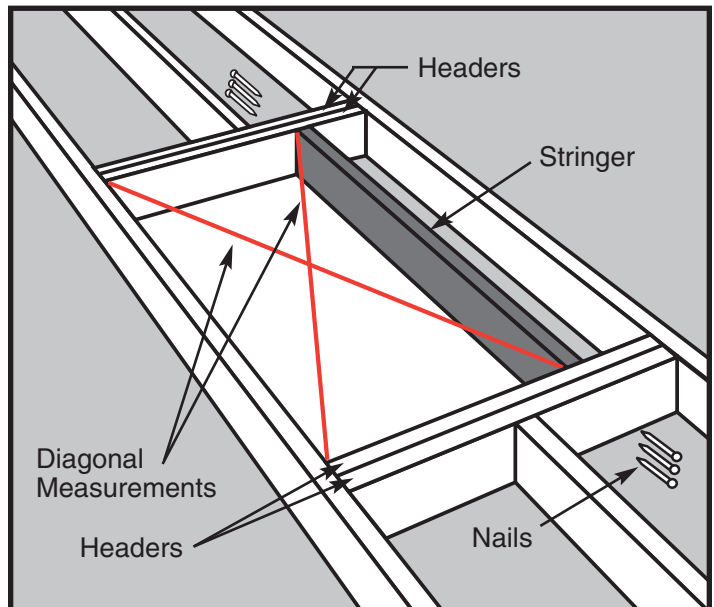


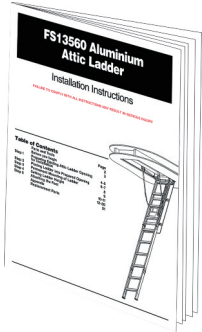
Figure 18

**YOUR ROUGH OPENING IS PREPARED
PROCEED TO STEP #1 - PREPARING EXISTING ATTIC
LADDER OPENING FOR INSTALLATION**

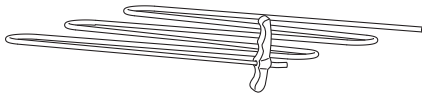
Replacement Parts For FS13560 Aluminium Attic Ladder

HARDWARE KIT

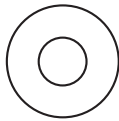
(1) Ladder Assembly Instruction Manual



(1) Rope Assembly



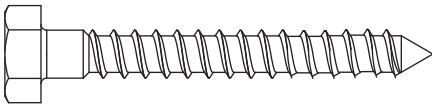
(11) 1/4" Washers



(2) 1/4"-20 Lock Nut



(10) 1/4" -20 Lag Bolt
5.08 mm Long



(2) 1/4"-20 Hex Head Cap Screws
1.91 cm Long



STRUT REPLACEMENT KIT

(1) Instruction Sheet

(2) Gas Strut Assembly



(4) Metal Straps



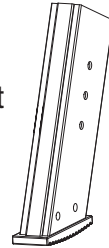
FOOT REPLACEMENT KIT

(1) Instruction Sheet

(1) Left Foot Assembly



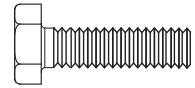
(1) Right Foot Assembly



(2) 1/4"-20 Lock Nut



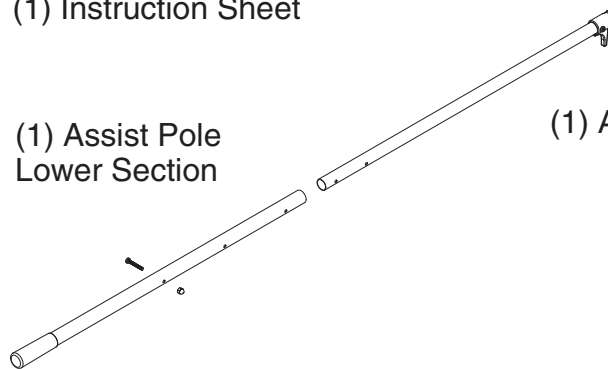
(2) 1/4"-20 Hex Head Cap Screws
1.91 cm Long



ASSIST POLE KIT

(1) Instruction Sheet

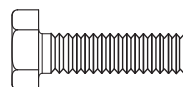
(1) Assist Pole Lower Section



(2) 1/4"-20 Lock Nut

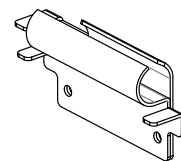


(2) 1/4"-20 Hex Head Cap Screws
1.91 cm Long

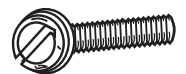


(1) Assist Pole Upper Section

(1) Assist Pole Bracket



(1) Machine Screw



(1) Acorn Nut



