

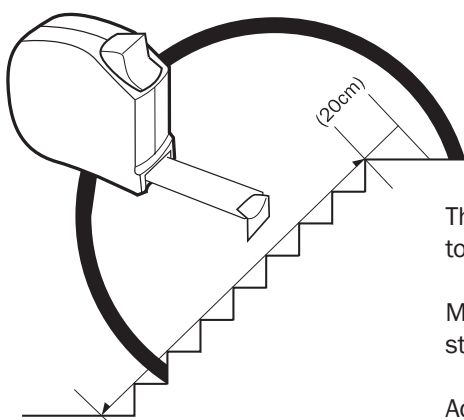
Rail Cutting Instructions

In situations where a stock rail needs to be reduced in length, the following points must be observed.



BEFORE CUTTING AND DRILLING, MAKE SURE YOU WEAR THE CORRECT PERSONAL PROTECTIVE EQUIPMENT

1.



Measure the stairway first.

The measurement must be taken from the landing at the top of the staircase to the floor at the bottom.

Measure in a straight line, with the tape measure resting on the nose of each step. Make a note of this measurement.

Add **8" (20cm)** (Overhang) to the stairway measurement to give the total length of the rail required.

	Stairway	Overhang		Rail length required
Examples:	148"	+ 8"	=	156"
	375cm	+ 20cm	=	395cm



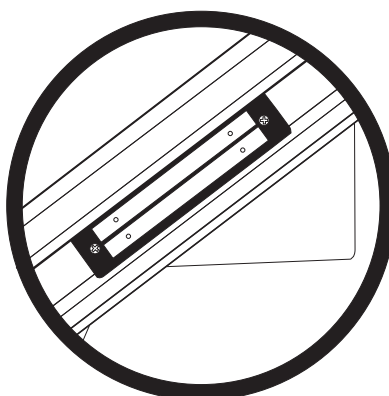
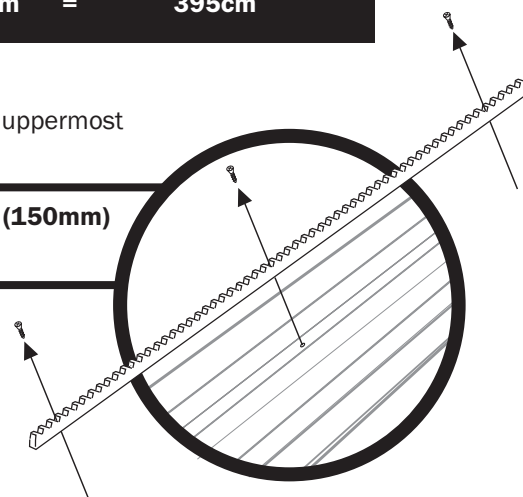
All cuts must be made at the very top of the rail. DO NOT cut at the joint, as this is a precision cut to allow the two pieces to join accurately.



All measurements of the rail must be made on the underside of the rail (the side opposite to the gear rack). As this is the side that rests on the stairway.

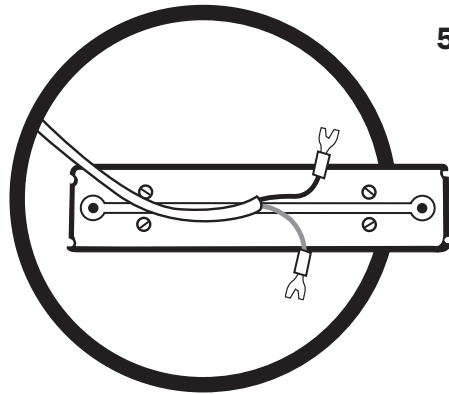
2. To cut the rail, first remove the uppermost section of gear rack.

Note that the gear rack is 6" (150mm) shorter than the rail itself.

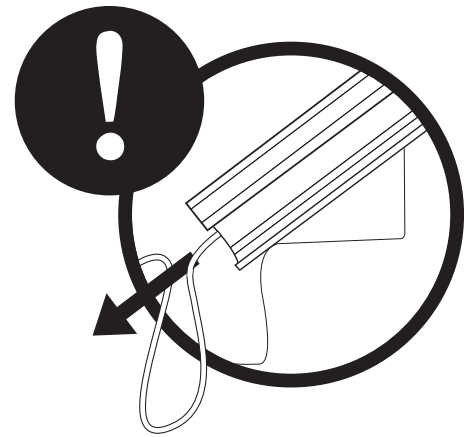


3. Now remove the upper charge point, which is affixed to the side of the rail.

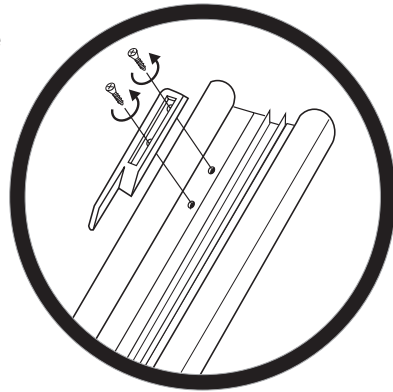
4. Disconnect the blue and brown cables from the reverse of the charge point plate.



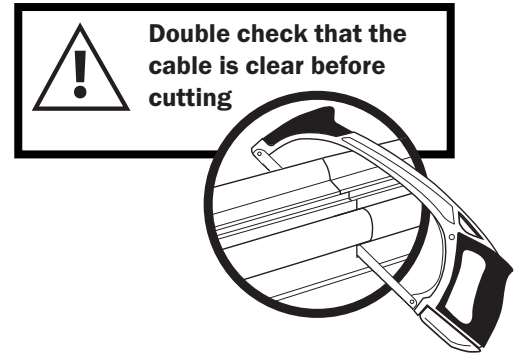
5. Temporarily pull the cable back through the rail to prevent it from being cut.



6. Cut the rail to the required length, using a chop-saw, skill-saw or broad-bladed hacksaw.



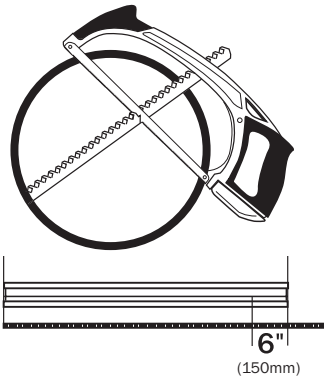
7. The top stopping-limit ramp (screwed to the upper surface of the rail, near the top) must also be removed.



8. The upper section of gear rack must now be reinstalled.

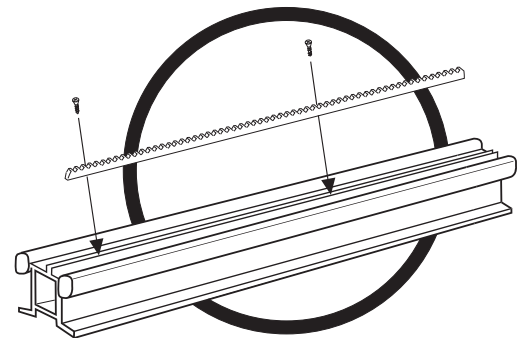
This must be shortened by the same amount so that it remains **6" (150mm)** shorter than the aluminium rail section.

For safety reasons, it is important that the difference in length between the gear rack and the rail section is maintained.

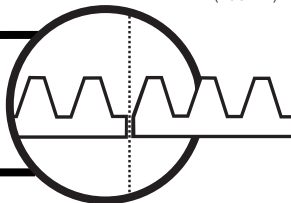


Re-installing the Gear Rack

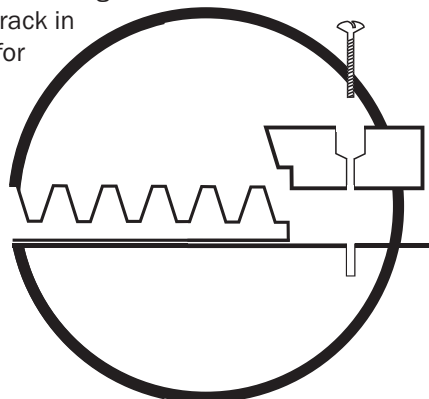
9. Screw the gear rack back into position through the remaining holes.



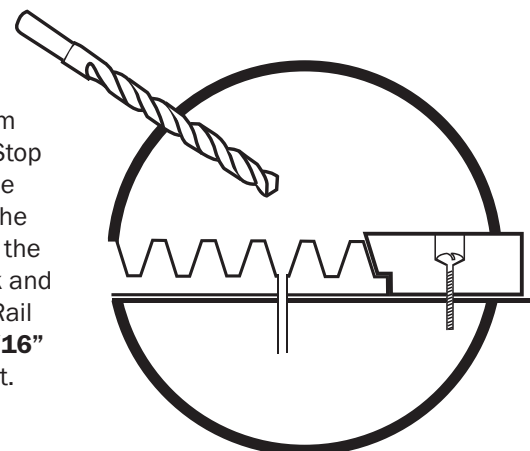
When cutting the gear rack make sure you leave a step for the END STOP to fit against.



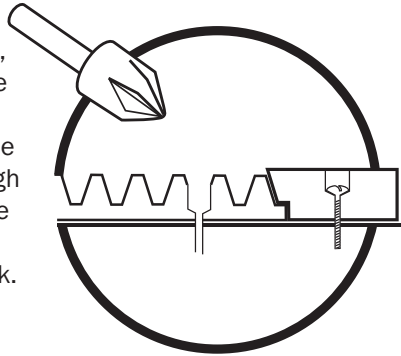
10. Screw the End Stop back down holding the gear rack in position for drilling.




11. Two to three runs down from the End Stop drill a hole through the centre of the gear rack and into the Rail with a **3/16" (5mm)** bit.



- 12.** Using a **5/16" (8mm)** Countersink, bore into the top of the previous hole giving enough depth for the head of the screw to sink.

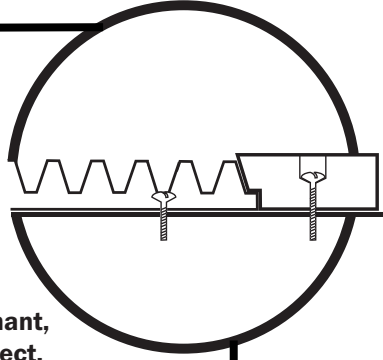


- 13.** Screw the gear rack down.

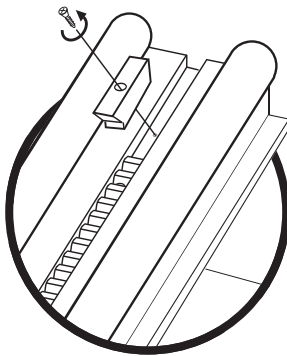


It is important that the screw head is sunk sufficiently for the gear to run smoothly preventing any damage.

If the screw head is still prominent, adjust the hole depth until correct.



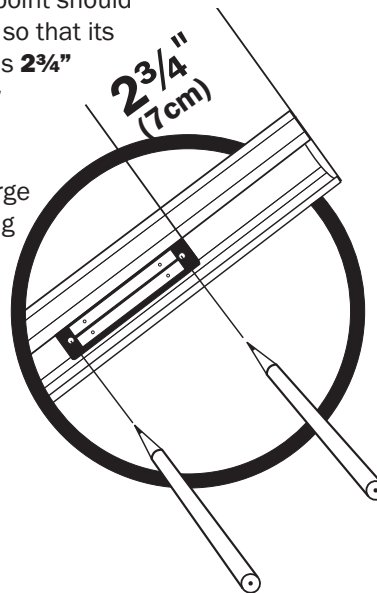
- 14.** Remove the End Stop so that the Carriage can be installed onto the rail.



Re-installation of the charge point

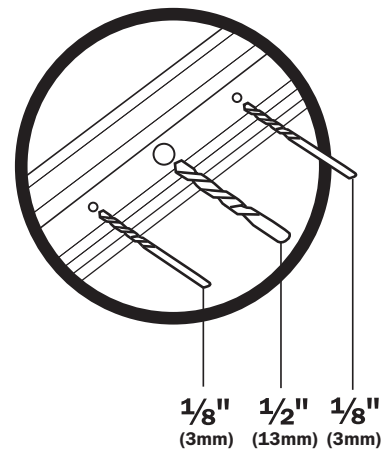
- 15.** The charge point should be mounted so that its upper edge is **2 3/4" (7cm)** below the cut.

Use the charge point molding as a template.



- 16.** Drill 2 x **1/8" (3mm)** holes for the mounting screws.

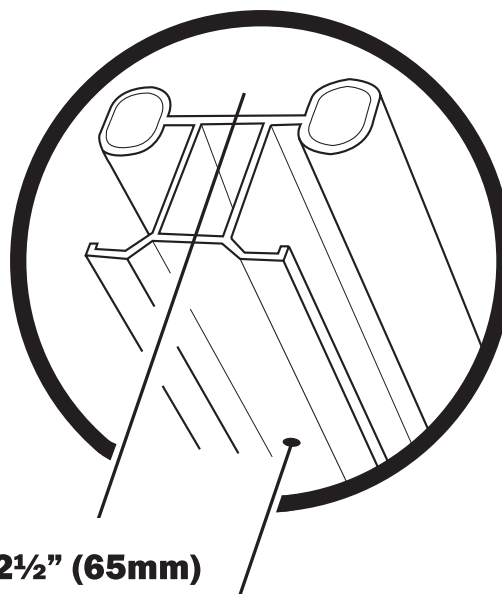
Drill a **1/2" (13mm)** hole between the two markings.



16a. ONLY IF REQUIRED

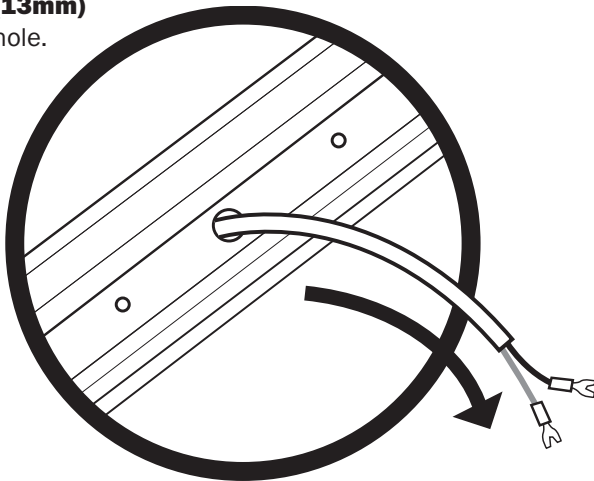


When cutting the stock rail to size, you may no longer have the transformer cable entry hole on the underside of the rail present. If this is the case, you will need to re-drill this hole and re-insert the rubber grommet.

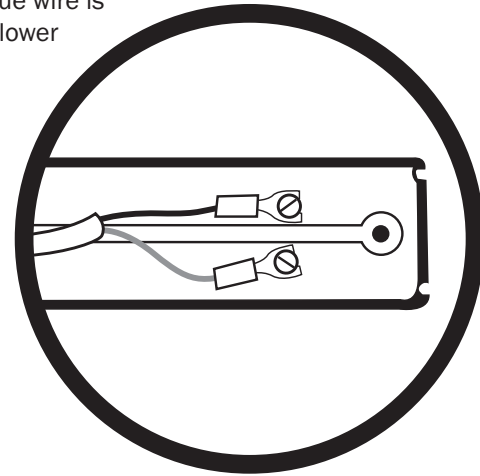


Drill a **3/8" (10mm)** hole on the underside of the rail **2 1/2" (65mm)** from the top end.

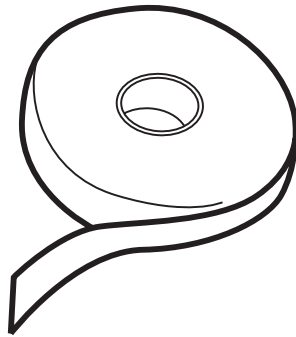
- 17.** Pass the charge point cable through the $\frac{1}{2}$ " (13mm) hole.



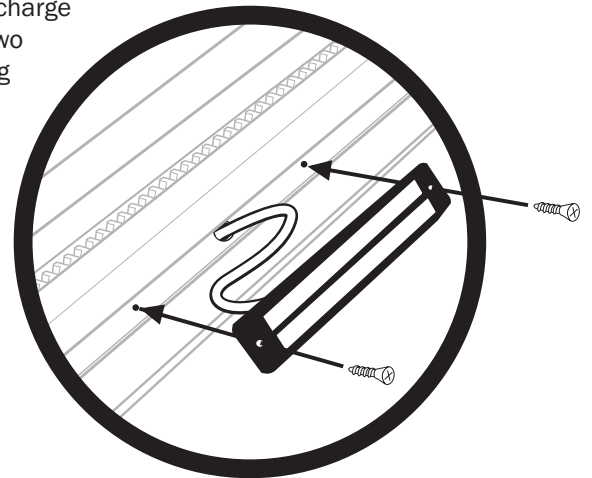
- 18.** Ensure that the brown wire is attached to the uppermost strip on the charge point and the blue wire is attached to the lower most strip.



- 19.** Also ensure that none of the metal components of the charge point or its wiring (aside from the fixing screws) are in contact with the rail itself by insulating with electrical tape.



- 20.** Re-position the charge point with the two screws, returning any loose cable back into the rail.

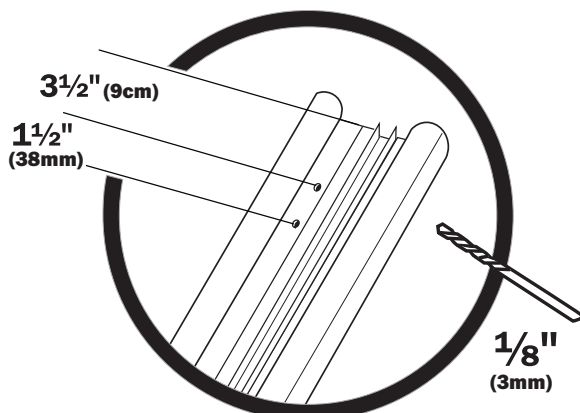


Re-installation of the top limit ramp and end stop

- 21.** Use the top stopping limit ramp as a template and mark the rail $3\frac{1}{2}$ " (9cm) from the top.

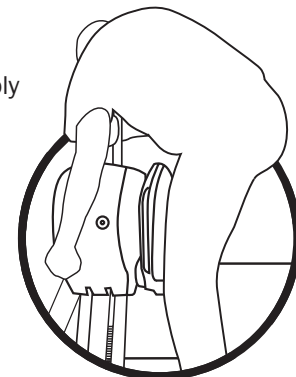
Then mark for the second hole $1\frac{1}{2}$ " (38mm) from the first hole.

Drill into the rail at the markings with a $\frac{1}{8}$ th (3mm) drill.



- 22.** The rail is now ready for assembly and fixing to the staircase.

Once the rail is in place run the carriage down giving sufficient access for the End Stop and Stopping Ramp to be fitted.



- 23.** Screw down the End Stop and Stopping Ramp.

