

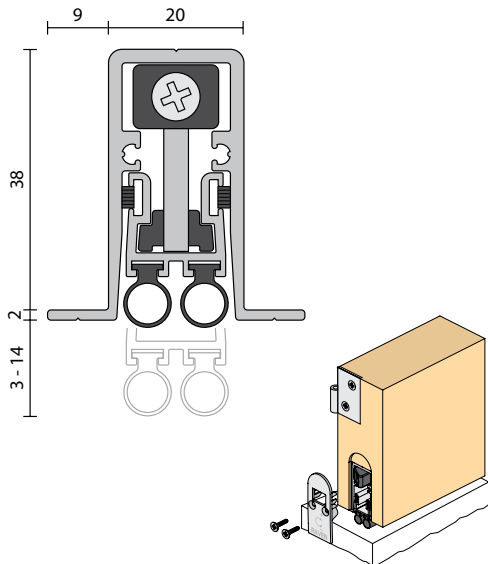
RPI27Si



FITTING INSTRUCTIONS

Automatic Door Bottom Seal

Anti-microbial Silicon Gasket



Category J door bottoms are intended for application to/with Classified hollow metal and steel covered composite type fire doors rated up to and including 3 hrs. and wood and plastic covered composite and wood core fire doors rated up to and including 1-1/2 hrs.

DETAILS

LOCATION

Single and double butt hinged door bottoms.

MIN/MAX GAP

3mm to 14mm.

SEAL MATERIAL

Silicon Rubber.

REPLACEMENT SEAL

RP3126Si.



TOOLS

RPI27Si is a heavy duty door bottom seal, with an extruded silicon sealing component that conforms to the 200°C requirement of NCC S12C4. The seal is operated automatically by pressure against the door jamb on the adjustment block. It seals when the door closes and retracts automatically when the door is opened. It is self levelling. RPI27Si has been approved on proprietary fire doors. Meets leakage rates specified in AS 6905, BS EN 13501-2 “Sa” & “Sm”. Tested to AS 1530.7, BS EN 1634-3.

NOTES

- » RPI27Si may be fully morticed only.
- » Door should be prepared in advance. **(FIG.3) PAGE 2**
- » Do not cut RPI27Si shorter than the length recommended as this may affect the seal operation and void warranty.
- » Cut back latch end only.
- » If doors are exposed to weather, any untreated exposed timber should be sealed with a wood primer.
- » For double doors, plain meeting stiles are recommended. For rebated meeting stiles, ensure thickness of door is sufficient.
- » For metal doors, refer **PAGE 3 & 4**
Note: **PAGE 3** for better sealing option.
- » **CAUTION:** Do not withdraw inner extrusion further than outer housing since this may damage mechanism. **(FIG.2) PAGE 2**
- » Do not use power or battery driven tools to fit escutcheon plates.

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Patented.

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ISO9001 QMS company
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Designed and produced by
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Made in P.R.C. by Raven

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Part No. ZSDSRPI27Si

WITHOUT ESCUTCHEON PLATES

Nominal Seal Lengths:	Cuts back to:
1500mm	1220mm
1220mm	1070mm
1070mm	920mm
920mm	820mm
820mm	600mm
600mm	305mm

WITH ESCUTCHEON PLATES

Total length of product is increased by 4mm.

Nominal Seal Lengths:	Cuts back to:
1504mm	1224mm
1224mm	1074mm
1074mm	924mm
924mm	824mm
824mm	604mm
604mm	309mm

- STEP 1** Prepare door as shown. (FIG.2 & FIG.3) Use a Ø22mm or Ø7/8" router bit to machine mortices for escutcheon plates. (FIG.3)
- STEP 2** Measure full width of door leaf. (FIG.1)
- STEP 3** Machine cut RPI27Si less 4mm to allow morticing of escutcheon plates. Cut back latch side only. (FIG.1 & FIG.3)
- STEP 4** To allow for operating clearance, file cut end of the inner extrusion 1mm shorter on the latch side. Cut gasket and inner seal with a sharp utility knife. **CAUTION:** Do not withdraw inner extrusion further than outer housing since this may damage mechanism. (FIG.2)
- STEP 5** Drill mounting holes in housing flanges along vee grooves to suit screws supplied - Ø3.5mm. (FIG.2)
- STEP 6** Wind adjustment screw anti-clockwise until it stops. (FIG.2) **Note:** Do not overtighten as this may damage components and void warranty.
- STEP 7** Allowing for escutcheon plates, centre RPI27Si in door bottom with adjustment screw on hinge side. Screw fix with the longest screws supplied.
- STEP 8** Fit escutcheon plates with the shortest screws supplied (do not use a powered driver). Push adjustment block to check seal operates freely. Hang door. (FIG.1) **Note:** Pull down inner extrusion by a few millimetres when fitting escutcheon plates. (FIG.4)
- STEP 9** For soft timber jambs, position striker button where adjustment block meets door jamb. (FIG.5)

- STEP 10** Pull adjustment block out from housing to orientate the adjustment block correctly. (FIG.6)
- STEP 11** Open the door and turn adjustment screw clockwise one turn. (FIG.2)
- STEP 12** Close door gently and observe the action of the RPI27Si. The seal should engage the sill lightly. For adjustment, only turn the adjustment screw **clockwise** half a turn at a time, then close door to check seal travel before further adjustment. Turning screw **clockwise** increases seal travel, **anti-clockwise** decreases seal travel. Repeat this step until the gaskets contact the sill along the full length of the product.

FIG.1

PLAN VIEW

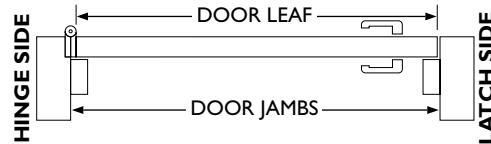


FIG.2

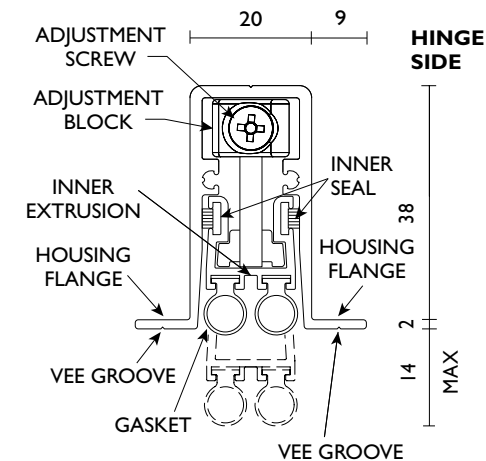


FIG.3

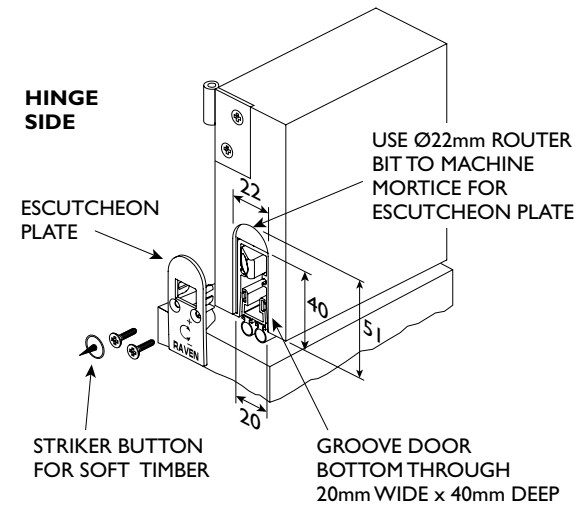


FIG.4

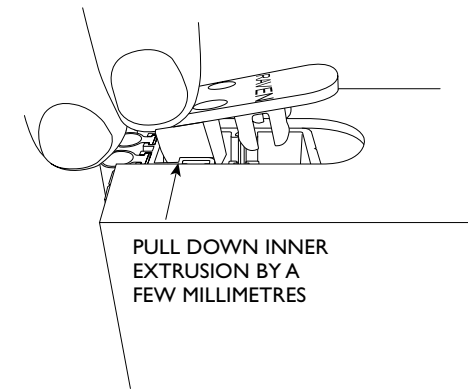


FIG.5

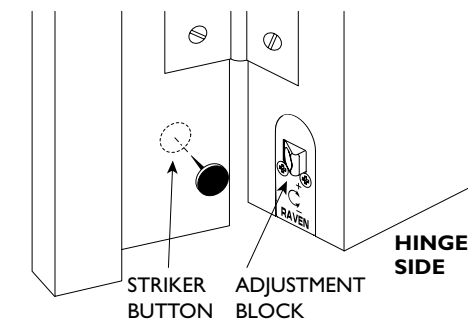
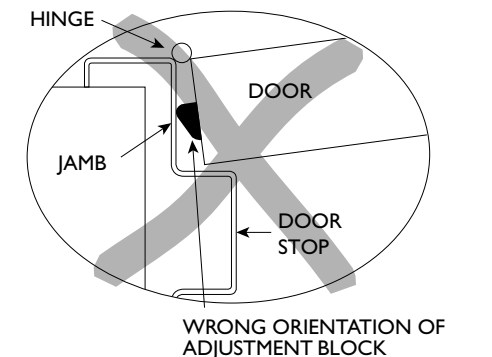
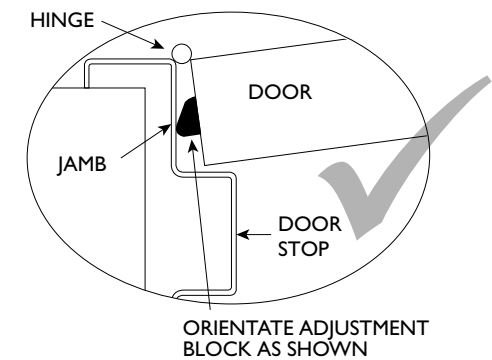


FIG.6



CONCEALED INSTALLATION WITHIN HOLLOW BOTTOM RAIL OF BUTT HINGED METAL FRAMED DOORS, BOTH SINGLE AND DOUBLE.

- STEP 1** Remove door. Cut out metal in stiles, so that the seal mounts in centre of rail. **(FIG.1 & FIG.2)** Machine stiles to suit.
- STEP 2** Drill countersink holes in stiles on latch and hinge side to suit 6 gauge self tapping countersink screws. **(FIG.1 & FIG.2)**
Note: Position screw hole so escutcheon plate will cover screw.
- STEP 3** Machine timber blocks (by others) to fit inside of each stile bottom. Insert timber blocks into stiles and screw fix using countersink screws (by others). **(FIG.2)**
- STEP 4** Machine cut RPI27Si to exact width of door leaf. Cut back latch side only.
- STEP 5** To allow for operating clearance, file cut end of the inner extrusion 1mm shorter on the latch side. Cut gasket and inner seal with a sharp utility knife. **CAUTION:** Do not withdraw inner extrusion further than outer housing since this may damage mechanism. **(FIG.5)**
- STEP 6** Drill two mounting holes in housing flanges along vee grooves at each end to suit longest screws supplied. **(FIG.3 & FIG.5)**
- STEP 7** Wind adjustment screw anti-clockwise until it stops.

(FIG.5) Note: Do not overtighten as this may damage components and void warranty.

- STEP 8** Insert RPI27Si into door bottom with adjustment screw on hinge side. Screw fix into timber block with the longest screws supplied. **(FIG.3)**
- STEP 9** Fit escutcheon plates with the shortest screws supplied (do not use a powered driver). **(FIG.3)**
Note: Pull down inner extrusion by a few millimetres when fitting escutcheon plates. **(FIG.4)**
- STEP 10** Fill any gaps with suitable sealant (by others). **(FIG.3)** Push adjustment block to check seal operates freely. Hang door.
- STEP 11** Pull **adjustment block** out from housing to orientate the **adjustment block** correctly. **(FIG.6)**
- STEP 12** Open the door and turn adjustment screw clockwise one turn. **(FIG.5)**
- STEP 13** Close door gently and observe the action of the RPI27Si. The seal should engage the sill lightly. For adjustment, only turn the adjustment screw **clockwise** half a turn at a time, then close door to check seal travel before further adjustment. Turning screw **clockwise** increases seal travel, **anti-clockwise** decreases seal travel. Repeat this step until the gaskets contact the sill along the full length of the product.

FIG.1

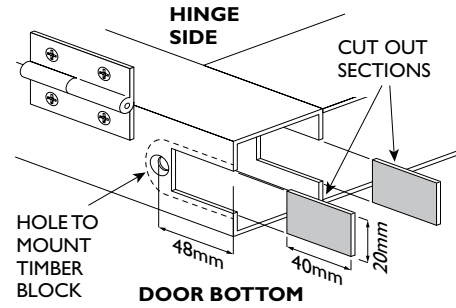


FIG.2

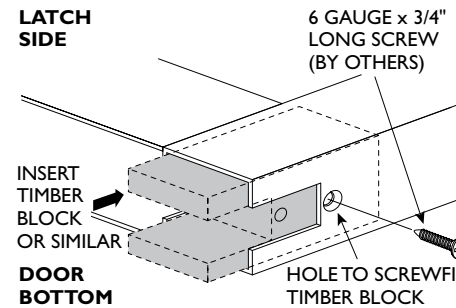


FIG.3

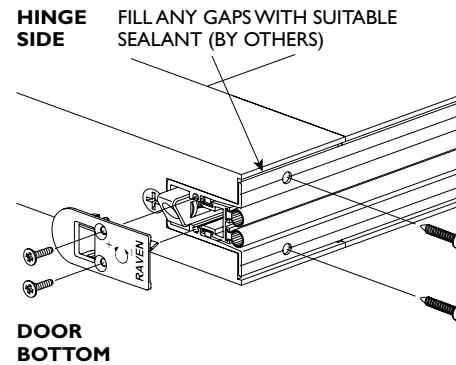


FIG.4

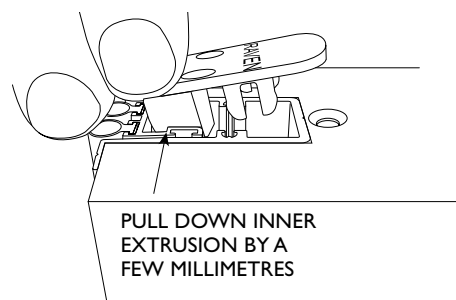


FIG.5

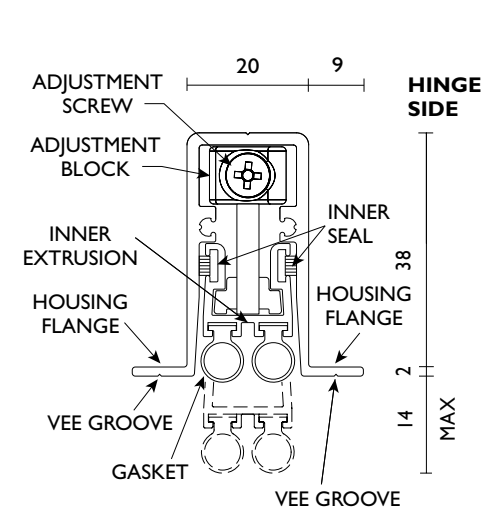
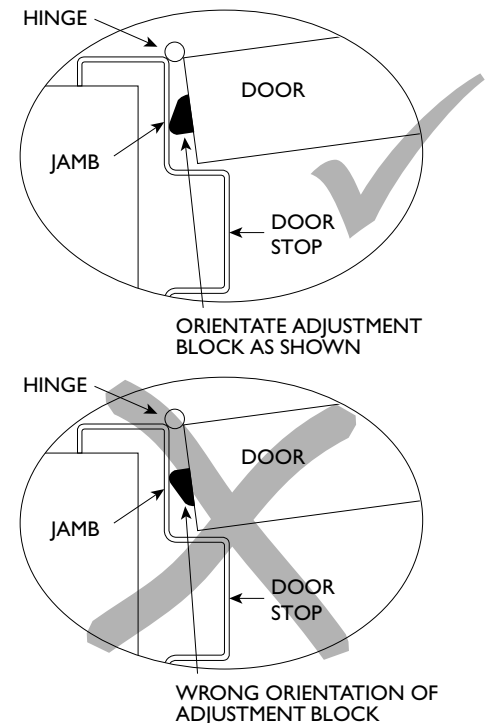


FIG.6



CONCEALED INSTALLATION WITHIN HOLLOW BOTTOM RAIL OF BUTT HINGED METAL FRAMED DOORS, BOTH SINGLE AND DOUBLE. (WITHOUT ESCUTCHEON PLATES).

- STEP 1** Remove door. Cut out metal in stiles, so that the seal mounts in centre of rail. **(FIG.1 & FIG.2)** Machine inside of stiles to suit.
- STEP 2** Drill holes in stiles on latch and hinge side to suit two 4 gauge countersink screws supplied. **(FIG.1 & FIG.2)** Hinge side only cut out square hole 10 x 14mm for adjustment block. **(FIG.1)**
- STEP 3** Machine cut RPI27Si to exact length between inside faces of stiles. Cut back latch side only. **(FIG.4)**
- STEP 4** To allow for operating clearance, file cut end of the inner extrusion 1mm shorter on the latch side. Cut gasket and inner seal with a sharp utility knife. **CAUTION:** Do not withdraw inner extrusion further than outer housing since this may damage mechanism. **(FIG.4)**
- STEP 5** Wind adjustment screw anti-clockwise until it stops. **(FIG.4)** **Note:** Do not overtighten as this may damage components and void warranty.

- STEP 6** Insert **adjustment block** end of RPI27Si into bottom rail so adjustment block protrudes through hole. Push other end of seal into bottom rail. Line up holes in housing **(FIG.4)** with two drilled holes on **latch** side stile and fasten smallest countersink screws supplied. Now do the same on **hinge** side.
- STEP 7** Fill any gaps with suitable sealant (by others). **(FIG.3)** Push adjustment block to check seal operates freely. Hang door.
- STEP 8** Pull **adjustment block** out from housing to orientate the **adjustment block** correctly. **(FIG.5)**
- STEP 9** Open the door and turn adjustment screw clockwise one turn.
- STEP 10** Close door gently and observe the action of the RPI27Si. The seal should engage the sill lightly. For adjustment, only turn the adjustment screw **clockwise** half a turn at a time, then close door to check seal travel before further adjustment. Turning screw **clockwise** increases seal travel, **anti-clockwise** decreases seal travel. Repeat this step until the gaskets contact the sill along the full length of the product.

FIG.1

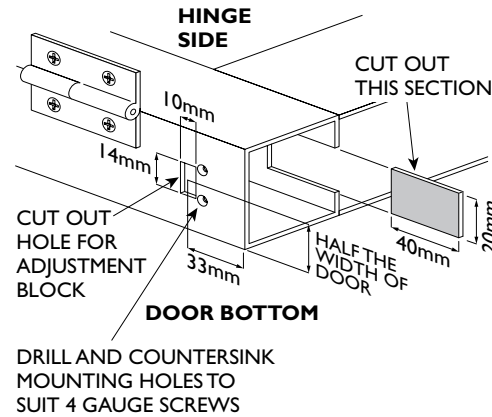


FIG.2

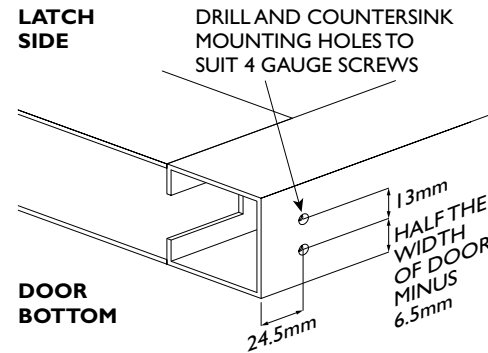


FIG.3

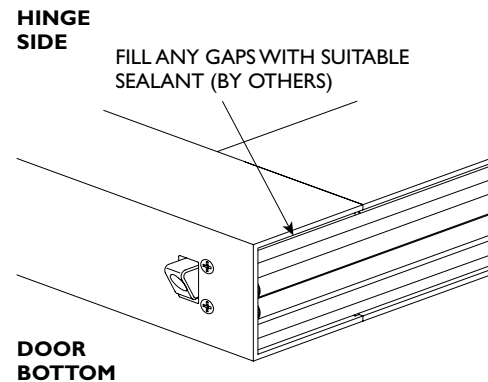


FIG.4

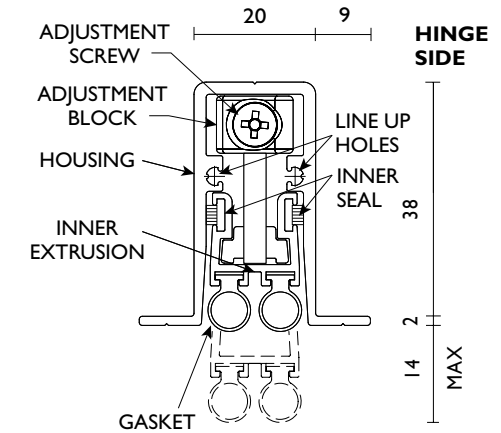
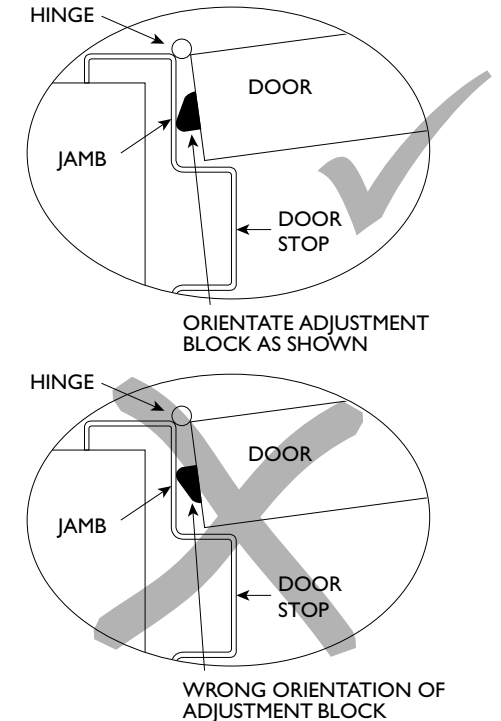
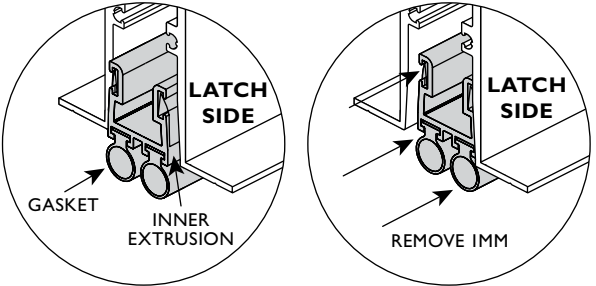
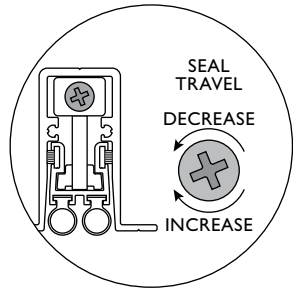


FIG.5



PROBLEM	SOLUTION	
<p>The seal does not drop evenly/correctly.</p>	<p>SOLUTION 1</p> <p>First, repeat directions in: STEP 4, TIMBER DOOR INSTALLATION, STEP 5, METAL DOOR INSTALLATION 1 STEP 4, METAL DOOR INSTALLATION 2.</p> <p>Remove latch side escutcheon plate, and file cut end to allow for operating clearance, file cut end of the inner extrusion 1mm shorter on the latch side. Cut gasket and inner seal with a sharp utility knife.</p> <p>Re-fit latch side escutcheon plate and open and close door to check correct sealing.</p> <p>CAUTION: Do not withdraw inner extrusion further than outer housing since this may damage mechanism: FIG.2, TIMBER DOOR INSTALLATION, FIG.5, METAL DOOR INSTALLATION 1, FIG 4, METAL DOOR INSTALLATION 2.</p>	
	<p>SOLUTION 2</p> <p>Repeat directions in: STEP 12, TIMBER DOOR INSTALLATION, STEP 13, METAL DOOR INSTALLATION 1, STEP 10, METAL DOOR INSTALLATION 2.</p> <p>Turning screw clockwise increases seal travel, anti-clockwise decreases seal travel. Repeat this step until the gaskets contact the sill along the full length of the product.</p>	
	<p>CONTACT RAVEN SUPPORT</p> <p>In rare cases, the CONNECTING ROD on the LATCH SIDE of the seal can break. Replacing the rod is a straight-forward process.</p> <p>Contact Raven at tech.advice@raven.com.au to request a replacement part.</p>	