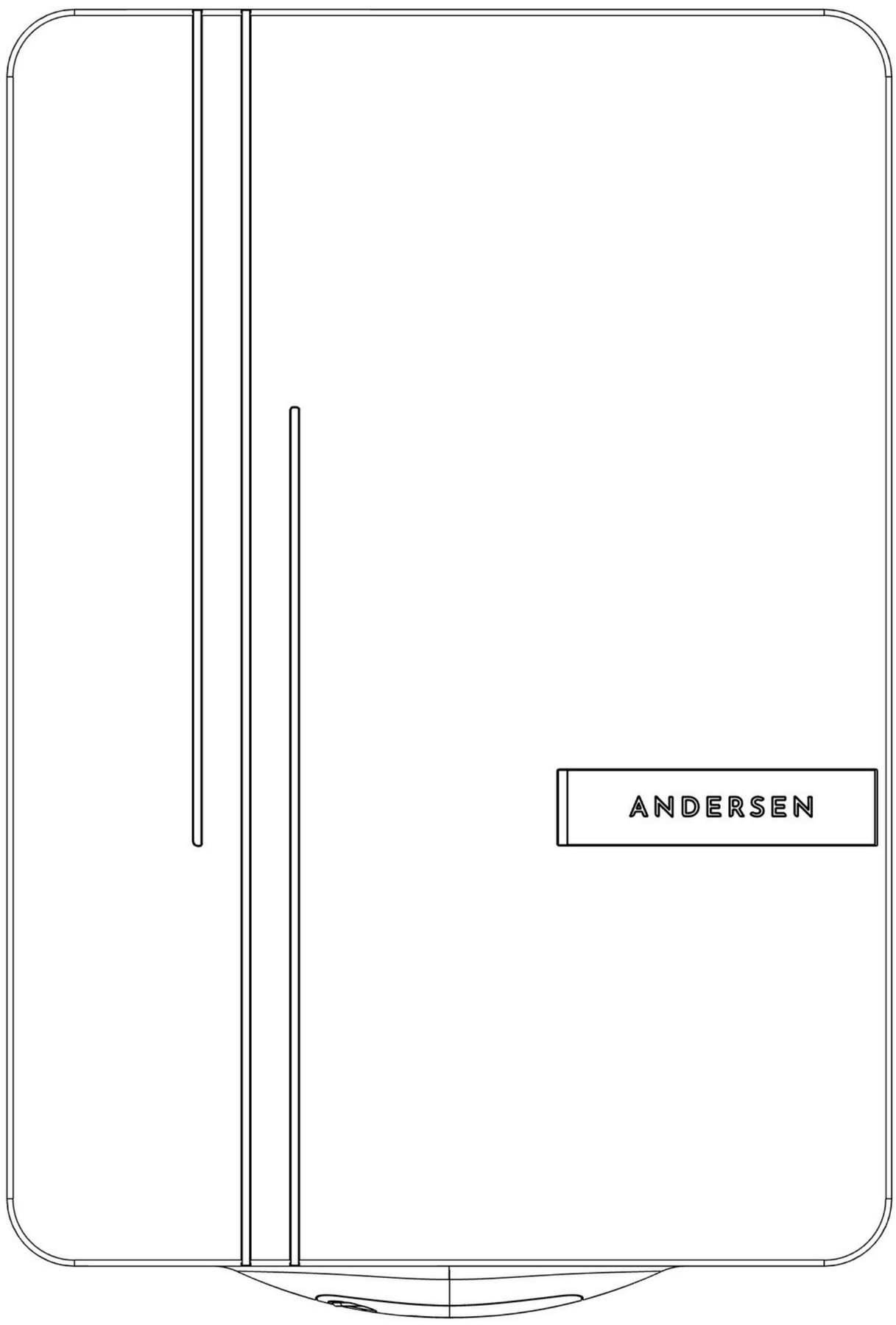
ANDERSEN

A3

Installer Manual



www.andersen-ev.com

Revision 1.0

ANDERSEN DISCLAIMER

The Andersen A3 should only be installed by an electrician with the appropriate knowledge and qualifications. The installation must comply with the current editions of the **IET Code of Practice for Electric Vehicle Charging Equipment installation** and **IET BS 7671 Requirements for Electrical Installations**. Failure to do so could result in injury or death.

It is the responsibility of the installer and/or designer to determine the correct cabling and protective devices where external influences could have an effect on inbuilt protection.

It is also the responsibility of the installer to apply or notify the relevant DNO with the installation details of the charge point and property in accordance with ENA guidance.

Opening of containment should only be carried out when the supply is isolated from the mains. The undertaking of any live testing should only be carried out by a person or persons qualified to do so.

The installation instructions should be followed closely to ensure correct installation and commissioning. Failure to follow these instructions could result in damage to the Andersen Charge point, existing installation or supplier's equipment,

During and on completion of the installation, it shall be inspected, tested and certified to verify that it complies with the current electrical regulations and standards as applicable.

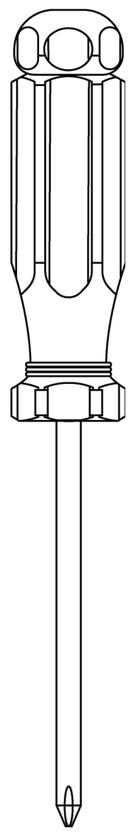
Before the Andersen A3 is put into service, we as the manufacturer require the installer to simulate a charge with a recognised EVSE adaptor and multifunction tester to prove operation and functionality. Use of this equipment should only be undertaken by someone who has an understanding of its functions and has the experience and knowledge to do so.

ANDERSEN A3

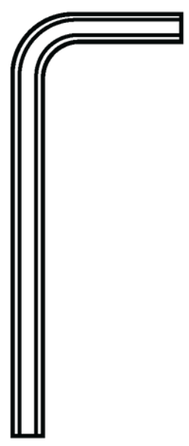
Tools Required

Included in fitting kit

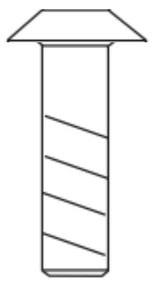
Pozidrive screwdriver



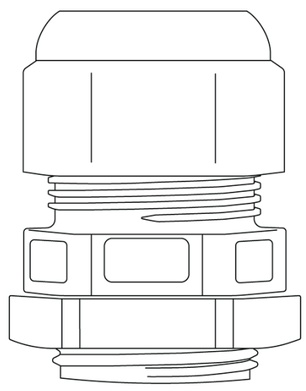
3mm allen key



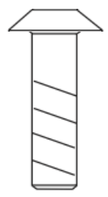
M5 x12mm for front fascia



1x 25mm Compression Gland for cable entry



M3 x8mm for terminal cover



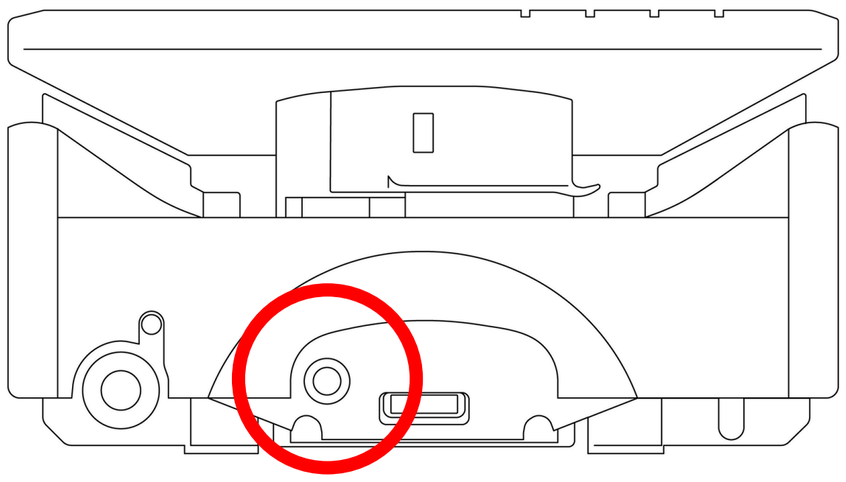
SETUP MULTI-FUNCTION OPERATION

Reset RCM (Two button presses)

Enter Network setup mode (Three button presses)

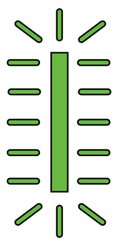
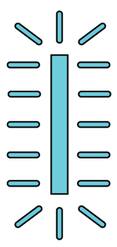
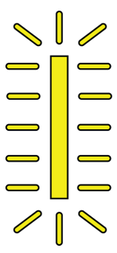
Exit Network setup mode (One button presses)

Enter unit reset mode (Five button presses)



Multi-function button located on the bottom, next to the amenity light.

OPERATION LED STATUS LIGHT

	Solid white LED - charge point is in standby mode
	Solid magenta LED - waiting for scheduled charge to start
	Solid orange LED - waiting for sufficient solar to start charge
	Pulsating green LED - vehicle is charging
	Solid green LED - vehicle has finished charging
	Solid blue LED - charge point is locked by user
	Solid red LED - charge point has detected an error
	Flashing cyan LED - charge point is in setup mode
	Pulsating yellow LED - charge point is rebooting
	All colours in a pulsating sequence - Firmware update in progress

Unpacking and Preperation

Package Contents:

- Welcome Pack
- A3 Unit
- Grid CT Clamp
- Solar CT Clamp (if applicable)
- M25 Compression Gland
- Terminal Cover Fitting Screws

Preparation - Recommended Steps:

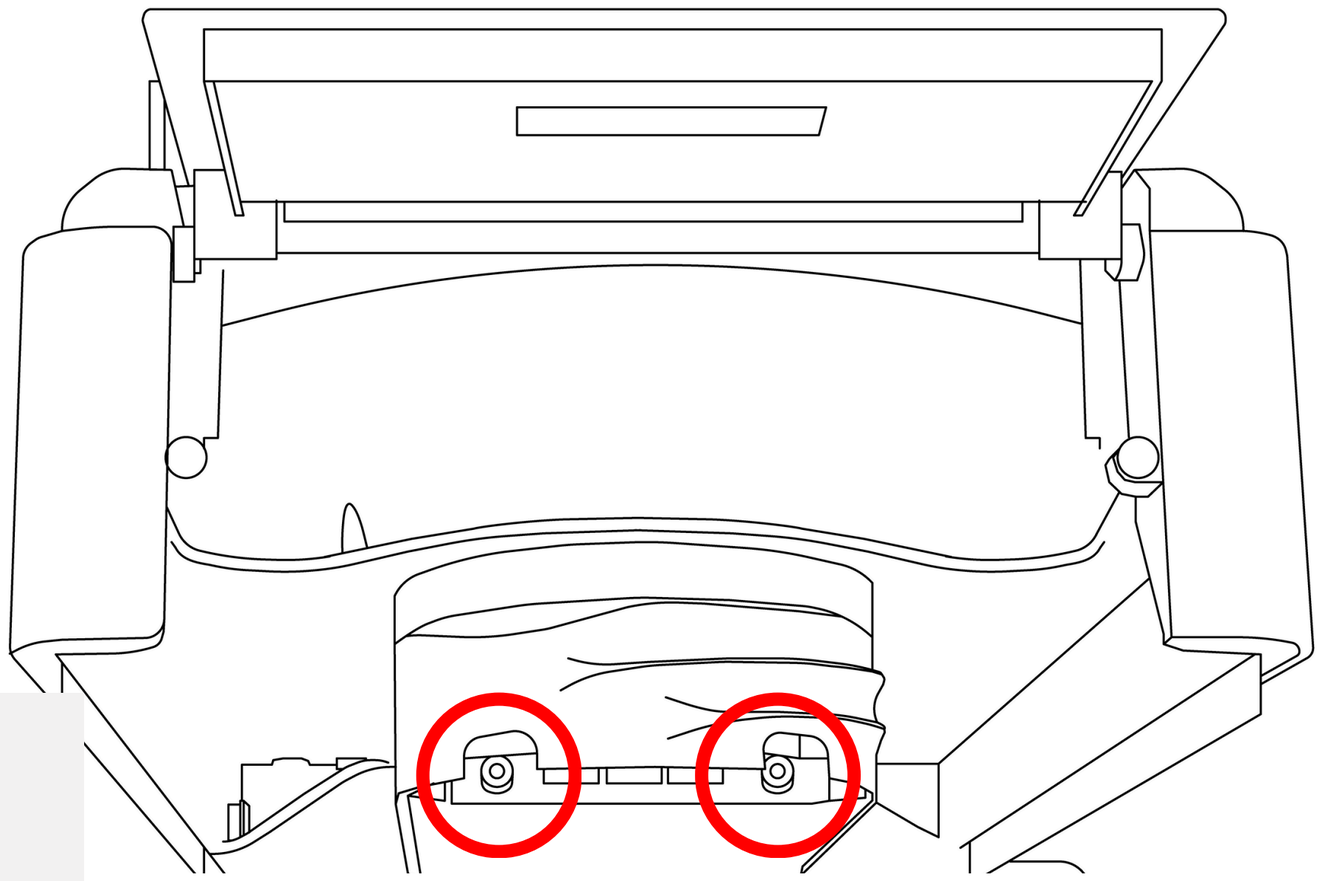
- Carefully Remove A3 From Box
- Check A3 For Any Damage
- Remove Front Fascia
- Remove Lower Panel & Terminal Cover
- Prepare To Mount To Wall

Any damage identified must be reported to Andersen.

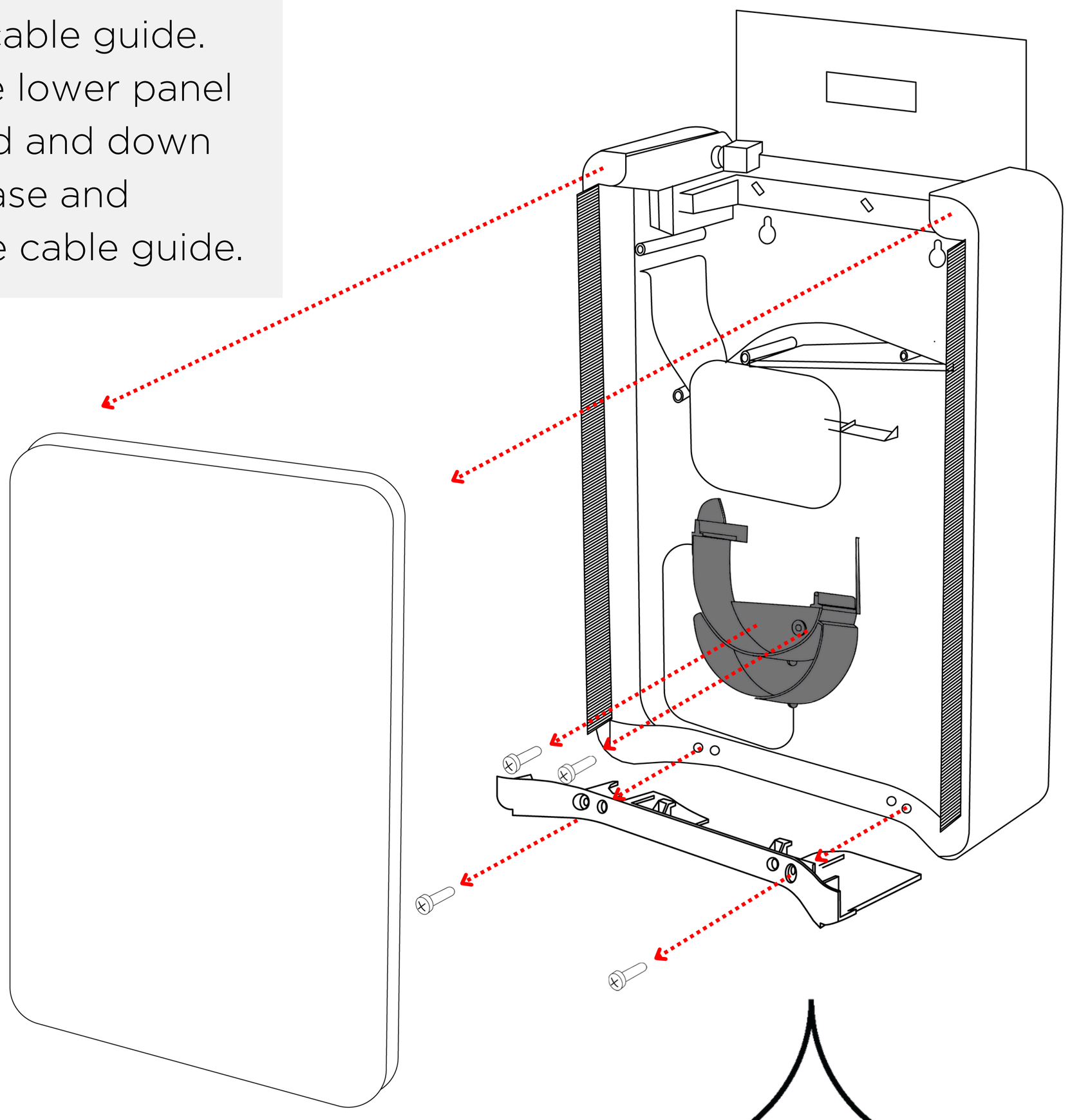
Please contact us on (01234) 916125

Step 1: Remove A3 Front Fascia & Lower Panel

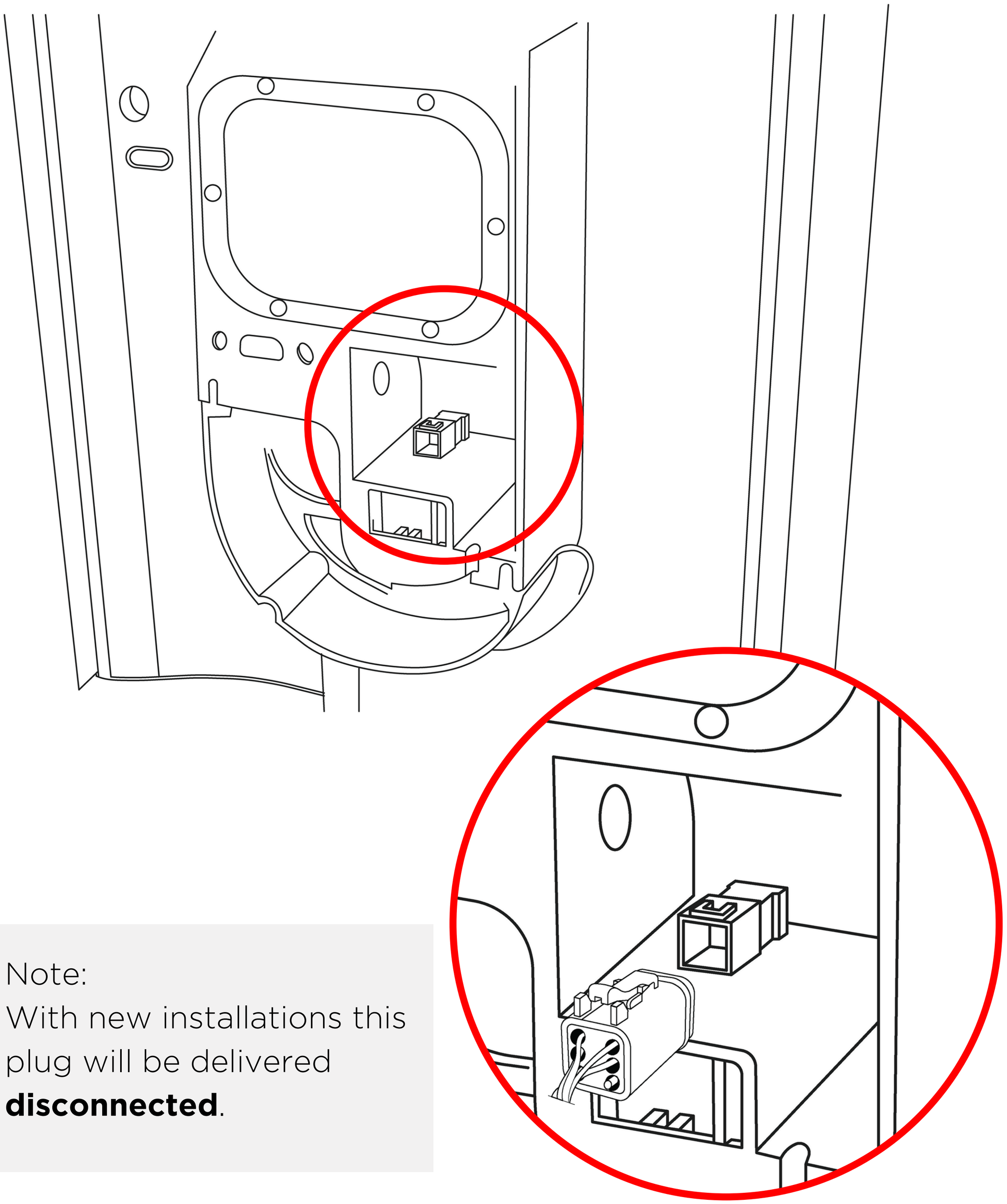
Remove the 2 screws, lift and remove the front fascia.



Remove the 2 screws in both the lower panel & the lower cable guide. Pull the lower panel forward and down to release and remove cable guide.



Step 2: LED Loom Connection Point



Note:
With new installations this plug will be delivered **disconnected**.

Step 3: Mount A3 Assembly To The Permanent Structure

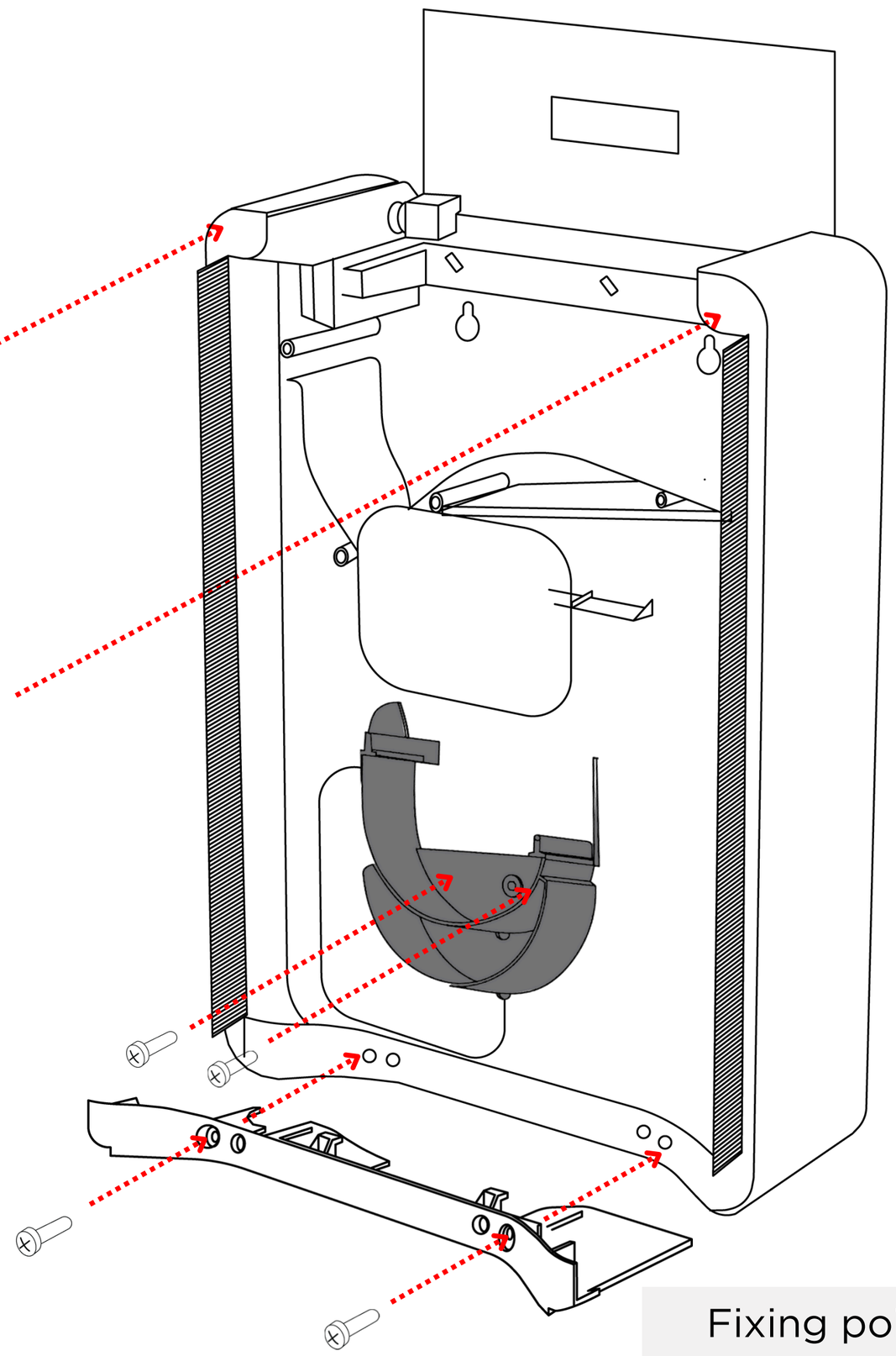
The mounting hardware (screws, wall plugs etc) must be selected and be appropriate for the specific structure.

RECOMMENDED

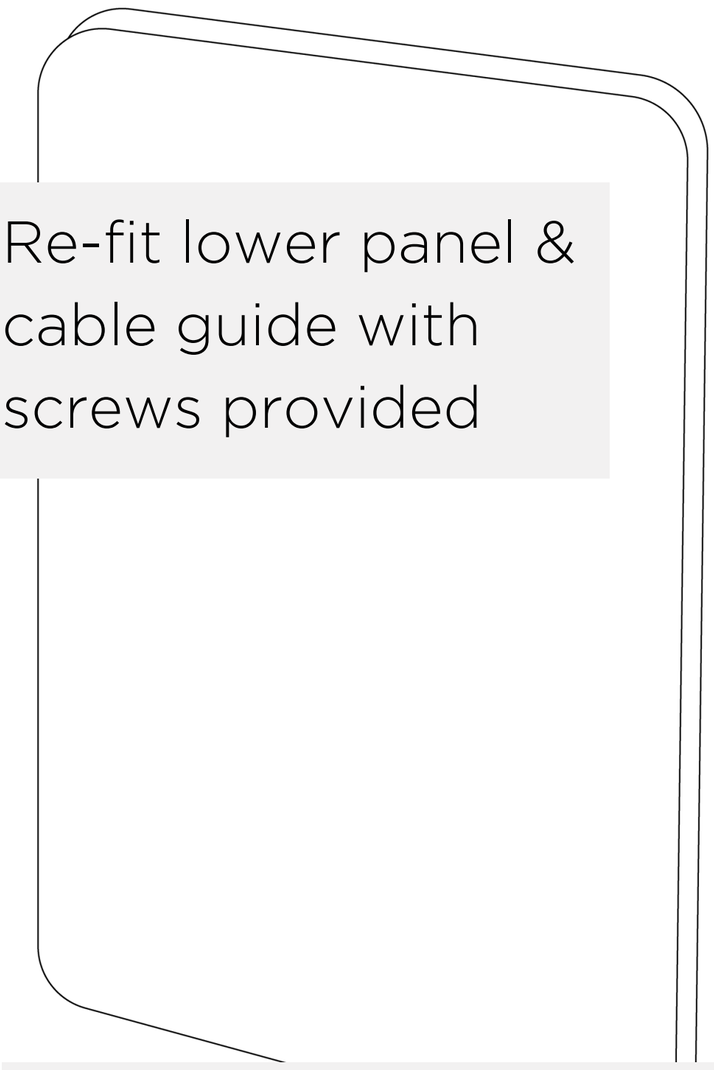
x2
6mm penny washer

x2
6mm washer

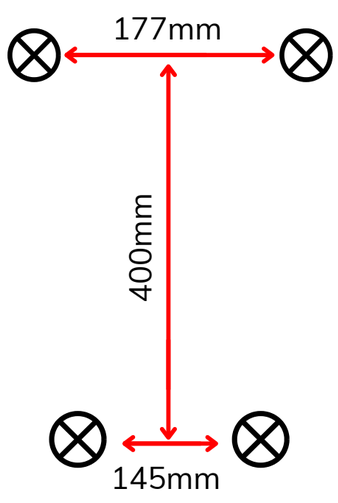
We don’t provide these screws or washers.



Re-fit lower panel & cable guide with screws provided



Fixing points dimensions

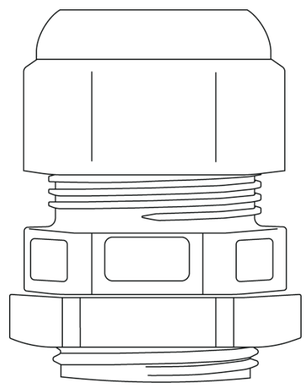


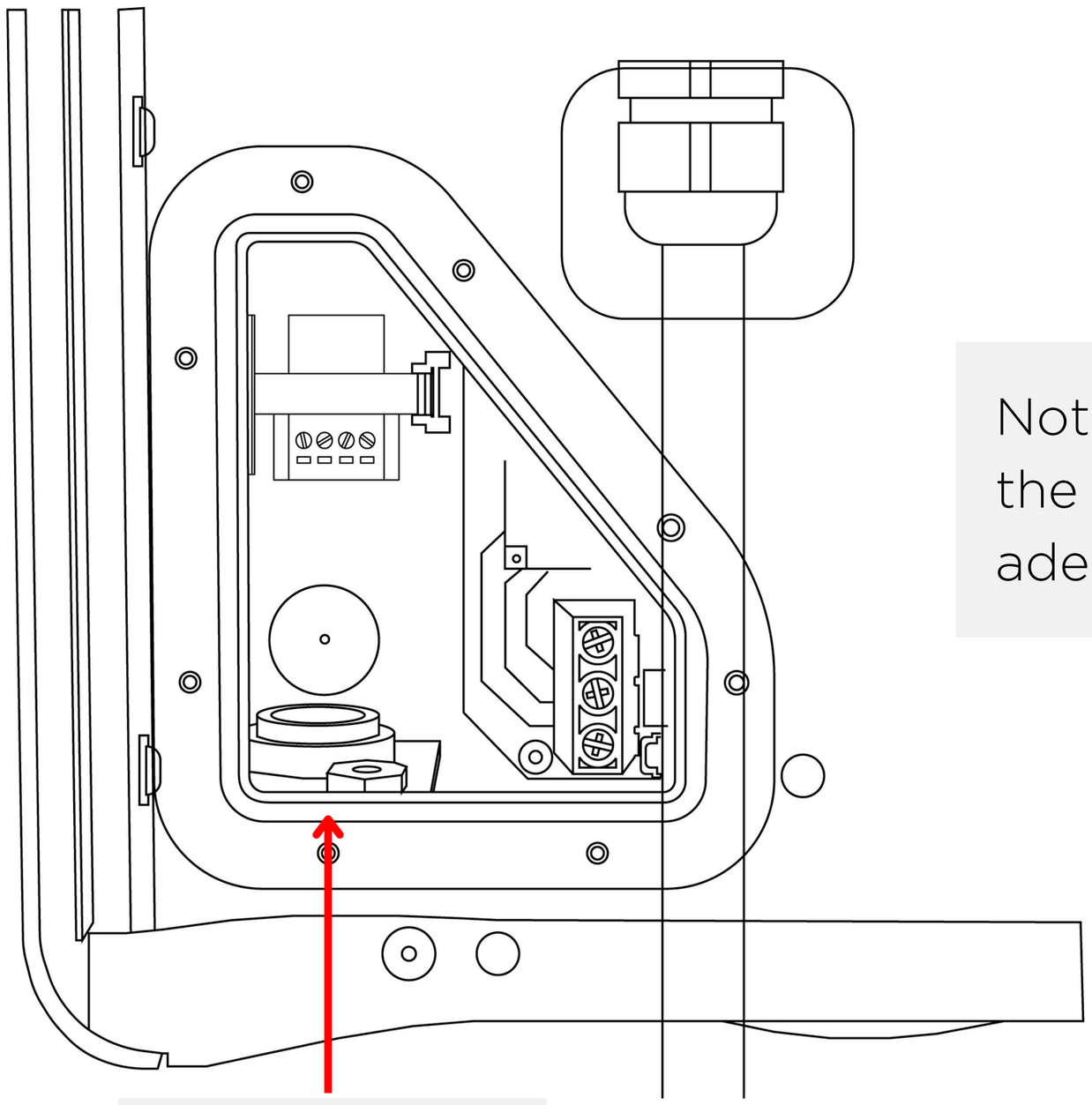
Note:
If the mounted surface is uneven, use spacers to ensure the unit core is sitting flush to the wall.

Step 4: Cable Entry

Cable can enter the unit from 2 positions. One on the underside through provided gland or rear entry into this compartment.

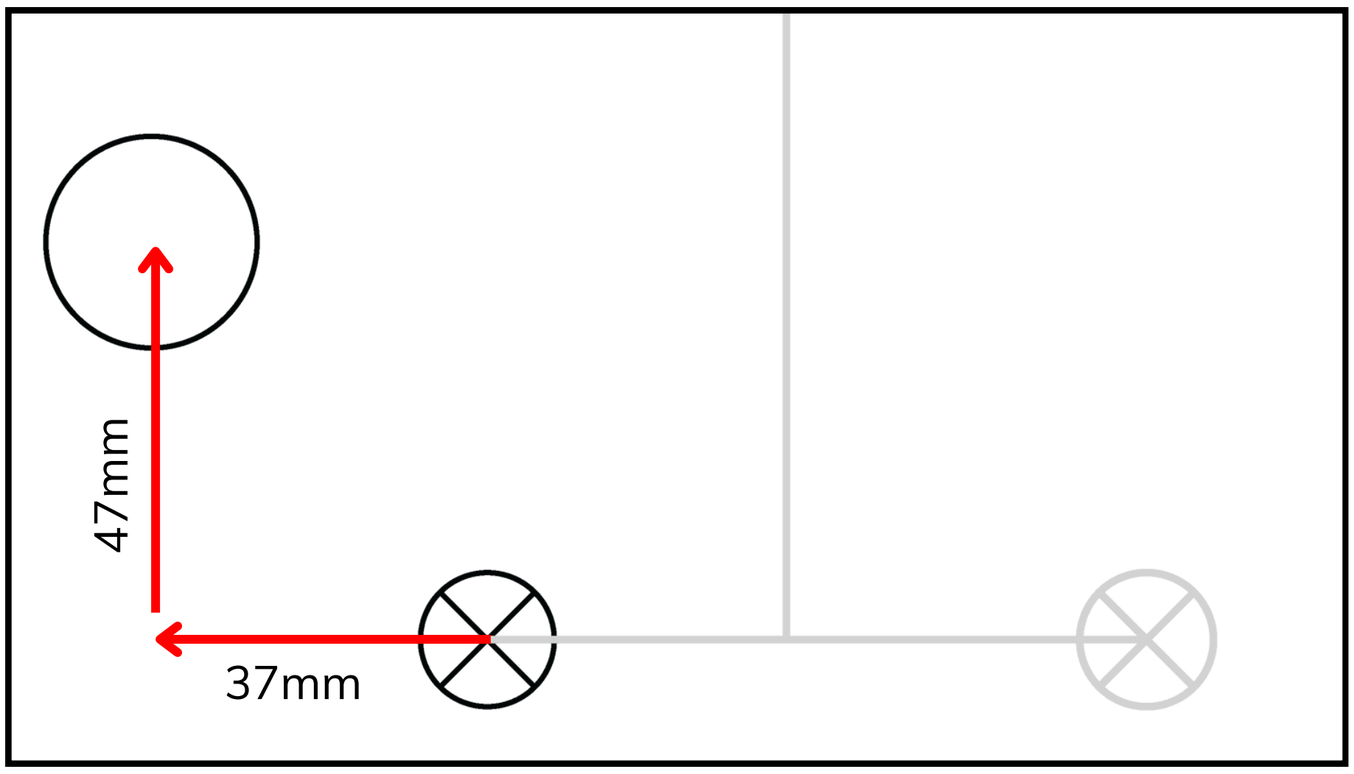
1x 10mm Compression Gland for cable entry pre-installed for any separate data cable.





Bottom entry

Note: Any cables entering the unit should be adequately sealed.



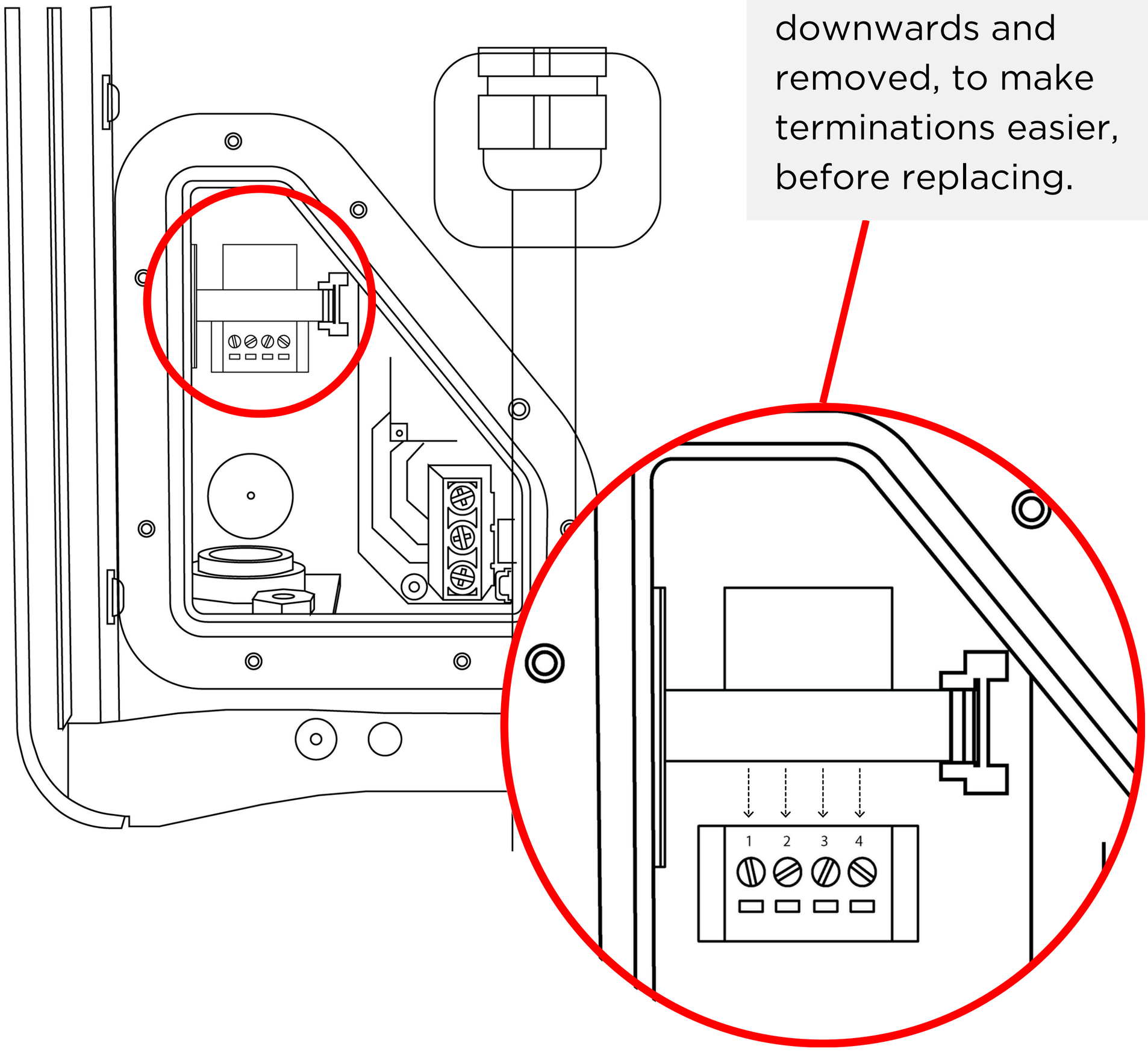
Rear entry location from the bottom left wall mount fixing point.

Step 5: Terminate Sensor Cables

Solar Advanced CT sensor cable Optional

Solar Basic/Adaptive Fuse CT sensor cable Optional

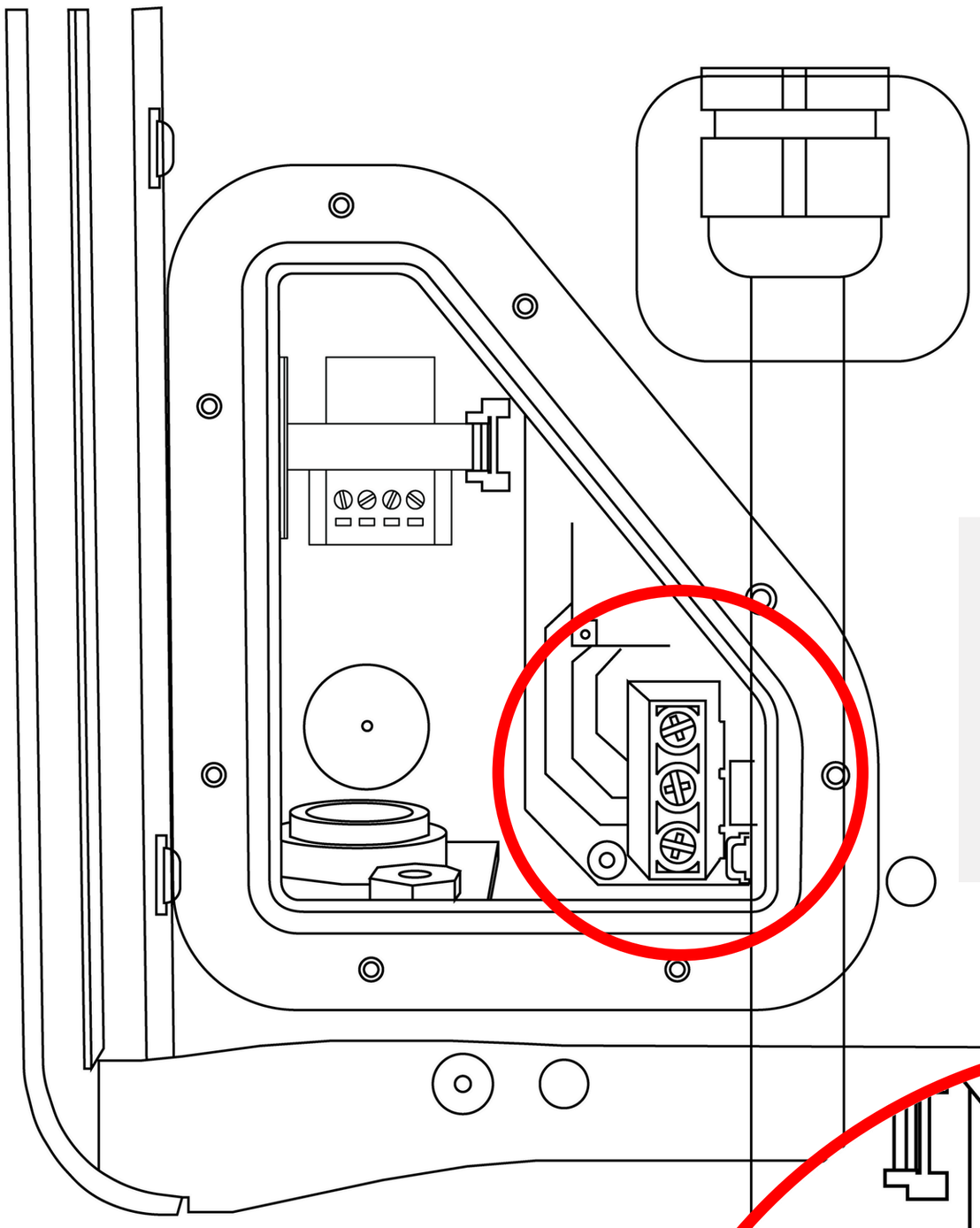
Please note: This plug can be gently pulled downwards and removed, to make terminations easier, before replacing.



1	2	3	4
solar+	solar-	mains+	mains-

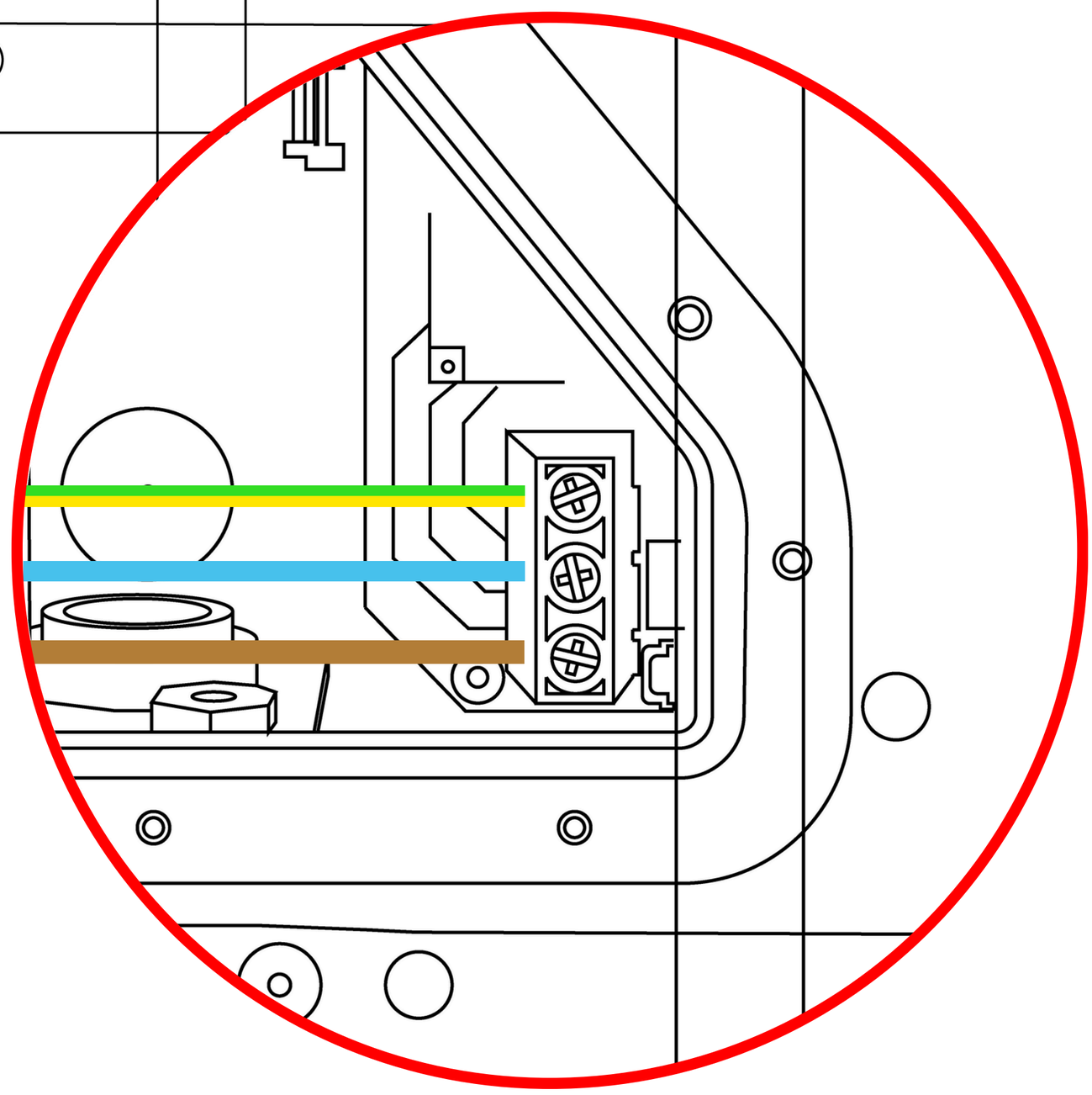
Please ensure you follow the installer guides to commission this feature correctly.

Step 6: Mains Supply Connection



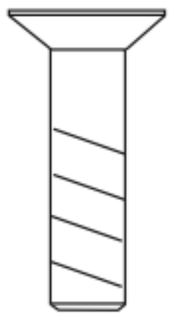
Note: Any stranded cables are recommend to be ferruled and crimped.

3	PE
2	Neautral
1	Live

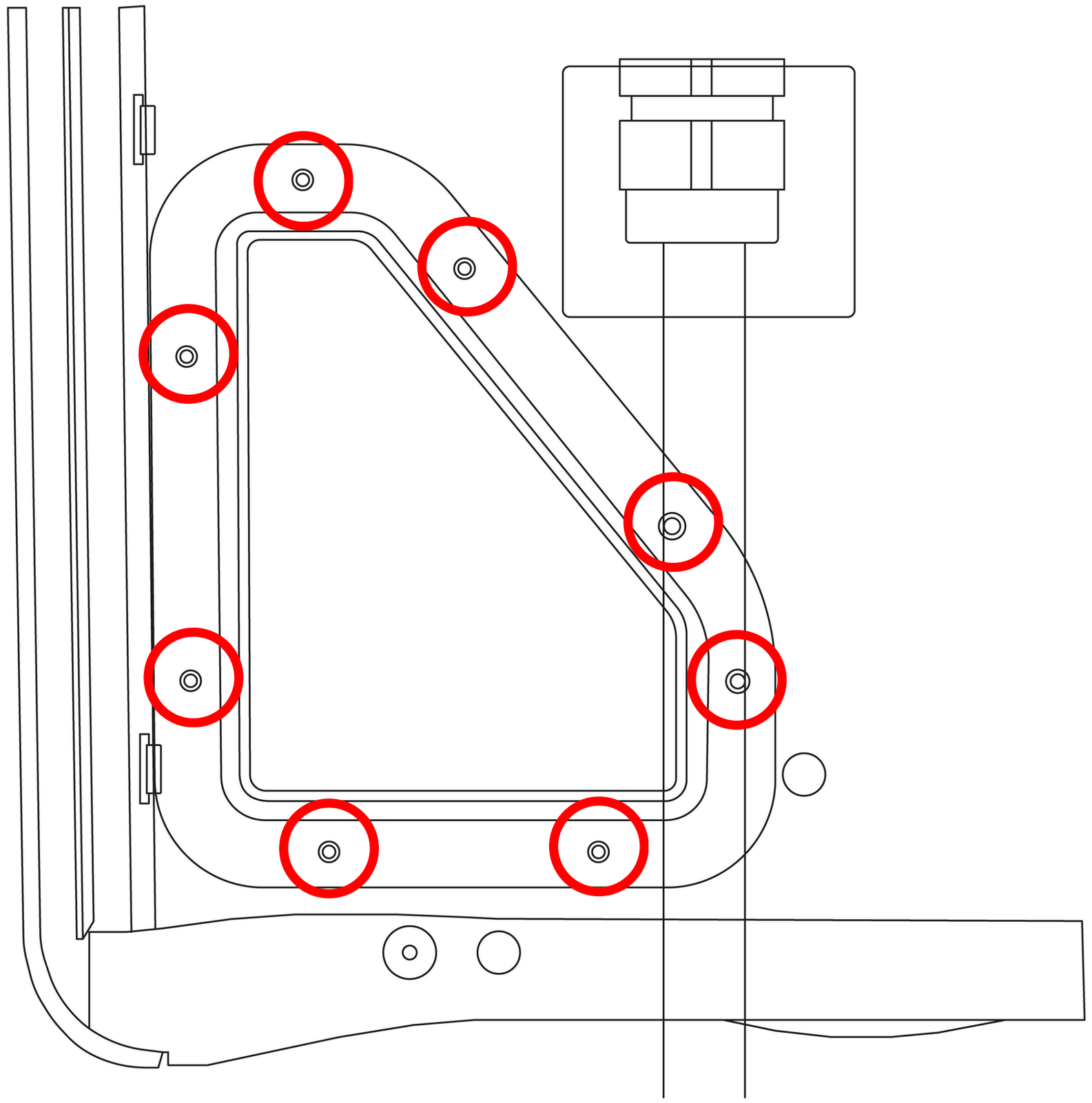


MAINS TERMINAL -
TORQUE SETTING: 1.2Nm

Step 7: Refit Terminal Cover



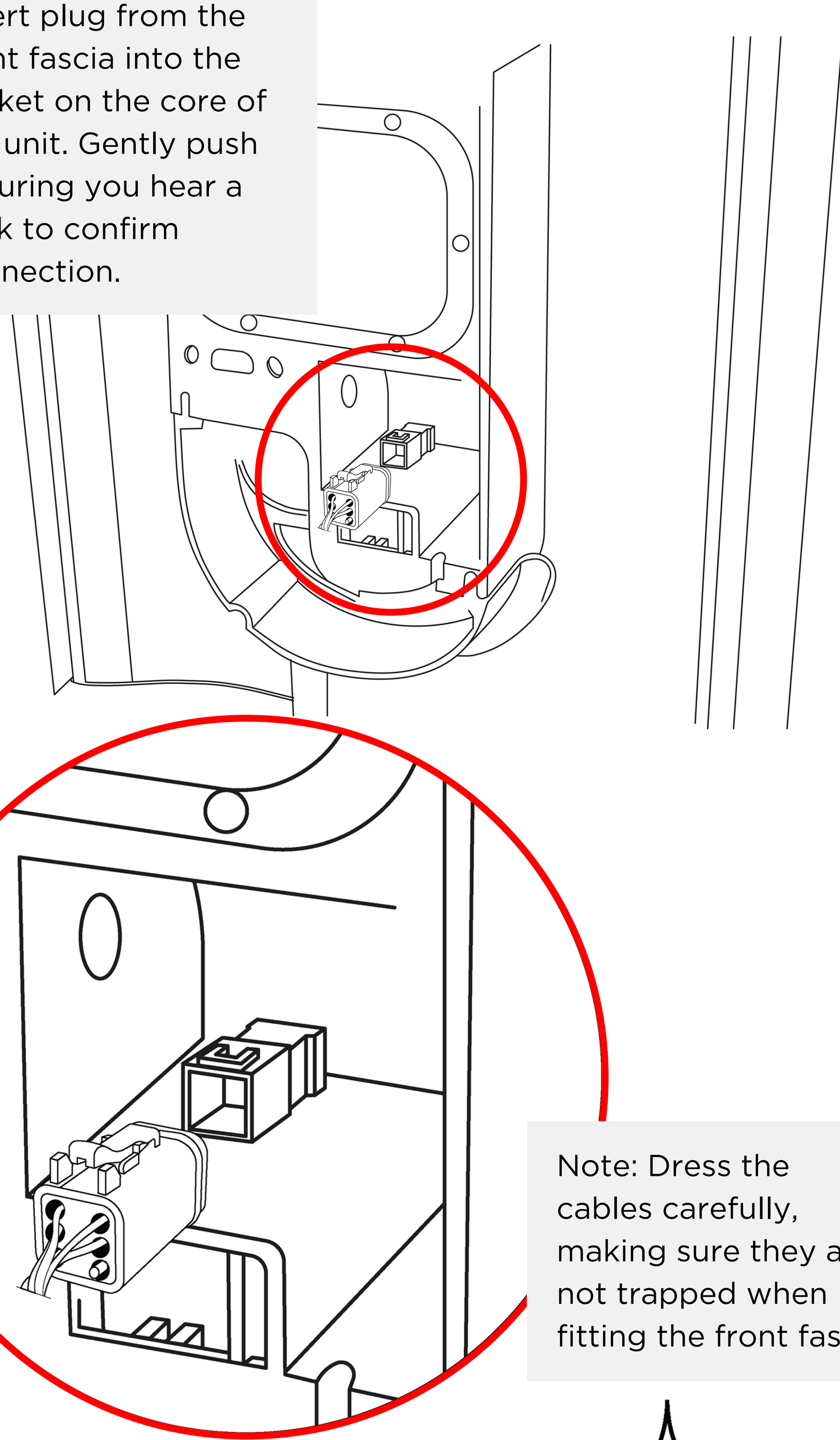
x8 PZ1 Screws



TERMINAL COVER SCREWS -
TORQUE SETTING: 0.7Nm

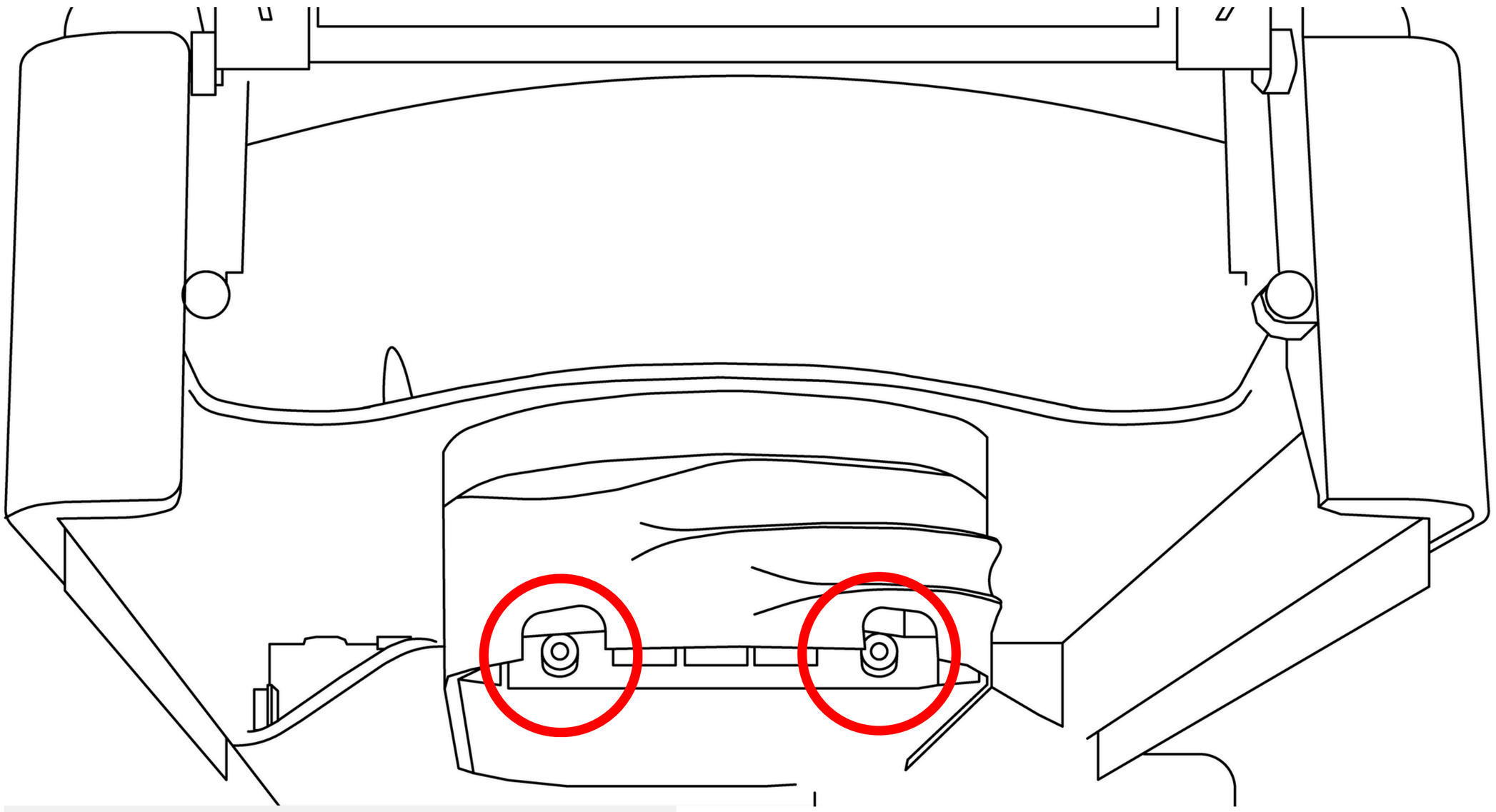
Step 8: Connect LED Loom

Insert plug from the front fascia into the socket on the core of the unit. Gently push ensuring you hear a click to confirm connection.

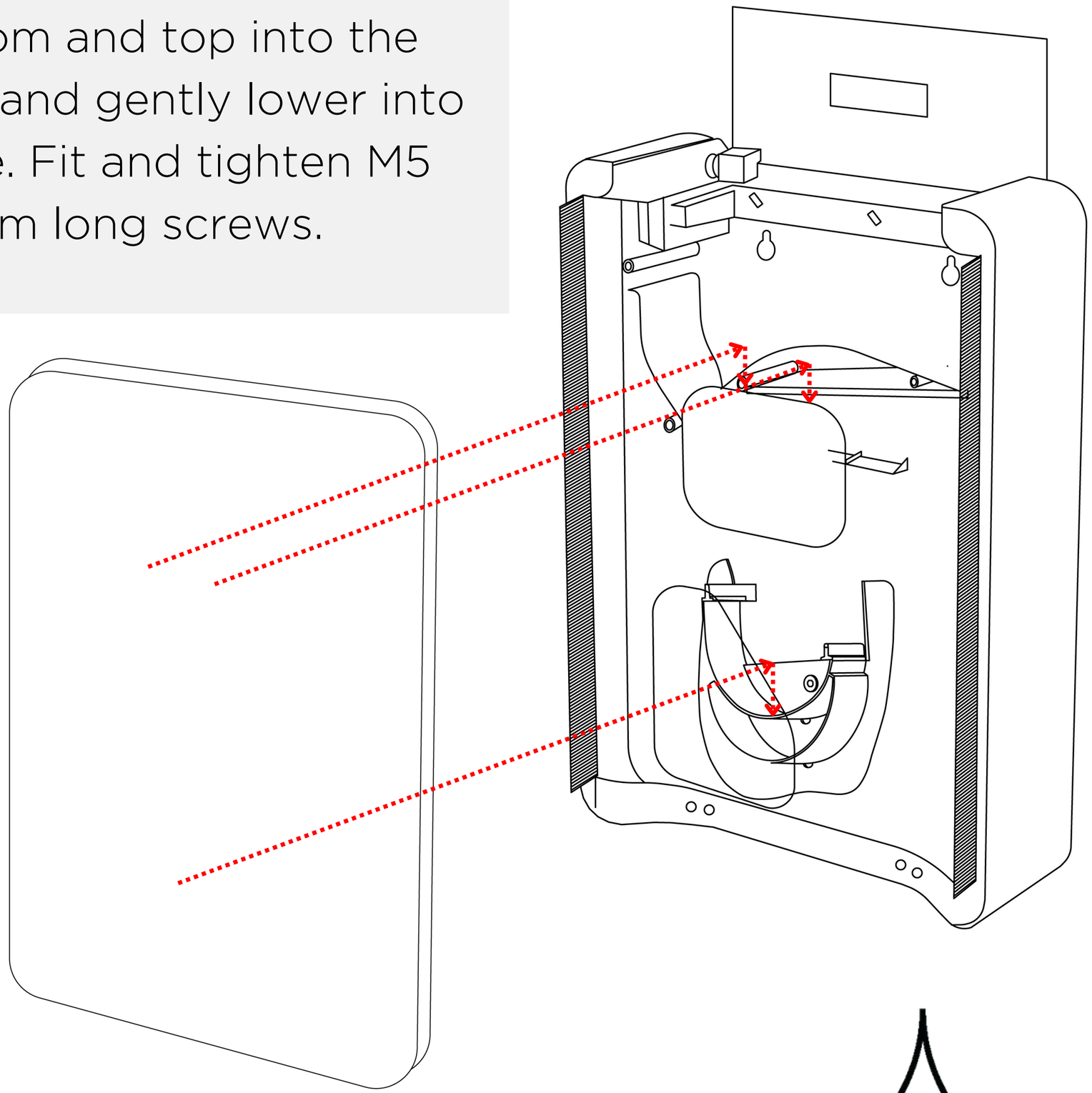


Note: Dress the cables carefully, making sure they are not trapped when fitting the front fascia.

Step 9: Refit Front Fascia



Locate the fascia hooks bottom and top into the core and gently lower into place. Fit and tighten M5 x12mm long screws.



Commissioning an Andersen A3 charge point

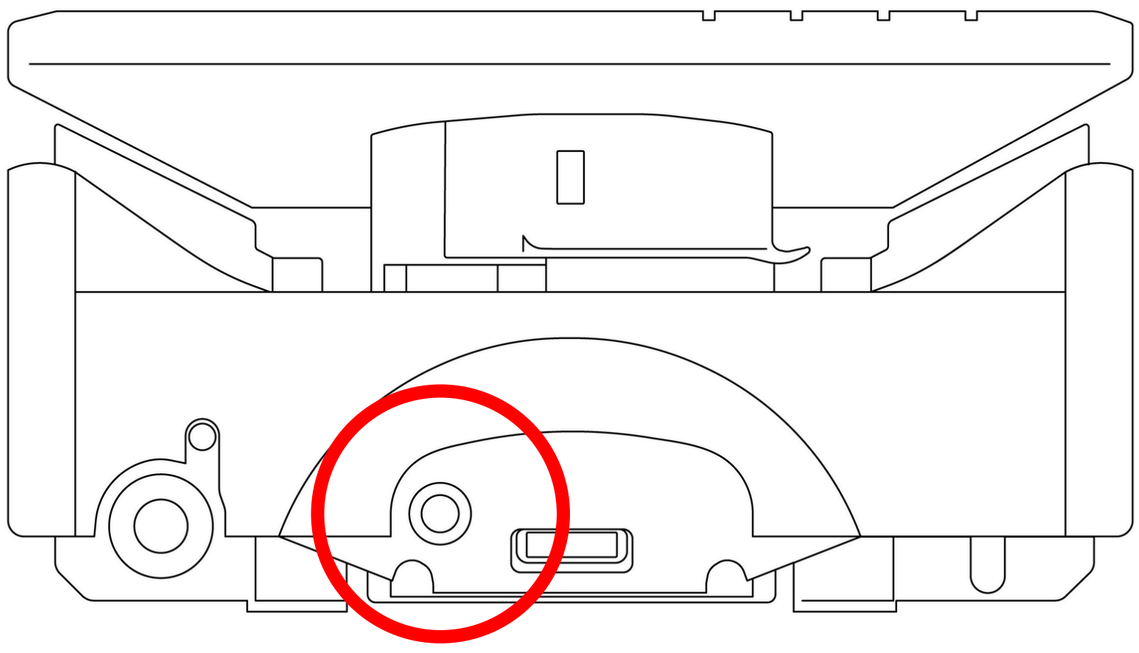
What you will need

A smart phone (iPhone or Android) with Bluetooth enabled

A wireless broadband router and the Wi-Fi password

The multi-function button

You will need to use the multi-function button, during this process, to put the charge point into the set-up mode. The button can be found on the underside of the of your charge point, on the lower left hand side.



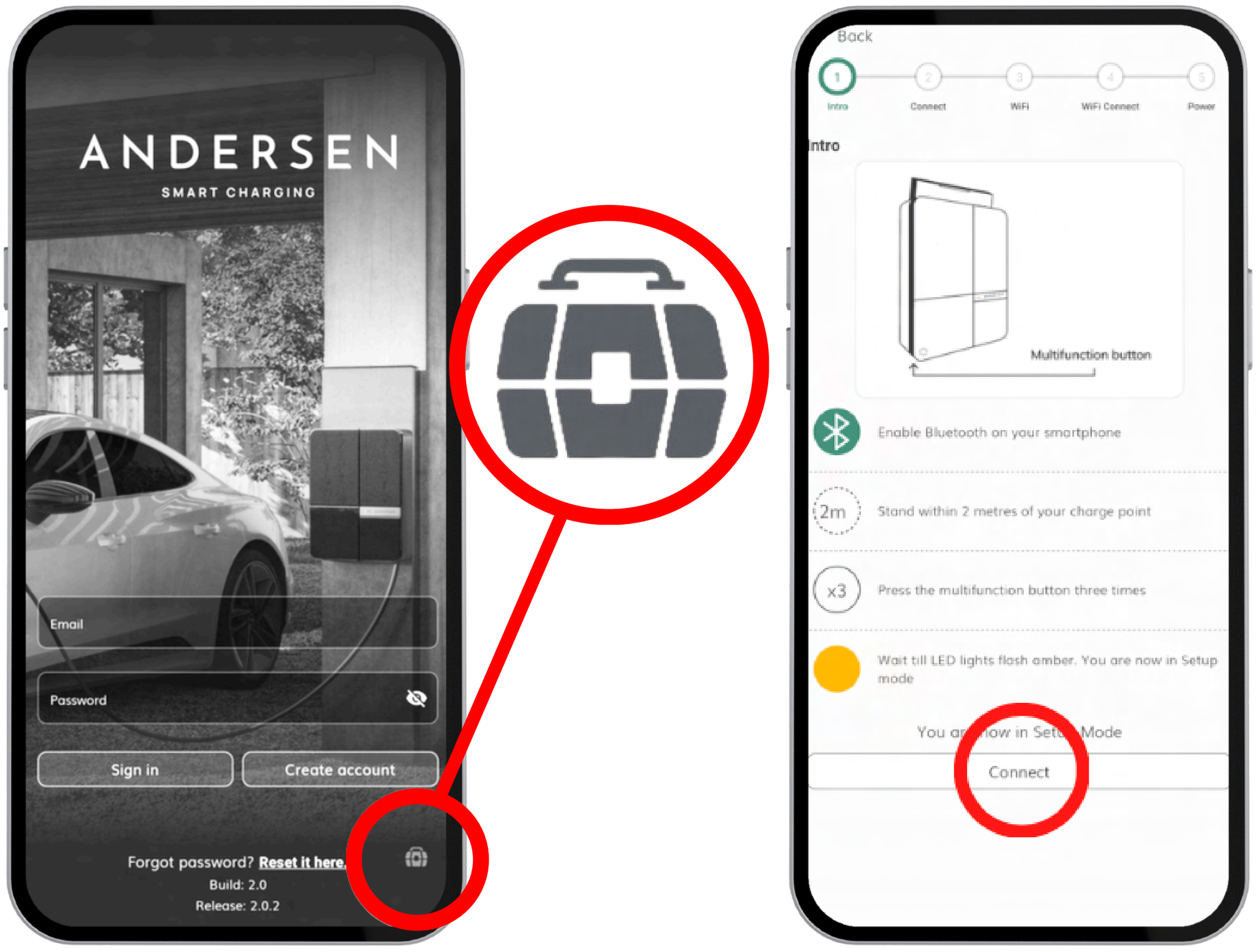
Commissioning

Open the Andersen App

Ensure you are logged out

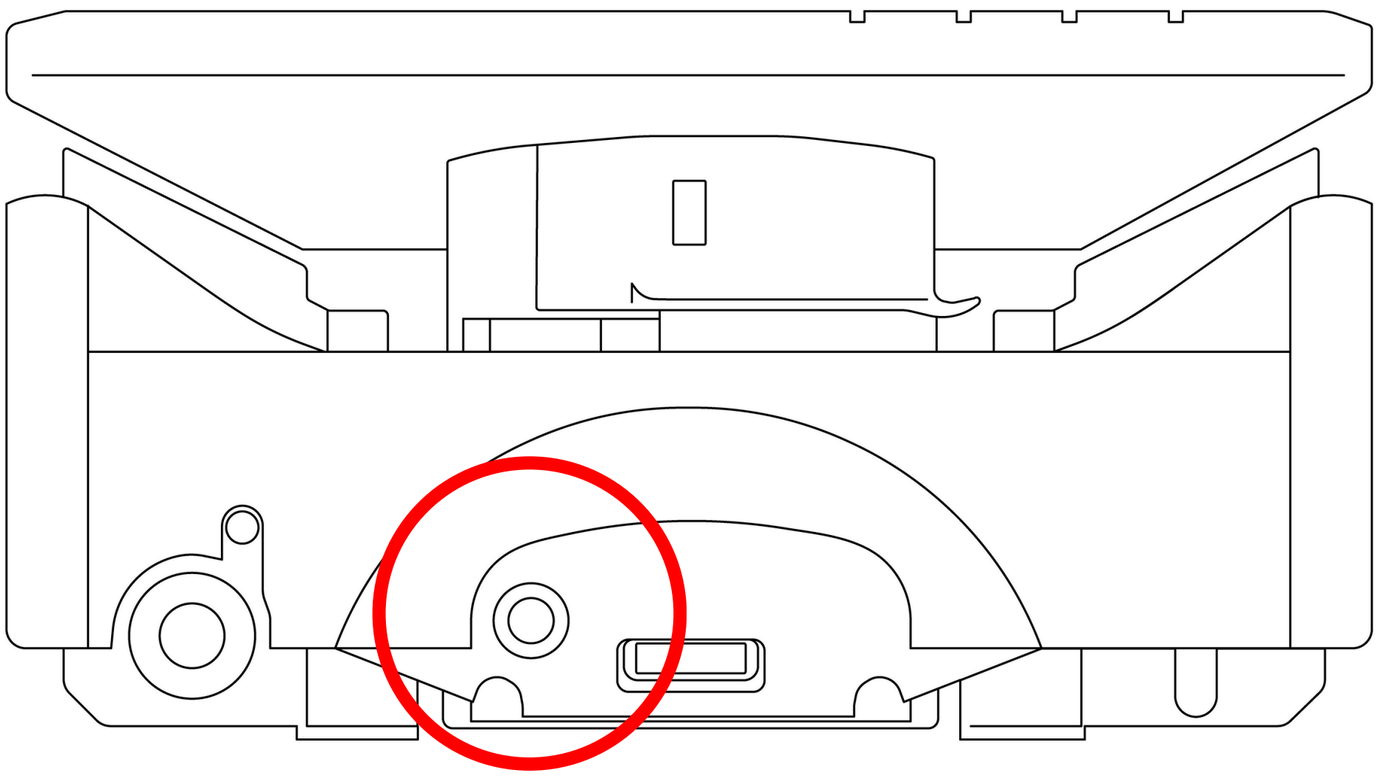
Press the toolbox located in the bottom right of the screen.

Follow the steps on the next screen to connect your charge point.



Commissioning

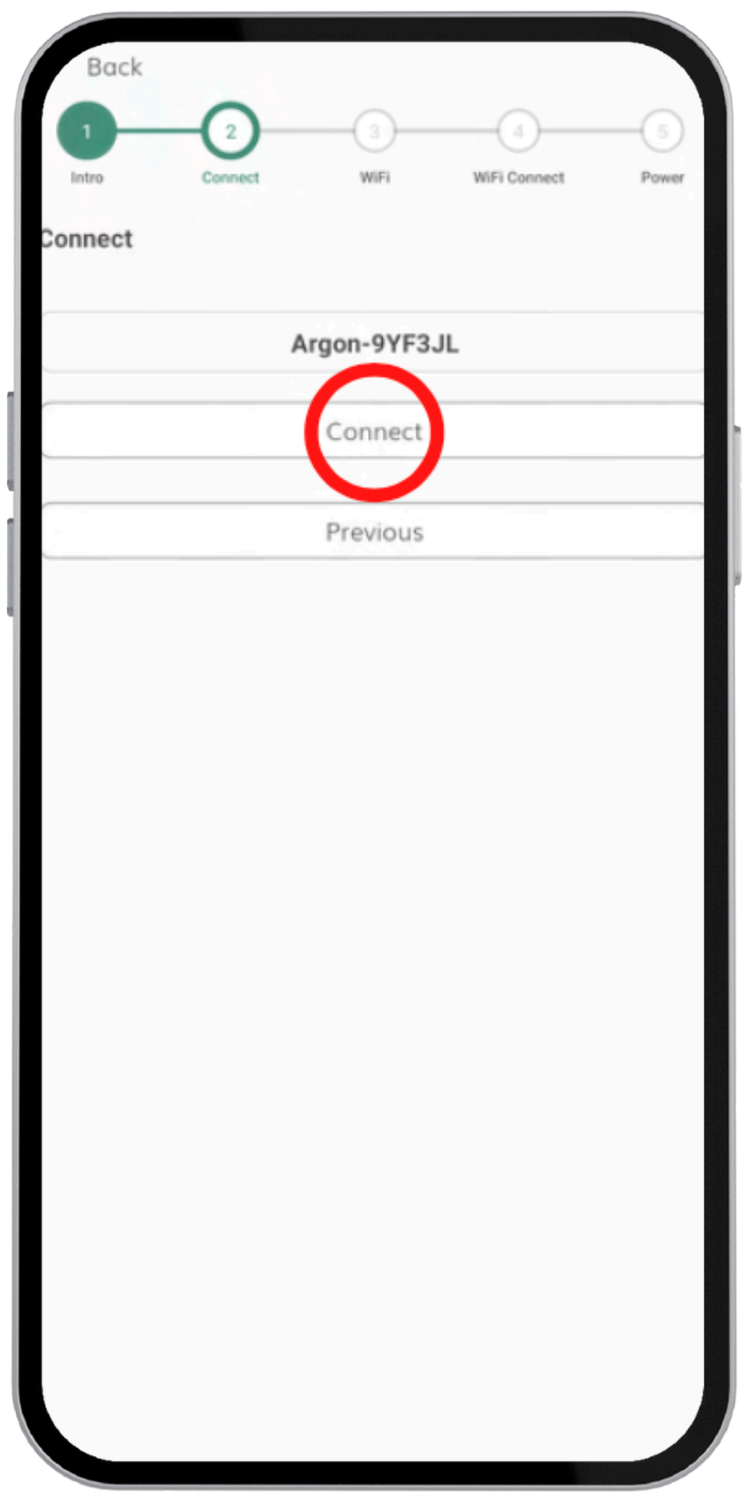
On your charge point, find and firmly press the multi-function button three times.



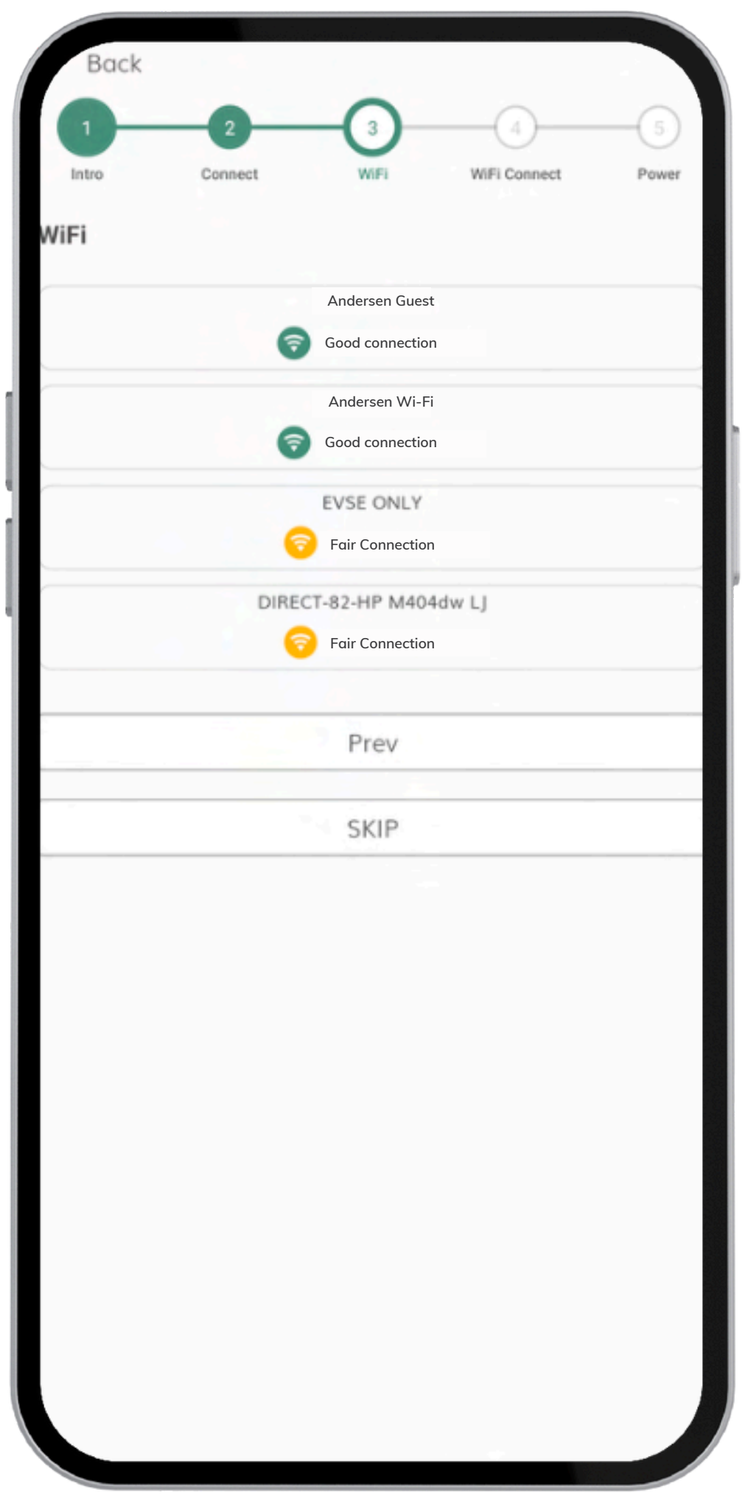
You should now see the LED status light repeatedly flash cyan blue.

Commissioning

The Andersen App will start scanning for your charge point using Bluetooth. Tap the ‘Connect’ Button on the app to enter set-up.



Once the Andersen App has found all available networks, please select the Wi-Fi you wish to connect to and enter the Wi-Fi password.



Commissioning

Once you have connected to the Wi-Fi network successfully your signal strength will be displayed here along with confirmation of connection.

Commissioning

You will now be prompted to enter a PIN number to access the power settings. If you are a current Andersen affiliate you may already have this PIN. Alternatively, please contact us.

Telephone:
01234 916125

Your installer commissioning is now complete.

Become an Andersen Affiliate

Enhance your profits

Andersen affiliates have access to exclusive discounts - the more you sell, the more you earn

Market-leading support

As well as training and technical documents, our affiliate programme gives you access to our experienced technical experts, ready to help with any query you may have

Simplified business

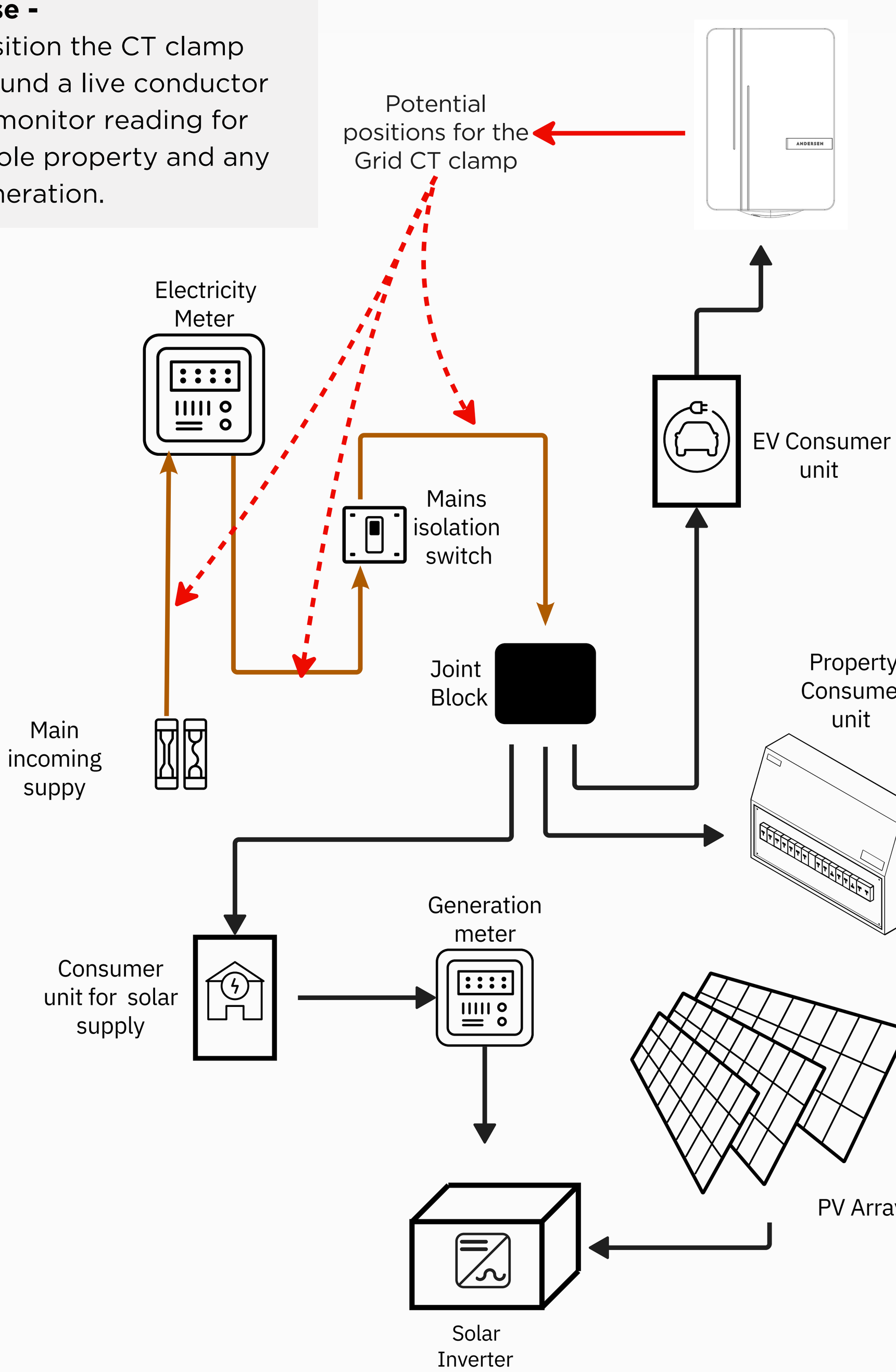
The Andersen affiliate portal means managing your Andersen orders is easy, leaving you free to concentrate on your business

We recommend you become an Andersen affiliate.

Please scan the QR code below to submit an application to allow us to fully support you.

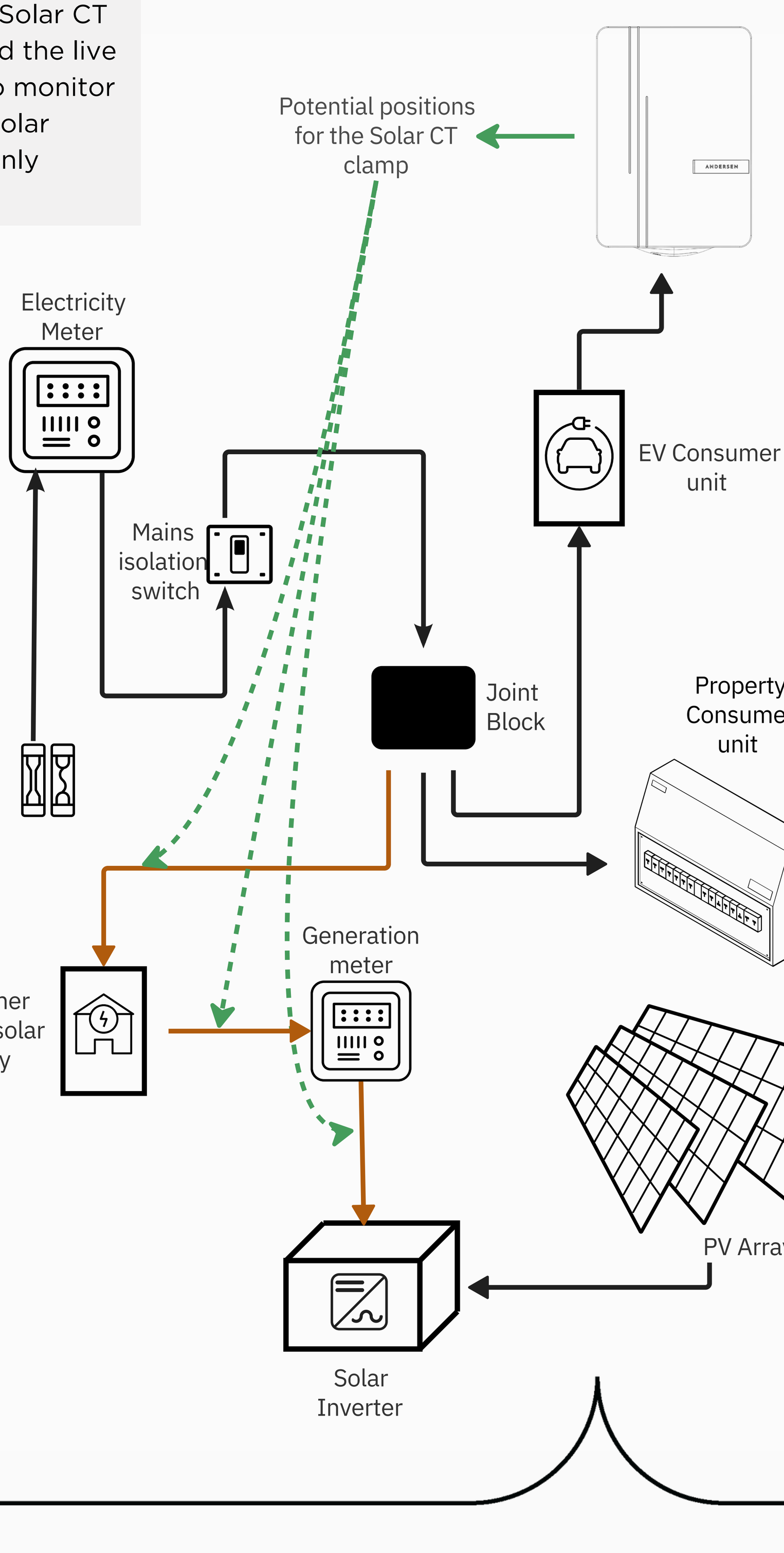
CT CLAMP POSITIONS

Solar Basic / Adaptive Fuse -
Position the CT clamp around a live conductor to monitor reading for whole property and any generation.



CT CLAMP POSITIONS

Solar Advanced - Position the Solar CT clamp around the live conductor to monitor reading for solar generation only



Technical Data	
Mounting Location[1]	The mounting wall must be capable of supporting at least four times the weight of the unit (44kg) and must be fire resistant.
Charging Mode	Mode 3 (IEC 61851-1 complaint communication protocol
Display	RGB Status lights- Amenity light. White, Hall sensor operated and internal courtesy light.
Charging Current	Single Phase 6A to 32A
Variable Current	Singe Phase Only 6A - 32A CT Monitored (Adaptive Fuse)
Connector Type	Type tethered cable IEC 62196-2 compliant
Compliance	RED 2014/53/EU, LVD 2014/35/EU, EMC 2014/30/EU, EN 61851-1:2019, EN 62196, EN 62955:2018, ROHS 2011/65/EU, WEEE 2012/19/EU, CE and UKCA Certified.
Ingress Protection	Enclosure, core IP65.
Operating Specification	Humidity to 95% RH non condensing -25 Celsius to +40 Celsius
Security	Remote software enabled charge point locking, 128-bit data SSL AES encryption for smart connectivity, Bluetooth with TLS encryption.
Fault Monitoring	Realtime health monitor system, start-up self-test, Earth monitoring, Welded contactor monitor, PME monitoring.
Enclosure Core Material	Polycarbonate Blend
Finish Material	Aluminimum Nylon Coated, Accoya
Shipped Weight	15-16kg

Electrical Specifications	
Rated Power	7.2kW (1-phase)
Rated Supply Voltage	230V AC Single Phase
Voltage Tolerance / Frequency	230 VAC +10% -6% 50Hz
Rated Current	32 Amps
PEN fault detection	Conforming to 722.411.4.1 (iii) (iv)
Earth Leakage Protection [2]	Internal 6mA DC protection (EN 62955) 30mA AC
Standby Power [3]	10 Watts
CT Sensor Voltage	0.333V
CT Sensor Specification	0 - 120 Amps / 25mm^2 maximum cable size split core
EVOFLEK Charging Cable [4]	4mm^2 Live Conductors / 32 A max current. High Performance ultra flexible cable
Installation	
Mounting	Flush mounting location using 4x fixing points
Cable Entry	Rear and Bottom entry, hole cutting size between 20-25mm, molded guide provided at both rear and bottom entry
Cable Sizing	4mm^2 - 10mm^2
Max Voltage drop	≤ 3% voltage drop allowance on supply cable (Dependant on length)

Dimensions Unboxed	430 x 310 x 148 mm
Mounting Height	Installed between 0.75m - 1.2m from ground level
CT Sensor Cable	Maximum extended length 30 metres unshielded CAT5/6 OR 50 metres shielded CAT6 data cable Any shielding to be suitably earthed
Recommended Upstream Protection	40A RCBO (BSO EN 61009)) or Type A RCD / RCCB (BSO EN 61008) + 40A MCB (BSO EN 60898) - B curve
Installed Weight	9.5kg - 11.2kg
Device Connection	
Internet Connection	Wi-Fi - 802.11 b/g/n support, 802.11 n (2.4 GHz), up to 150 Mbps
Bluetooth	Bluetooth BLE 5 (set-up only)
Device Support	Apple iOs mobile device / Android mobile devices
EVSE Regulations	Compliant with The Electric Vehicles (Smart Charge Points) regulations 2021.

1. The mounting wall must be capable of supporting at least four times the weight of unit (44kg) and must be fire resistant.

2. The mounting hardware (screws, wall plugs etc) must be selected to be appropriate for the specific structure of the mounting wall.

3. The cable used must be approved to a local national regulations and standards.

4. The upstream protection must be approved to local national regulations and standards. The disconnection devices, isolators, etc. must be nearby and easily accessible at all times.

DANGER

Danger to life due to electrical voltage! Injuries due to electric shock! and/or burns, possibly resulting in death, are possible.
During all work, make sure at all times that power to the system is switched off and secured so it cannot inadvertently be switched on.

- Before commissioning the device, check that all screw and terminal connections are tight.
- The termination panel covers must never be left opened without supervision. Fit the termination panel cover when you leave the charge point.
- Do not make any unauthorised changes or modifications to the charge point
- Repair work to the charge point may only be completed by the manufacturer or a trained expert.
- Do not remove any identifiers such as safety symbols, warning instructions, rating plates, labels or cable markings.
- Ensure that the charging cable is not mechanically damaged (kinked, jammed or run over) and that the contact area does not come into contact with heat sources, dirt or water.

WARNING

Safety notice:

- Switch off on all poles and from all sources.
- Secure to prevent it being switched on again.
- Verify isolation from the supply.
- Earth and short-circuit.
- Cover neighbouring live parts and cordon off danger areas.

CAUTION

Ensure that the charge point is not damaged by incorrect handling (housing cover, internal parts, etc.)
On outdoor installations, do not open the termination panel cover in damp conditions.

- Do not tighten the securing screws with force.
- The installation area must be completely flat, do not bend the housing.
- Electronic components may be damaged if handled. Before handling modules, perform an electrically discharge process by touching a metallic earthed object.

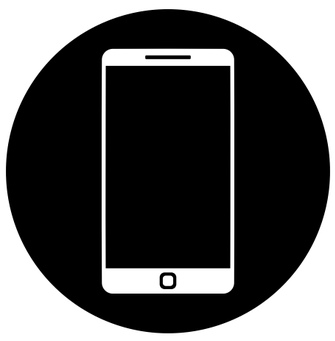
A failure to follow the safety information may result in a danger of death, injury and damage to the device. The device manufacturer cannot accept any liability for claims resulting from this.

We're here to help

Send us an email

helpdesk@andersen-ev.com

Call us



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Sat 09:00 - 14:00
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www.andersen-ev.com