




Post Mount System Installation Manual

Part Number	Model Number	Part Number	Model Number
809867	BIA-1-PM	809868	BIA-2-PM
809869	BIA-3-PM	809870	BIA-4-PM
809872	BIA-6-PM	809874	BIA-8-PM



WARRANTY	
Frames warranty	

1. Introduction

The iSOLAR Post Mounts are a ground mounting system developed for PV mounting in commercial and utility applications. They can be installed on uneven ground and designed to fit PV modules at different angles to suit different regions.

Please review this manual thoroughly before installing. This manual provides supporting documents relating to Universal PV Module Mounting System and installation instructions.

The iSOLAR post mounts when installed in accordance with this guide, will be structurally adequate and will meet the Structural design actions Part 2: Wind actions, AS/NZS 1170.2 standard.

2. Key Features

1. Fast Installation

The support can be assembled with ease in only a few steps to finish installations, which minimizes the time and cost of installation.

2. Offer unmatched durability

With all structural components comprised of high-class stainless steel and anodized Aluminium Alloy, it is designed for 25 years' service life and backed by ten years warranty.

3. Stand up to extreme weather

This solar racking system is designed to stand up to the extreme weather complied with the AS/NZS 1170 and other international structure load standard by the skilled engineer. The main support components have also been tested to guarantee its structure and load-carrying capacity.






4. Provide broad installation flexibility

This solar racking system can accommodate most commercially available solar panels and they can scale easily from small to large, multi-megawatt installations.







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4. Symbols used in this manual

	Warning - Electrical safety
	Warning – Potential consequences of use outside of intended application(s). Includes environmental condition warnings.
	Mandatory warning
	Warning to disconnect power
	Read carefully

5. Warnings

	Read the manual carefully before starting and retain for future reference. All images shown are for illustration purpose only. Actual product may vary due to product enhancement.
	Prior to starting installation or any maintenance, please ensure all power is disconnected from the power supply.
	Any changes or modification to the wiring must be carried out by suitably qualified personnel.
	A qualified electrician should correctly size and install circuit breakers to protect the power supply. The fitment of additional surge protection is recommended.
	This appliance is not intended for use by persons (including children) with reduced physical, sensory, mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
	Ensure that the installation will comply with all applicable local regulations.

6. Installation & Operating Instructions



The structural stability of the PV-System must be verified before installation. The ground must be able to support the additional weight safely.

Installation notes:

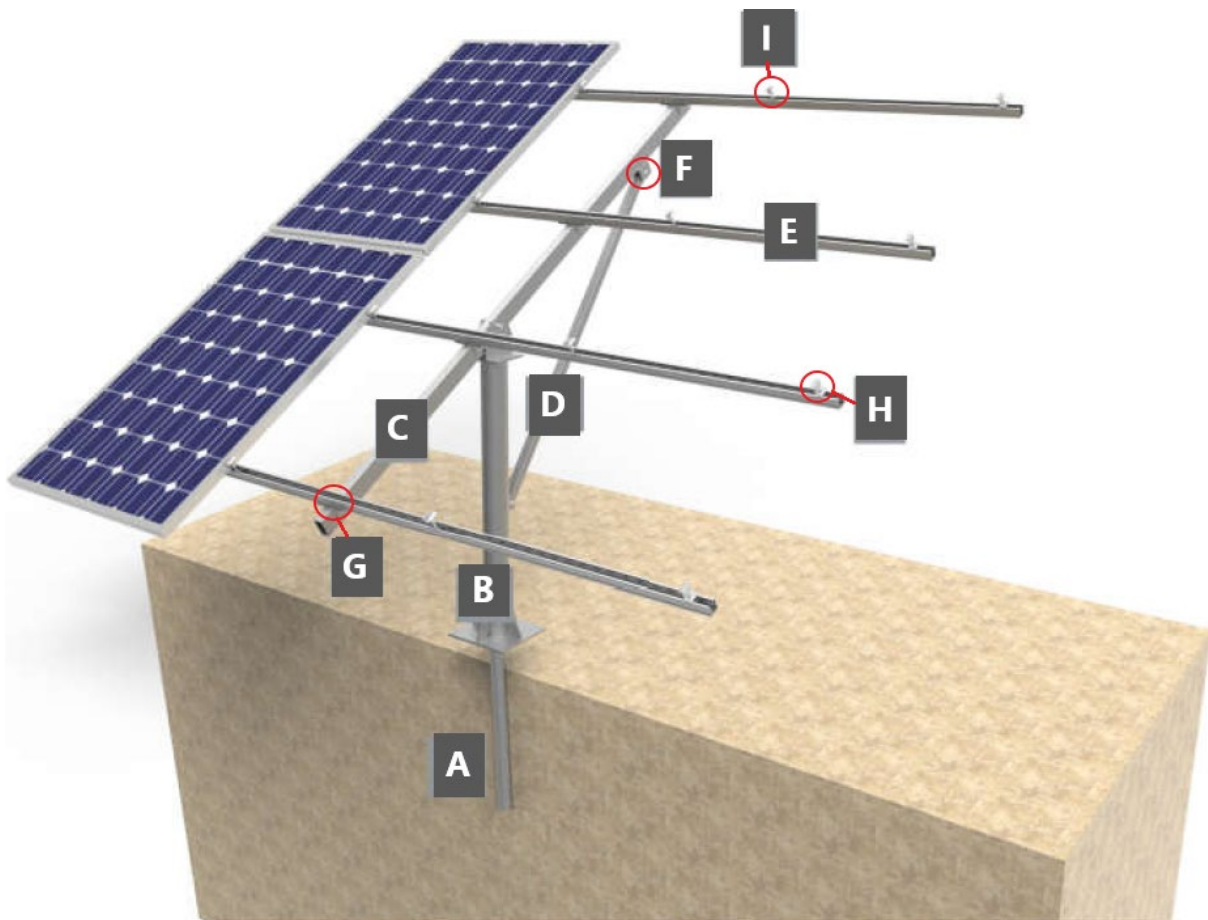
Please read these installation instructions carefully before starting the installation and familiarise yourself with the system components. During the installation ensure to work according to the relevant health and safety guidelines. Please follow the current rules and regulations for your corresponding region. The individual installation instructions are merely recommendations in accordance with the current state of technology and are based on previous experiences of how these systems can be installed.

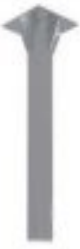




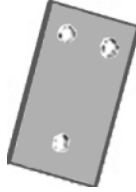
Installation Guidelines:





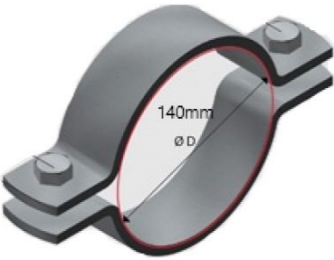

1. Installer to assess site, ground stability and plan for install accordingly.
2. Distribute the components to each construction site according to the installation sequence of the unit area and prepare for installation.
3. The appearance and protective layer of the stent should be intact, remove the mud sand, dust and stains on the stent components, and keep the stent components dry and tidy.
4. Check whether the bracket components have obvious bending deformation and prohibit the use of components that do not meet the installation requirements.
5. Note: Solar panels vary in size and dimensions, the maximum L x W x H that can be accommodated on the iSOLAR post mounts are 1840 x 1040 x 35 (mm).

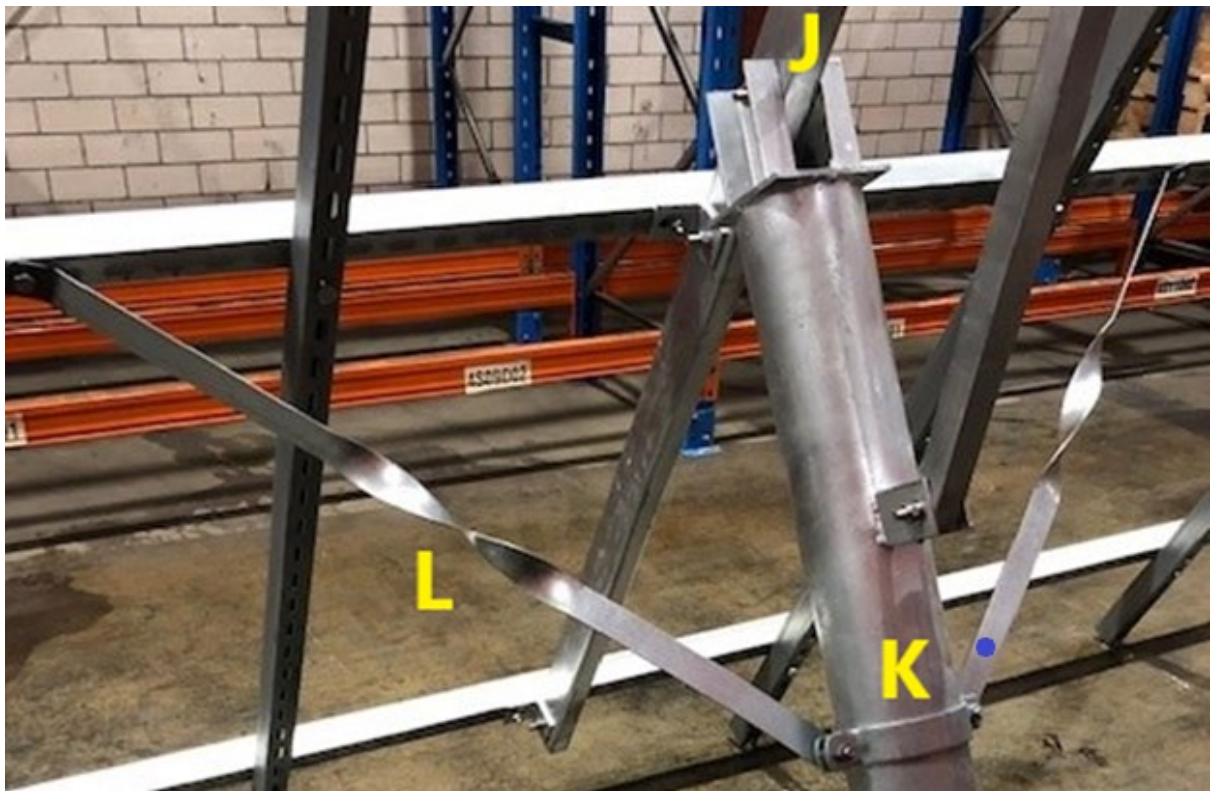
7. Components and Tools

Component list

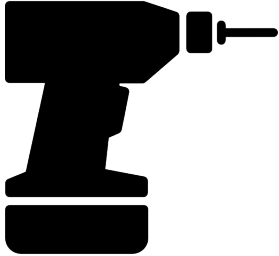





A. Ground Leg	B. Support Post	C. Cross Beam
		
D. Adjustable Arm	E. U-Channel	F. Connecting Plate
		

G. Rail Clamp	H. End Clamp	I. Middle Clamp
		
J. Rectagular Spacer	K. Pipe Clamp (6 & 8 Panel only)	L. Twisted Flat bar x 2 (6 & 8 Panel only)
		

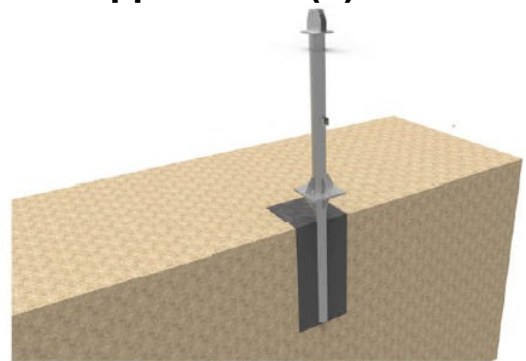
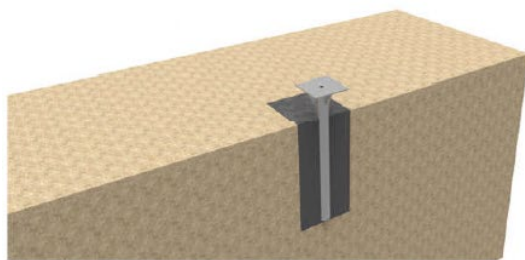


Installation tools:

Power drill	6mm Impact Bit	Hammer	17mm & 19mm Spanners
			

8. Installation Steps

1. Setting the Ground Leg (A) and Fixing the Support Post (B)



Dig a hole with a diameter of 300mm, ensure the 1.5m long Ground Leg (A) is embedded into the ground by a minimum of 1.3m. Place the Ground Leg into the middle of the hole and fill it with concrete (min 25Mpa strength). The allowed vertical tolerance is $\pm 2^\circ$.

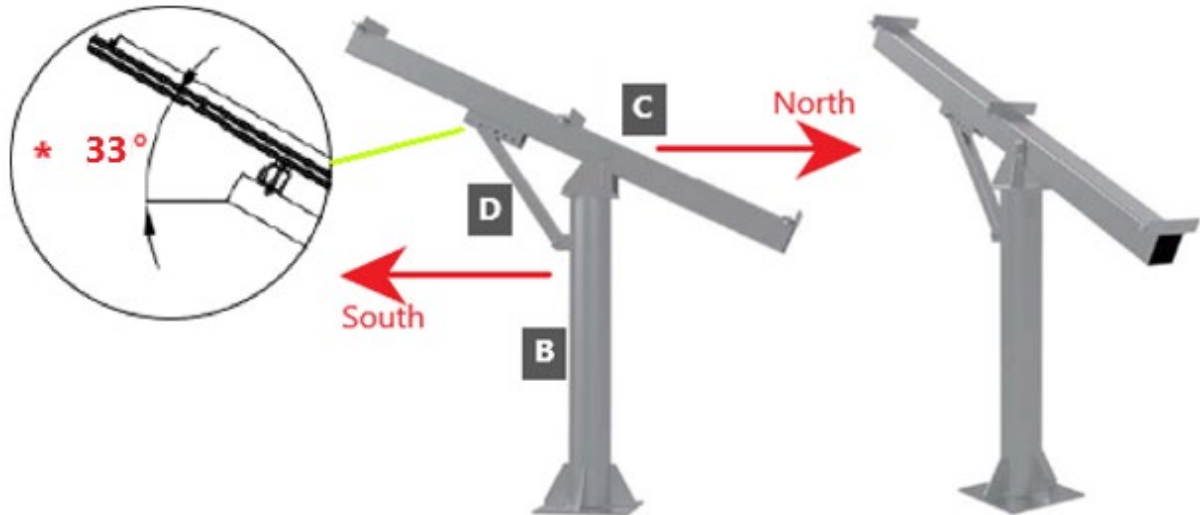
Install the Support Post (B) to the Ground Leg (A) using the anchor screws. Ensure they are anchored thoroughly.

Please note: You must ensure you have lined the Post mount up to TRUE NORTH prior to setting of the Ground Leg in concrete & anchoring the Support Post.
(Ref to the next image on page 8)

Installing combination of Post mounts:

When installing a combination of post mounts, E.g. A 6-post mount and 3 or 4 post mounts, please note that the length of the Support Post (B) varies for both systems. Hence the Ground Leg (A) for the 6-post mount may need to be embedded further into the ground, so the 2 sets of solar panels remain aligned altogether after assembly.

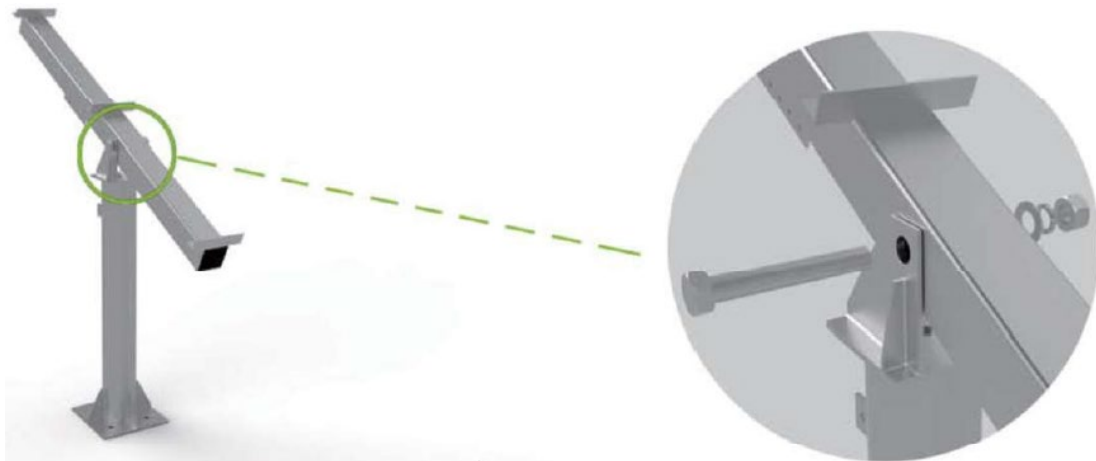
2. Fixing Cross Beam (C) and Adjustable Arm (D)



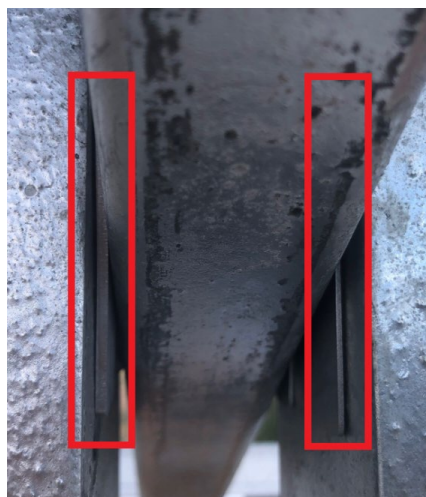
**Set the angle based on the Latitude of your region.*

Crossbeam Installation:

2a. Fix the Cross beam (C) onto the Support Post (B) by embedding the bolts



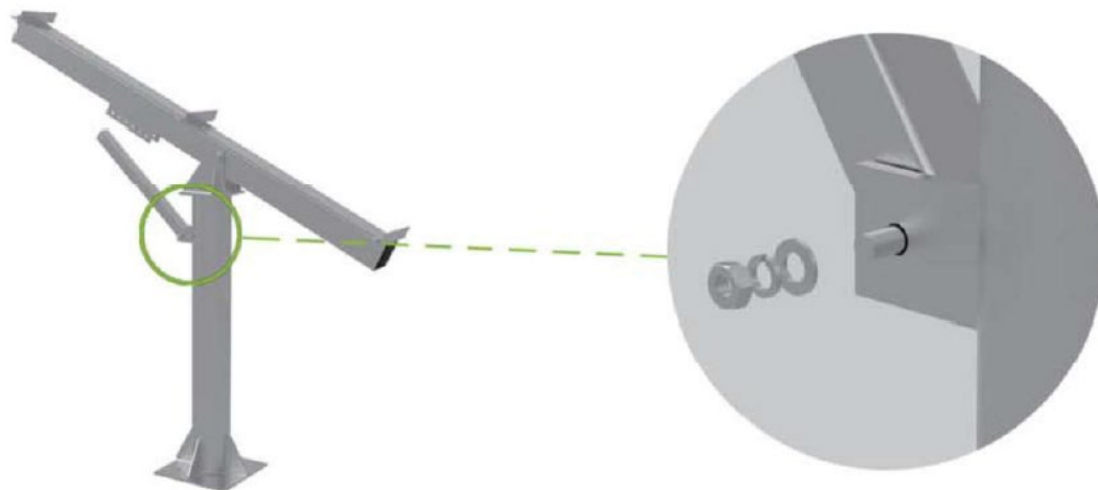
Wedge the given rectangular SS spacer(s) between the Support Post and Cross beam to adjust for any tolerance and ensure there is no movement once assembled



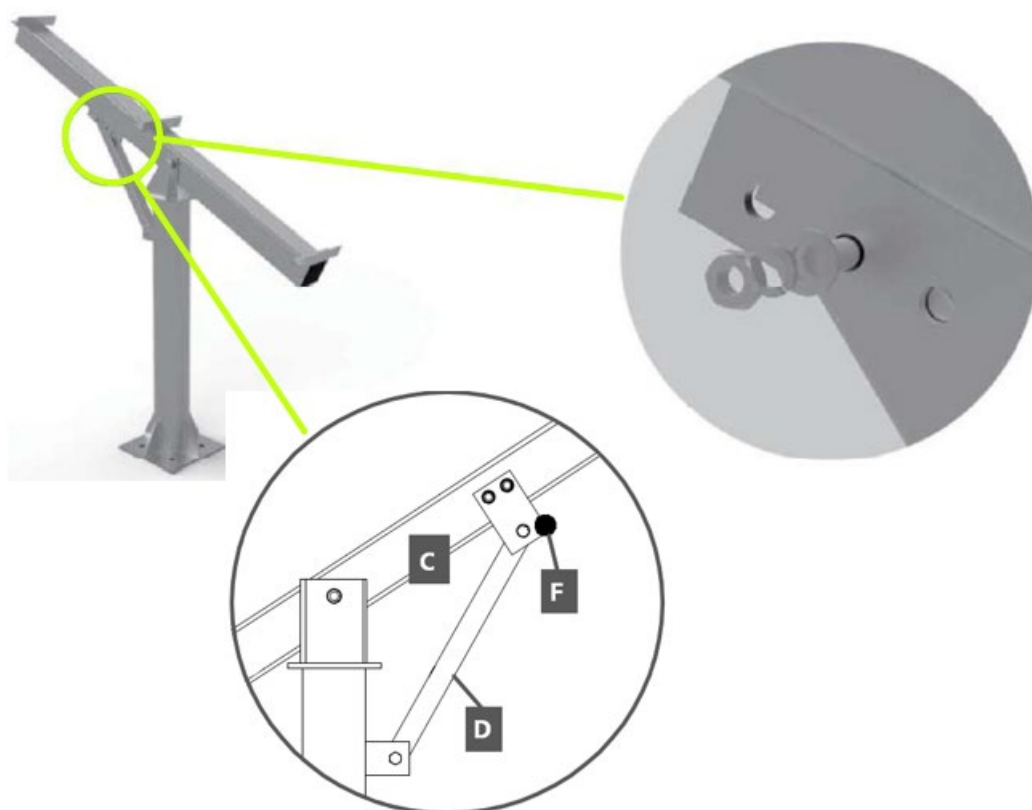
Rectangular Spacer

Adjustable Arm Installation:

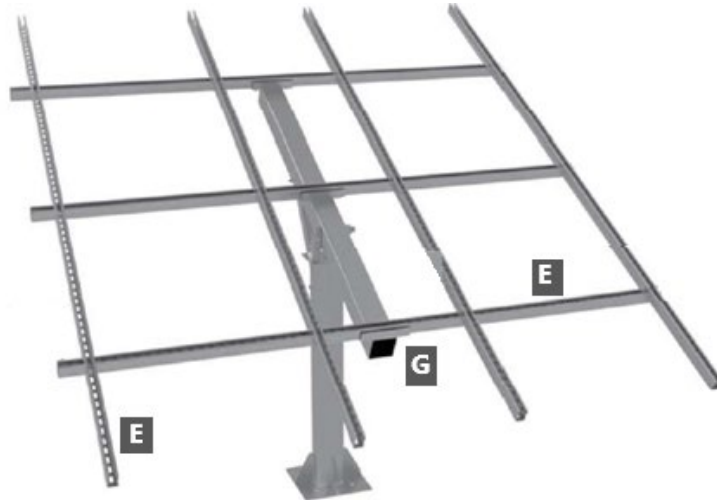
2b. Connecting Adjustable Arm (D) to Support Post (B)



2c. Connecting Adjustable Arm (D), Connecting Plate (F) to Cross Beam Post (C)



3. Install Horizontal and Vertical Rails (U-Channel) (E) with the Rail Clamps (G)



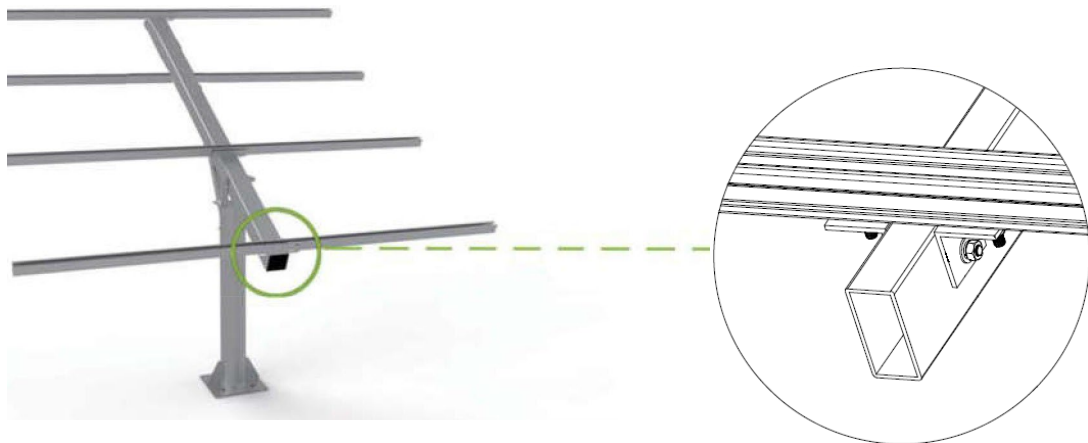
Ensure the U channels are square to the support post to ensure alignment of solar panels

3a. Mount Horizontal Rails

(U-Channel) with Rail Clamps.

Use M10 x 30mm (8 units) for the Rail Clamps to U Channels

Use supplied M12 x 80mm bolts (4 units) for the Rail Clamps to Cross beam.



3b. Mount vertical Rail (Only for 3, 6 and 8 Panel systems)



Assemble Vertical U-Channels to the Horizontal U-Channels using the M12 x 80mm bolts (16 units)

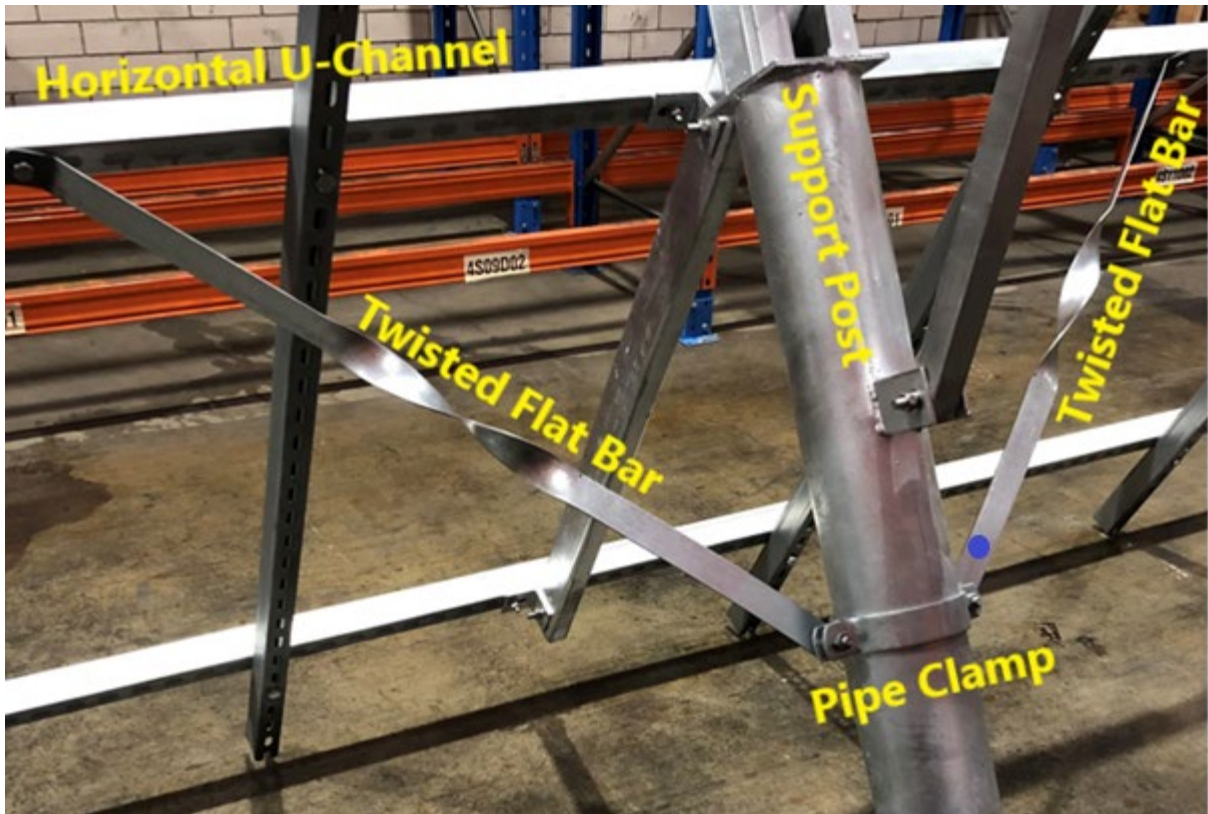
3c. Mount the V-Support strap (6 & 8 Panel only)

Attach the pair of twisted flat bar to the Horizontal U-Channel.

Use the M12 x 40mm – 2 units

(Do not tighten the bolts completely unless in final position)

NOTE: The twisted flat bar with the BLUE sticker indicates the Right-Hand Side (when viewed from underneath the solar array, as per photo)

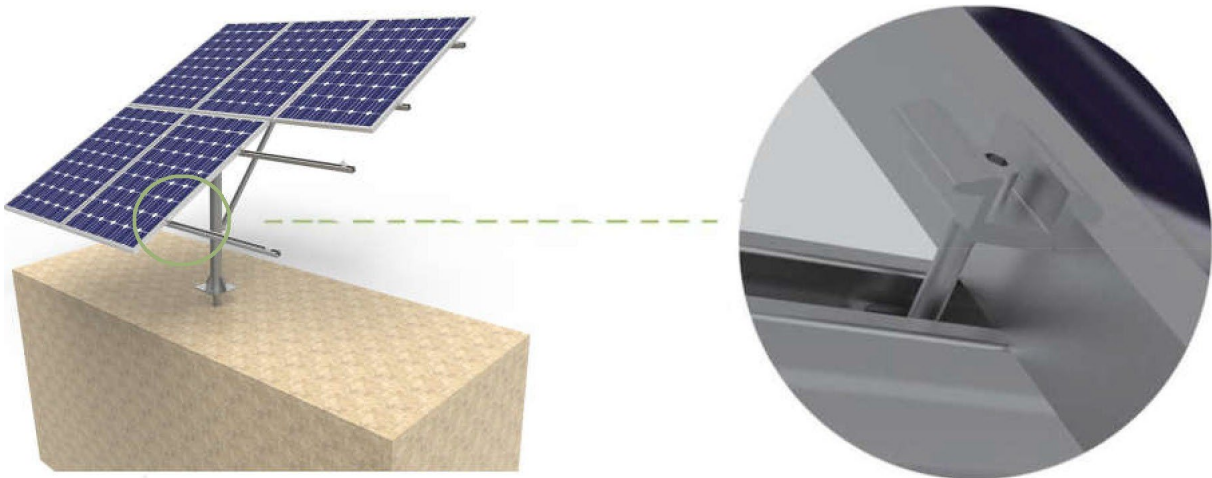
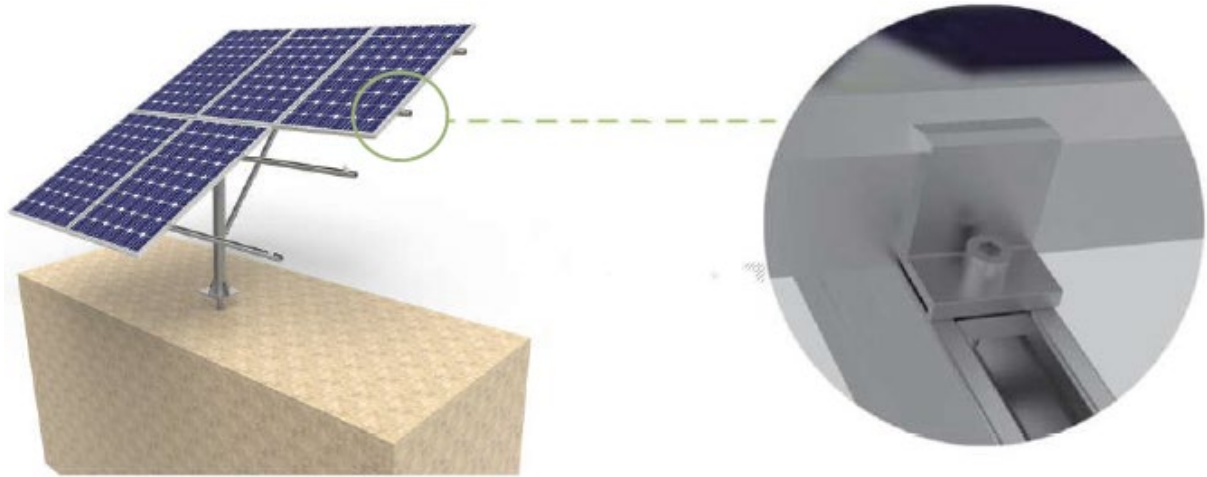


Attach the Pipe Clamp to the Support post, assemble the trimmed end of the flat bars to the bolts on the pipe clamp, as per photo below. Align to approx. 45-degree angle during assembly. (Do not tighten Pipe clamp unless in final position)



4. Installing Solar Panels

4a. Place the Solar Panels on the U-Channels and lock the end clamps, followed by the middle clamps.

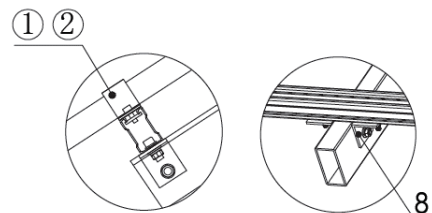
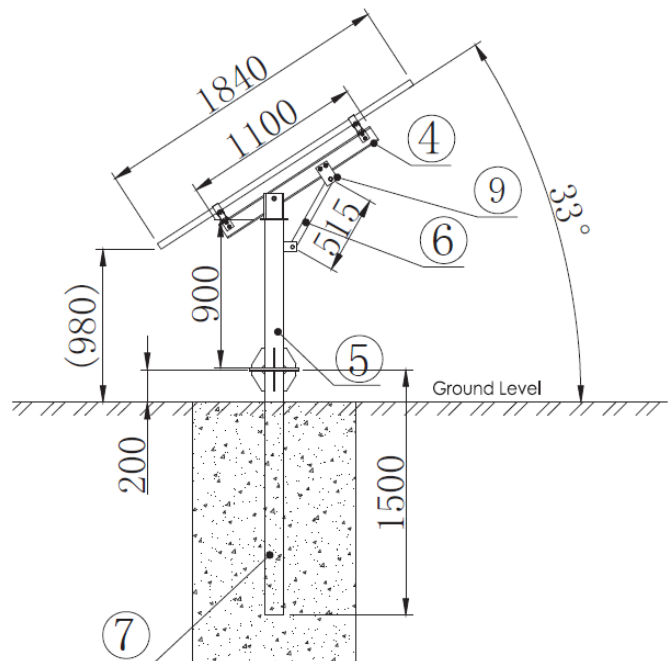
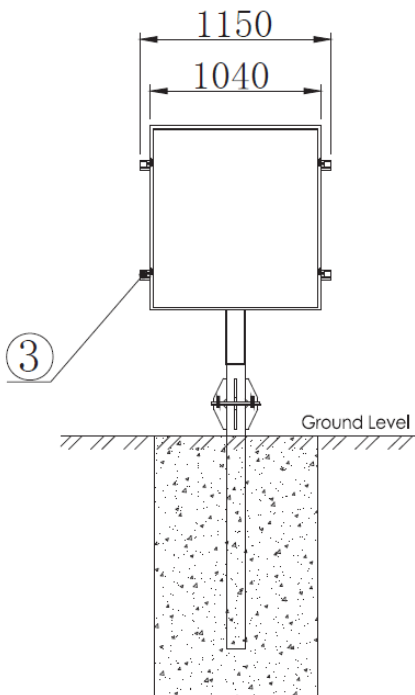


4b. Repeat the above process until all the solar panels are assembled.

8. Bill of Materials & Schematic Drawings

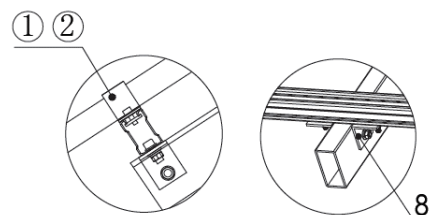
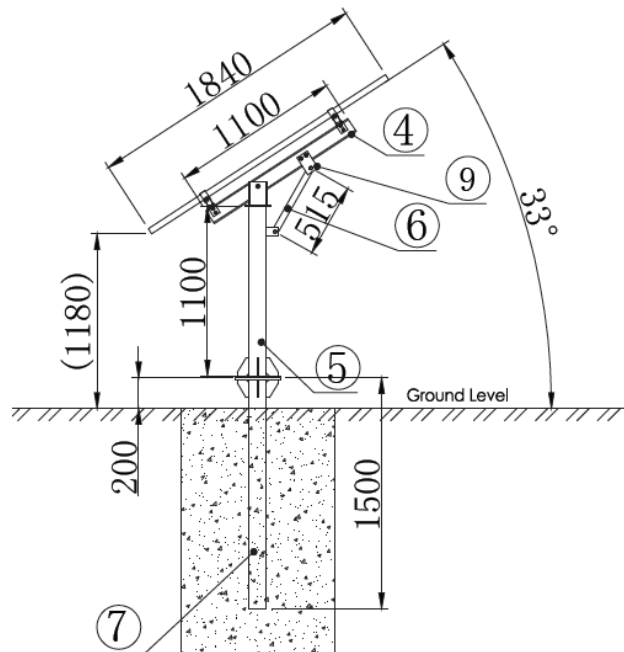
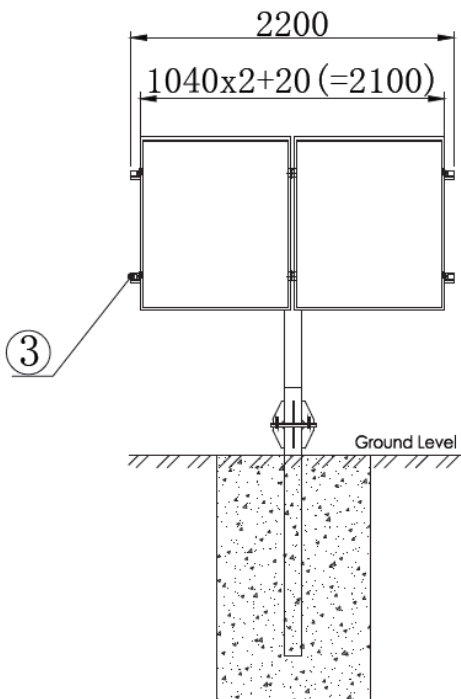
Part Number	Model Number
809867	BIA-1-PM

Part No	Item	Size (mm)	Qty
1	Middle Clamp	35	0
2	End Clamp	35	4
3	U Channel	41x62x2 L1150	2
4	Cross Beam	80x40x3 L1100	1
5	Support Post	D88.5x6 L900	1
6	Adjustable Arm	40x40x2.5 L515	1
7	Ground Leg	D88.5x6 L1500	1
8	Rail Clamp		4
9	Connecting Plate		2
10	Type 1 Screw	M10 x 30mm	4
11	Type 2 Screw	M12 x 40mm	4
12	Type 3 Screw	M12 x 80mm	7
13	SS304 Spacer	1mm	1
14	SS304 Spacer	2mm	1



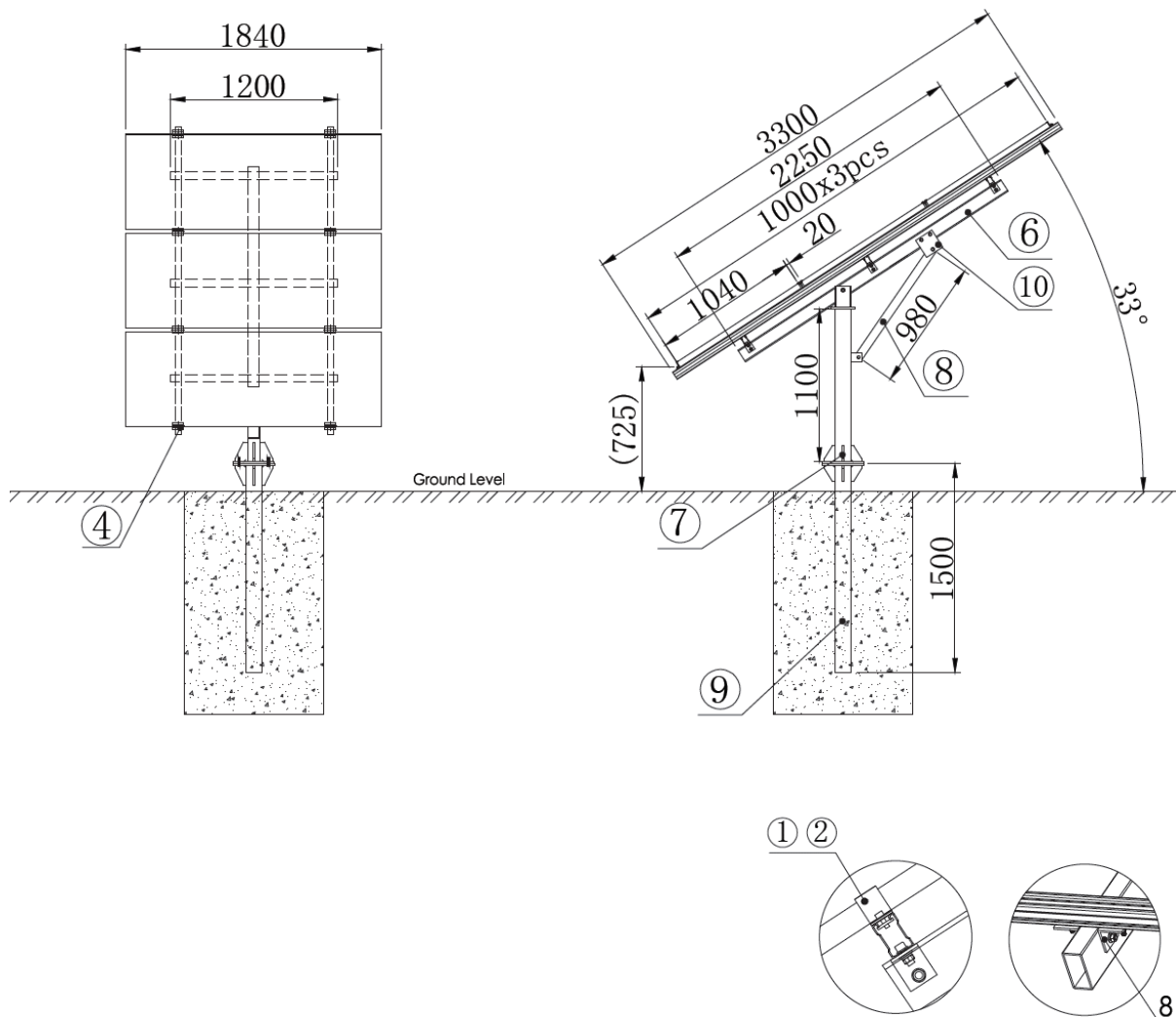
Part Number	Model Number
809868	BIA-2-PM

Part No	Item	Size (mm)	Qty
1	Middle Clamp	35	2
2	End Clamp	35	4
3	U Channel	41x62x2 L2200	2
4	Cross Beam	80x40x3 L1100	1
5	Support Post	D114x6 L1100	1
6	Adjustable Arm	40x40x2.5 L515	1
7	Ground Leg	D114x6 L1500	1
8	Rail Clamp		4
9	Connecting Plate		2
10	Type 1 Screw	M10 x 30mm	4
11	Type 2 Screw	M12 x 40mm	4
12	Type 3 Screw	M12 x 80mm	7
13	SS304 Spacer	1mm	1
14	SS304 Spacer	2mm	1



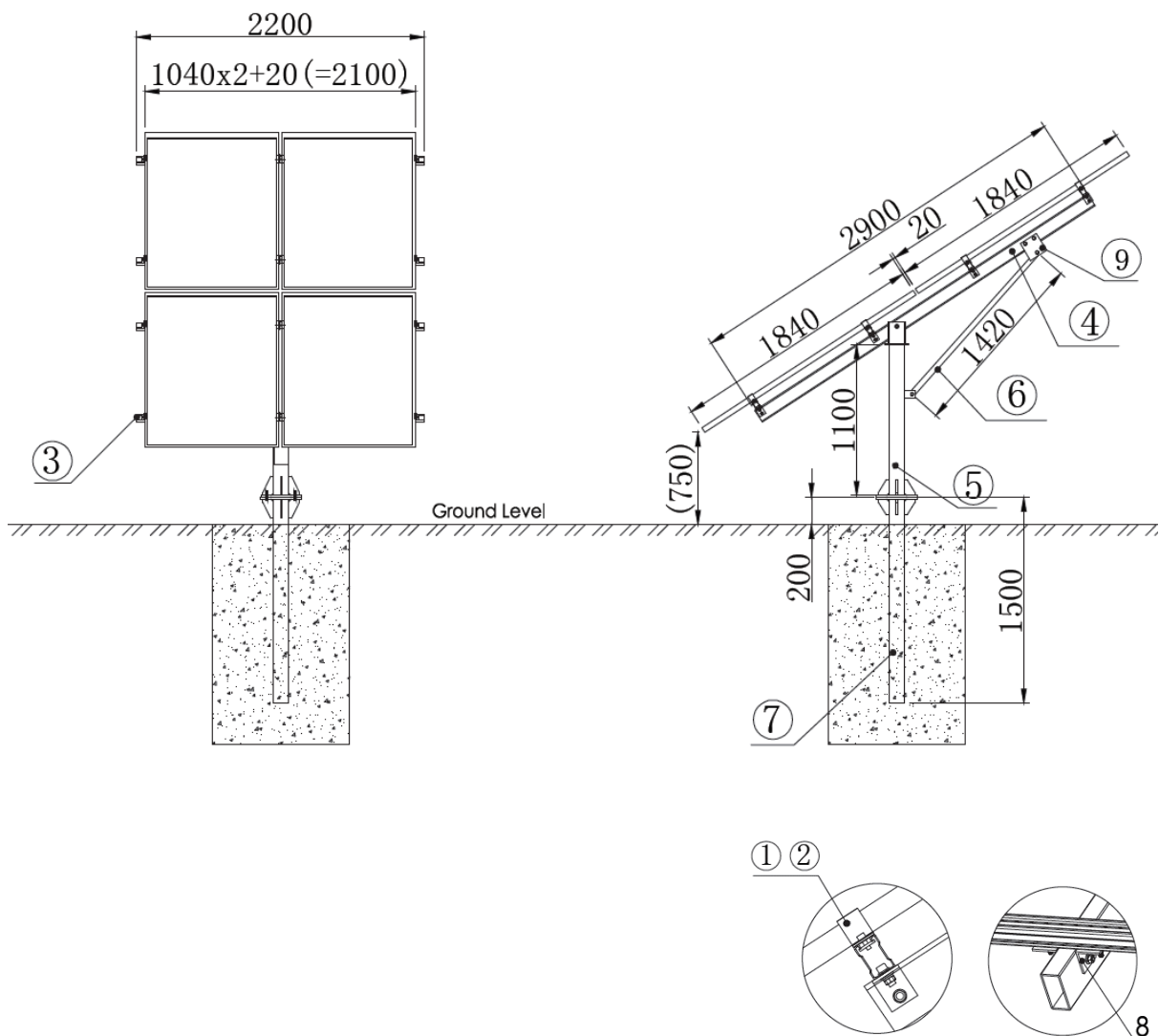
Part Number	Model Number
809869	BIA-3-PM

Part No	Item	Size (mm)	Qty
1	Middle Clamp	35	4
2	End Clamp	35	4
3	U Channel	41x62x2 L1200	3
4	U Channel	41x62x2 L3300	2
5	Cross Beam	80x40x3 L2250	1
6	Support Post	D114x6 L1100	1
7	Adjustable Arm	40x40x2.5 L980	1
8	Ground Leg	D114x6 L1500	1
9	Rail Clamp		6
10	Connecting Plate		2
10	Type 1 Screw	M10 x 30mm	6
11	Type 2 Screw	M12 x 40mm	4
12	Type 3 Screw	M12 x 80mm	8
13	SS304 Spacer	1mm	1
14	SS304 Spacer	2mm	1



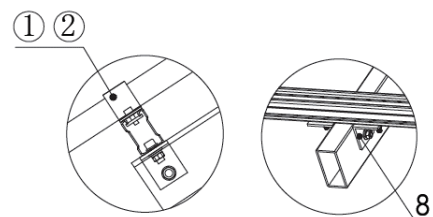
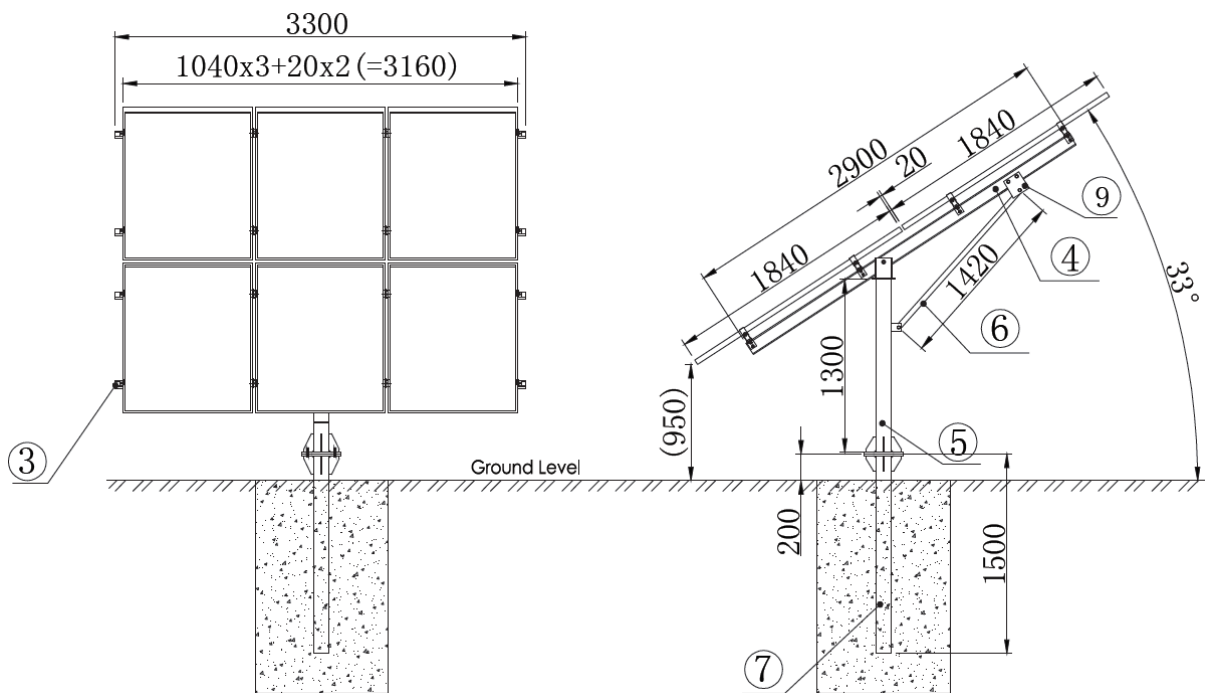
Part Number	Model Number
809870	BIA-4-PM

Part No	Item	Size (mm)	Qty																												
1	Middle Clamp	35	4																												
2	End Clamp	35	8																												
3	U Channel	41x62x2 L2200	4																												
4	Cross Beam	80x40x3 L2900	1																												
5	Support Post	D114x6 L1100	1																												
6	Adjustable Arm	40x40x2.5 L1420	1																												
7	Ground Leg	D114x6 L1500	1 </tr <tr> <td>8</td> <td>Rail Clamp</td> <td></td> <td>8</td> </tr> <tr> <td>9</td> <td>Connecting Plate</td> <td></td> <td>2</td> </tr> <tr> <td>10</td> <td>Type 1 Screw</td> <td>M10 x 30mm</td> <td>8</td> </tr> <tr> <td>11</td> <td>Type 2 Screw</td> <td>M12 x 40mm</td> <td>4</td> </tr> <tr> <td>12</td> <td>Type 3 Screw</td> <td>M12 x 80mm</td> <td>9</td> </tr> <tr> <td>13</td> <td>SS304 Spacer</td> <td>1mm</td> <td>1</td> </tr> <tr> <td>14</td> <td>SS304 Spacer</td> <td>2mm</td> <td>1</td> </tr>	8	Rail Clamp		8	9	Connecting Plate		2	10	Type 1 Screw	M10 x 30mm	8	11	Type 2 Screw	M12 x 40mm	4	12	Type 3 Screw	M12 x 80mm	9	13	SS304 Spacer	1mm	1	14	SS304 Spacer	2mm	1
8	Rail Clamp		8																												
9	Connecting Plate		2																												
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13	SS304 Spacer	1mm	1																												
14	SS304 Spacer	2mm	1																												



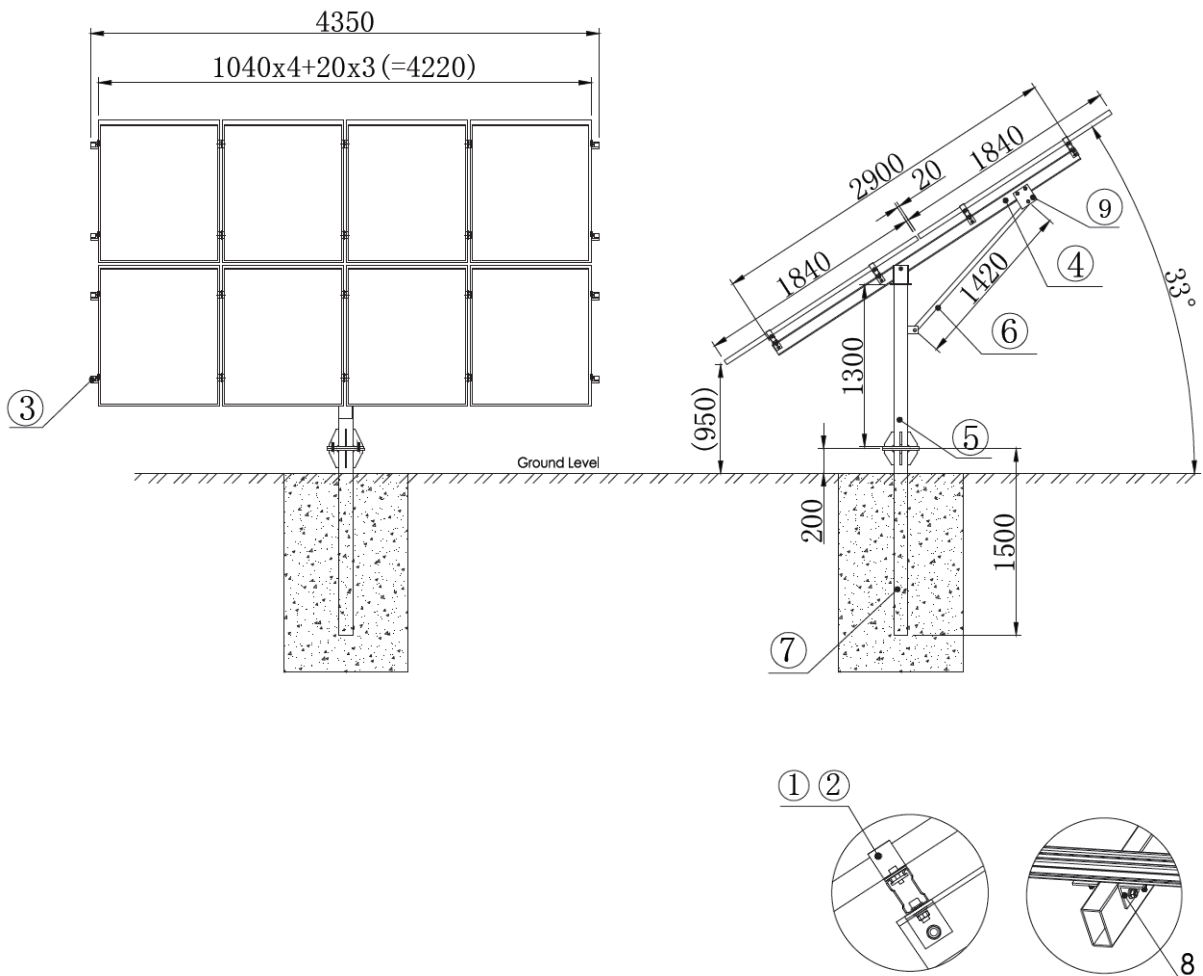
Part Number	Model Number	Part Number	Model Number
809871	BIA-5-PM	809872	BIA-6-PM

Part No	Item	Size (mm)	Qty
1	Middle Clamp	35	8
2	End Clamp	35	8
3	U Channel	41x62x2 L3300	4
4	Cross Beam	80x40x3 L2900	1
5	Support Post	D140x6 L1300	1
6	Adjustable Arm	40x40x2.5 L1420	1
7	Ground Leg	D140x6 L1500	1
8	Rail Clamp		8
9	Connecting Plate		2
10	Type 1 Screw	M10 x 30mm	8
11	Type 2 Screw	M12 x 40mm	6
12	Type 3 Screw	M12 x 80mm	17
13	Pipe Clamp	140mm diameter	1
14	Support Strap Pair	1m x 40x5mm	1
15	Slotted U Channel	3m x 41x41x2.5mm	2
16	SS304 Spacer	1mm	1
17	SS304 Spacer	2mm	1



Part Number	Model Number	Part Number	Model Number
809873	BIA-7-PM	809874	BIA-8-PM

Part No	Item	Size (mm)	Qty
1	Middle Clamp	35	12
2	End Clamp	35	8
3	U Channel	41x62x2 L4350	4
4	Cross Beam	80x40x3 L2900	1
5	Support Post	D140x6 L1300	1
6	Adjustable Arm	40x40x2.5 L1420	1
7	Ground Leg	D140x6 L1500	1
8	Rail Clamp		8
9	Connecting Plate		2
10	Type 1 Screw	M10 x 30mm	8
11	Type 2 Screw	M12 x 40mm	6
12	Type 3 Screw	M12 x 80mm	25
13	Pipe Clamp	140mm diameter	1
14	Support Strap Pair	1m x 40x5mm	1
15	Slotted U Channel	3m x 41x41x2.5mm	4
16	SS304 Spacer	1mm	1
17	SS304 Spacer	2mm	1



Part Number	Model Number
809875	BIA-9-PM = BIA-3-PM + BIA-6-PM

Part Number	Model Number
809876	BIA-10-PM = BIA-4-PM + BIA-6-PM

9. Service

White International warrants to the original purchaser ("Purchaser") of product(s) that the Product shall be free from defects in material and workmanship for a period of ten (10) years, except for the anodised finish, which finish shall be free from visible peeling, or cracking or chalking under normal atmospheric conditions for a period of five (5) years, from the earlier of 1. the date the installation of the Product is completed, or 2. 30 days after the purchase of the Product by the original Purchaser ("Finish Warranty").

The Finish Warranty does not apply to any foreign residue deposited on the finish. All installations in corrosive atmospheric conditions are excluded. The Finish Warranty is VOID if the practices specified by AAMA 609 & 610-02 – "Cleaning and Maintenance for Architecturally Finished Aluminium" (www.aamanet.org) are not followed by Purchaser.

This Warranty does not cover damage to the Product that occurs during its shipment, storage or installation.

This Warranty shall be VOID if installation of the Product is not performed in accordance with White International's written installation instructions, or if the Product has been modified, repaired, or reworked in a manner not previously authorised by White International in writing, or if the Product is installed in an environment for which it was not designed. White International shall not be liable for consequential, contingent, or incidental damages arising out of the use of the Product by Purchaser under any circumstances.

If within the specified Warranty periods the Product shall be reasonably proven to be defective, then White International shall repair or replace the defective Product, or any part thereof, in White International's sole discretion. Such repair or replacement shall completely satisfy and discharge all of White International's liability with respect to this limited Warranty. Under no circumstances shall White International be liable for special, indirect or consequential damages arising out of or related to use by Purchaser of the Product.

White International's limited Warranty covers only its Product, and not any related items.

10. Warranties – Terms and Conditions

This warranty is given in addition to the consumer guarantees found within the Australian Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 NZ for goods purchased in New Zealand:

1) White International Pty Ltd / White International NZ Ltd (White International) warrant that all products distributed are free from defects in workmanship and materials, for their provided warranty period as indicated on the top or opposite side of this document. Subject to the conditions of the warranty, White International will repair any defective products free of charge at the premises of our authorised service agents throughout Australia and New Zealand if a defect in the product appears during the warranty period. If you believe that you have purchased a defective product and wish to make a claim under this warranty, contact us on our Sales Hotline on 1300 783 601, or send your claim to our postal address or fax line below and we will advise you as to how next to proceed. You will be required to supply a copy of your proof of purchase to make a claim under this warranty.

2) This warranty excludes transportation costs to and from White International or its appointed service agents and excludes defects due to non-compliance with installation instructions, neglect or misuse, inadequate protection against the elements, low voltage or use or operation for purposes other than those for which they were designed. For further information regarding the suitability of your intended application contact us on our Sales Hotline on 1300 783 601. If you make an invalid claim under this warranty, the original product will be sent back to you unrepaid.

3) This warranty refers only to products sold after the 1st January 2012, and is not transferable to another product type and only applies to the original owner, purchaser or end user, and is in addition to the consumer guarantees found within the Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 (NZ) for goods purchased in New Zealand.

4) Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. 2 YEAR WARRANTY.

5) To the fullest extent permitted by law, White International excludes its liability for all other conditions or warranties which would or might otherwise be implied at law. To the fullest extent permitted by law, White International's liability under this warranty and any other conditions, guarantees or warranties at law that cannot be excluded, including those in the Competition and Consumer Act 2010 (Cth), is expressly limited to: (a) in the case of products, the replacement of the product or the supply of equivalent product, the payment of the cost of replacing the product or of acquiring an equivalent product or the repair of the product or payment of the cost of having the product repaired, is at the discretion of White International or a 3rd party tribunal elected under the Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 (NZ) for goods purchased in New Zealand; and

6) To the fullest extent permitted by law, this warranty supersedes all other warranties attached to the product or its packaging.

7) In the case of services, supplying the services again or the payment of the cost of having the services supplied again, is at the discretion of White International or a 3rd party tribunal elected under the Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 (NZ) for goods purchased in New Zealand. 8) Our warranty commences from the date of purchase of the above-mentioned pumps. Proof of purchase is required before consideration under warranty is given.

Record your date of purchase in the space below and retain this copy for your records.

Date of Purchase**Model Purchased**



www.whiteint.com.au

www.whiteint.co.nz

Please always refer to our website for further technical information & new product innovations

Disclaimer: Every effort has been made to publish the correct information in this manual. No responsibility will be taken for errors, omissions or changes in product specifications.

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