

Installation Checklist for Pantograph Down 2000

To adhere to ChargePoint best practices, complete this checklist before you leave the site.

Express Plus Pantograph Down 2000 Post-Installation Checklist		
1.	Verify the site is energized by utility.	☐
2.	Ensure that site AC voltage measurements are within acceptable range (480 V AC +/- 10% (Phase-Phase).	☐
3.	Ensure that all ground and earth connections are made, including those to ground lugs. Refer to Connect Power Link 2000 Wires , Connect PD Controller Wires , and Connect Pantograph Wires sections in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf	☐
4.	Ensure that all Power Link 2000 wire connections have correct polarity and are installed on the correct bus. Refer to Connect Power Link 2000 Wires section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf	☐
5.	Ensure that all Schunk SLS 201.102 wire connections have correct polarity and are installed on the correct bus. Refer to Connect Pantograph Wires section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf .	☐
6.	Within the Power Link 2000, ensure all service wires are inserted into their designated terminal blocks, and ensure all electrical connections are clean and snug (not pinched or trapped). Refer to Connect Power Link 2000 Wires section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf .	☐
7.	Within the PD Controller, ensure all service and system wires are inserted into their designated terminal blocks, and ensure all electrical connections are clean and snug (not pinched or trapped). Perform a visual inspection on all controller interface cable wires at their landing terminals to ensure field-installed wires mirror factory-installed wires in terms of terminal port position and wire color. Refer to Connect Power Link 2000 Wires section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf .	☐
8.	At the Schunk SLS 201.102 pantograph, ensure all system cables are installed and	☐

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	secure. At the pantograph control box, verify all wires are inserted into their designated terminals and all electrical connections are clean and snug (not pinched or trapped). Refer to Connect Schunk SLS 201.102 Pantograph Wires section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf .	
9.	Ensure that all electrical enclosures are cleaned and vacuumed and are free of wire strands, metal shavings, debris, packaging material, or all other foreign objects.	☐
10.	Ensure that all clearance requirements for service and ventilation of the Pantograph Down Mast and pantograph are met. Refer to the Clearances and Ventilation sections of the <i>Express Plus Pantograph Down 2000 Site Design Guide</i> .	☐
11.	Ensure that the Pantograph Down Mast, Power Link 2000, PD Controller, and pantograph are fully secured and do not rock or move at their mounting points.	☐
12.	Ensure that the Power Link 2000 mounting nuts are torqued per site plan specifications. Refer to Mount Power Link 2000 Wires section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf .	☐
13.	Ensure that the fasteners connecting the mast arm to the mast pole are torqued per the Turn of Nut Technique by verifying the angle between the anchor bolt and anchor nut torque marks. Refer Mount Pantograph Down Mast section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf .	☐
14.	Ensure that the Power Link 2000 mounting base fasteners are torqued to 50 Nm (37 ft-lb) and the enclosure mounting screws are torqued to 5.6 Nm (50 in-lb). Refer to Mount Power Link 2000 Wires section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf .	☐
15.	Ensure that the PD Controller mounting strut fasteners are torqued to 50 Nm (37 ft-lb) and the enclosure mounting bolts are torqued to 10 Nm (90 in-lb). Refer to Mount PD Controller section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf	☐
16.	Ensure that the Schunk SLS 201.102 mounting fasteners are torqued to 99 Nm (73 ft-lb) and the rail clamp fasteners are torqued to 4.7 Nm (42 in-lb). Refer to Mount Schunk SLS 201.102 Pantograph section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf .	☐
17.	Ensure that the conductors, cables, and lugs meet the specifications listed in Wires and Terminations Required for Site section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf	☐

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	dc/pantograph/pantograph_down-ig-valmont-mast.pdf .	
18.	All Power Link 2000 cables (HVDC, LVDC) are labeled correctly and clearly identified. Refer to Connect Power Link 2000 Wires section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf .	☐
19.	Ensure that all fasteners on the field-installed components are properly torqued. Refer to the Tightening Torques section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf .	☐
20.	Ensure that Power Link 2000 input and output HV DC wires have undergone wire insulation resistance test and have test results ready to present at system commissioning. Refer to the Pull, Cut, and Connect Wires Power Link 2000 section in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf .	☐
21.	Ensure that an electrical installer will be on site during commissioning.	☐
22.	Verify all site construction work is complete.	☐
23.	Ensure that the site is inspected by authority having jurisdiction (AHJ).	☐
24.	Ensure that all enclosure doors are closed, and all covers and panels are installed. Refer to the Complete the Install chapter in the Installation Guide using the following link: https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/pantograph/pantograph_down-ig-valmont-mast.pdf .	☐
25.	Ensure that any twists in charging cables are removed and straightened.	☐
26.	Ensure that the parking area is clean and free of all packaging, debris, and anything that could damage vehicle tires.	☐
27.	Ensure that all local required forms are prepared.	☐

Third-Party Service Providers

Services Performed

Details	Complete the following:
Description of Service Provided	
Location	
Unit	
Panel ID	
Breaker	

Contact Information

Service Provider	Complete the following:
Technician Name	
Email	
Service Company Name	
Address	
Contact Person	
Phone	

Site Owner/Customer	Complete the following:
Contact Person	
Email	
Business Name	
Site Address	
Phone	

Questions

For assistance, navigate to chargepoint.com/support and contact technical support using the appropriate region-specific number.