



eBike Charging Station Install Guide



Saris Cycling Group
5253 Verona Road Madison WI 53711 Ph: 800.783.7257
www.sarisinfrastructure.com

Shelter requirements:

- Saris recommends a roof or shelter for outdoor installations to provide added protection against sun (heat) and rain protection for the charging connection at the e-bike.



Electrical requirements:

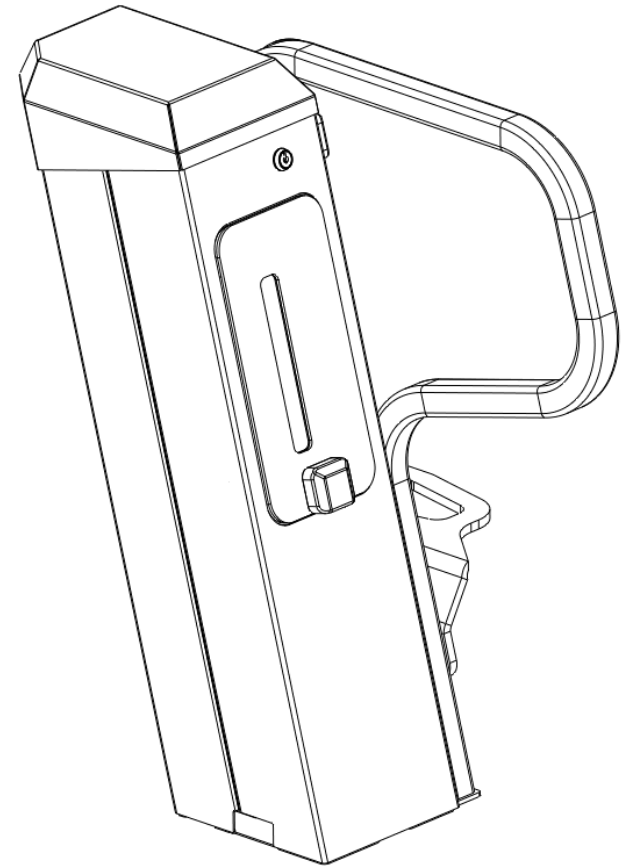
- Power must be supplied to the charging station. This power needs to be installed per the requirements in the National Electrical Code (NEC), ANSI/NFPA 70, or the Canadian Electrical Code (CEC), Part 1, CAN/CSA C22.1 or local requirements where applicable.
- Circuit breaker required. Recommended circuit breaker sizes shown in table.
- Recommend installation to be done by licensed electrician

CIRCUIT BREAKER SIZES	
MARKET	BREAKER SIZE
USA/CAN	120V, 25A
EU/AUS/NZ	230V, 20A
UK	230V, 16A



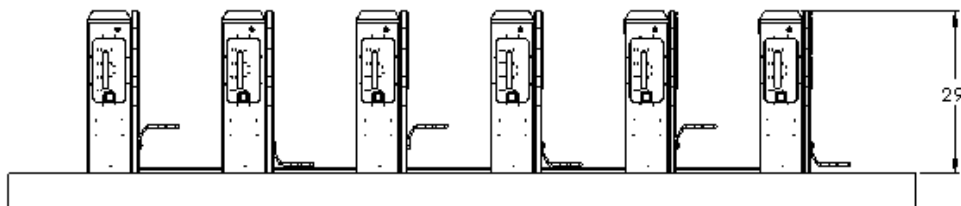
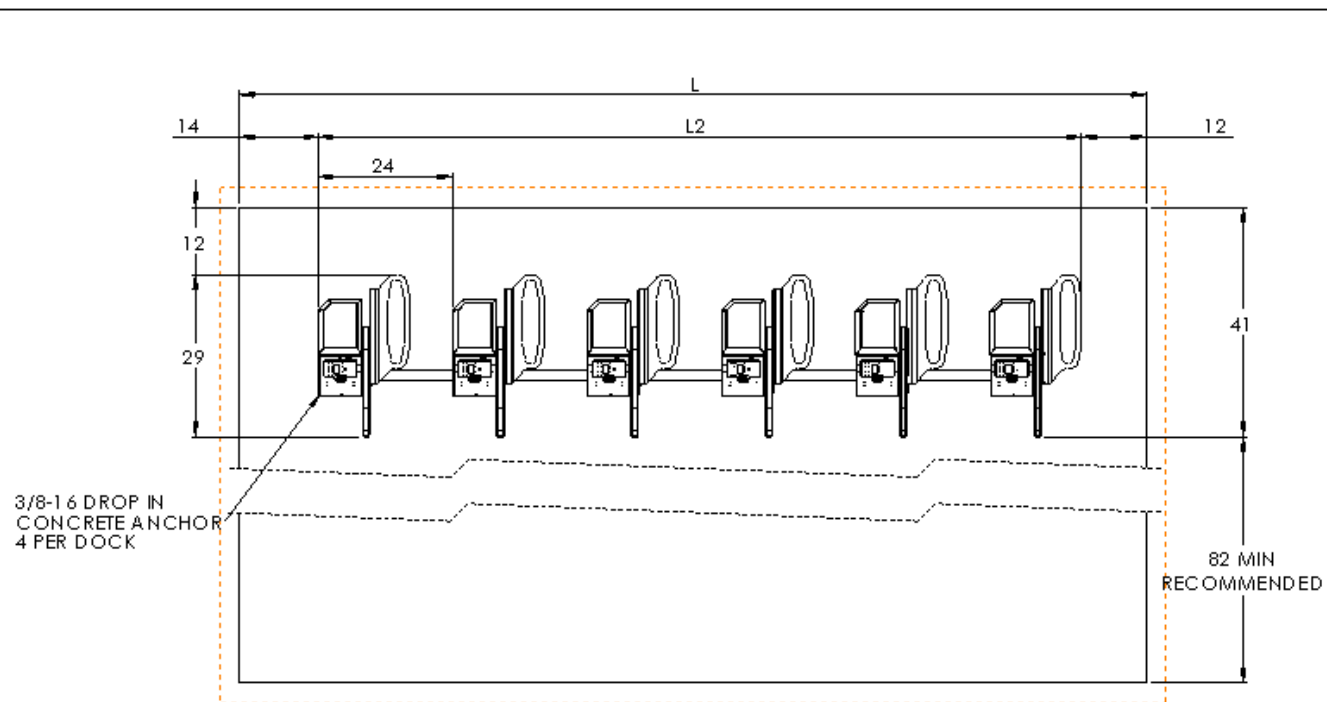
Installation instructions

Step 1: Review site layout document to determine required space and setbacks for charging stations. Determine power source for site. Main power should be connected to a circuit breaker.





Site layout: Ground Mount System



SYSTEM LENGTH		
# OF DOCKS	"L"	"L2"
1	42	16
2	66	40
3	90	64
4	114	88
5	138	112
6	162	136
7	186	160
8	210	184

NOTES

1. ALL UNITS IN INCHES
2. POWER TO BE STUBBED IN FROM BELOW END DOCK

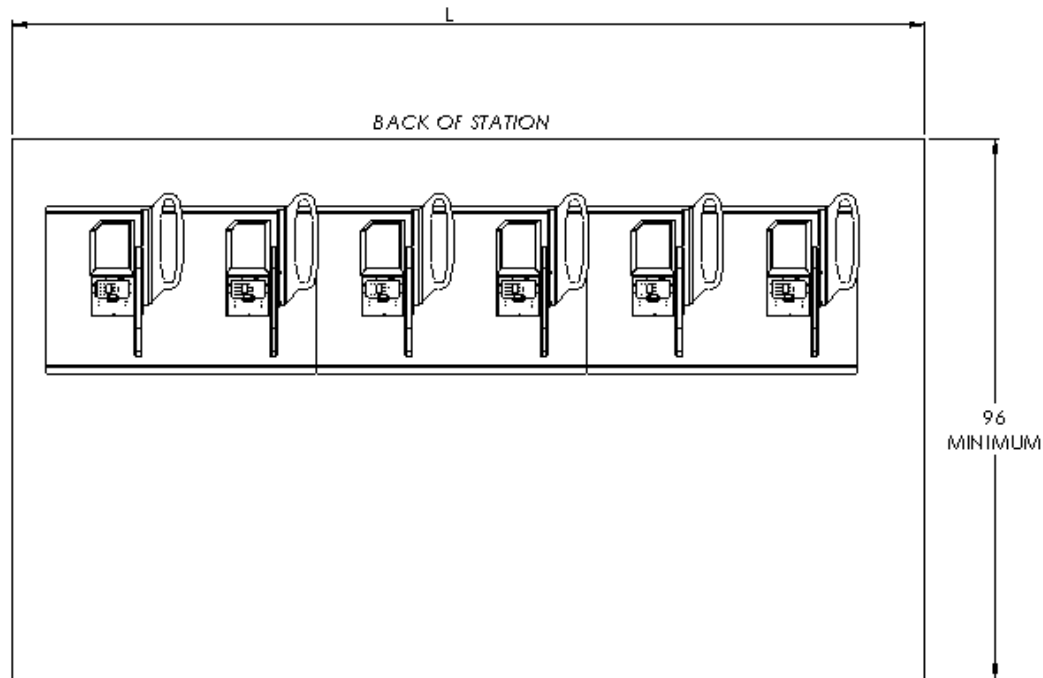


5253 VERONA ROAD, MADISON WI 53711
1-800-783-7257 / WWW.SARIS.COM

THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF SARIS. IT IS TO BE USED FOR THE PURPOSES OF THE PROJECT ONLY. THE INFORMATION CONTAINED HEREIN IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.

TITLE: E-BIKE CHARGING STATION
GROUND MOUNT SYSTEM LAYOUT

Site layout: Recommended Shelter Dimensions



MINIMUM SHELTER LENGTH	
# OF DOCKS	" L "
1	42
2	66
3	90
4	114
5	138
6	162
7	186
8	210

NOTES

1. SHELTER SHALL HAVE WALLS ON BACK AND BOTH SIDES
2. MINIMUM RECOMMENDED INTERIOR DIMENSIONS
3. ALL UNITS IN INCHES



5253 VERONA ROAD, MADISON WI 53711
 1-800-783-7257 / WWW.SARIS.COM

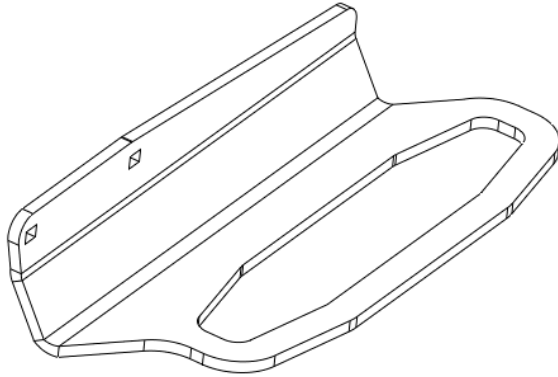
© 2020 SARIS. ALL RIGHTS RESERVED.
 THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF SARIS. IT IS TO BE USED FOR THE PURPOSES OF THE PROJECT ONLY AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.

TITLE: E-BIKE CHARGING STATION
 SHELTER DIMENSIONS



Installation instructions

GROUND MOUNT SYSTEM COMPONENTS



WHEEL HOLDER

WHEEL HOLDER INSTALLATION HARDWARE (1 KIT PER HOLDER)



CARRIAGE BOLT
QTY 2



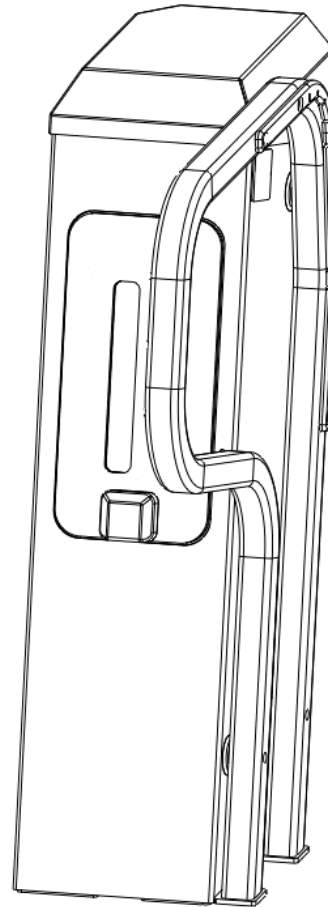
RUBBER WASHER
QTY 2



LOCK NUT
QTY 2



STEEL WASHER
QTY 2



DOCK

Anchors

- 3/8 OR M10 ANCHORS (CAN BE PURCHASED FROM SARIS INFRASTRUCTURE, part #28879) QTY 4 PER DOCK

TOOLS REQUIRED for Install

- T-25 Security Torx Bit
- 9/16" OR 14MM SOCKET
- 10MM SOCKET
- RATCHET
- TORQUE WRENCH
- SMALL FLAT BLADE SCREWDRIVERS

Tools required for above ground electrical supply

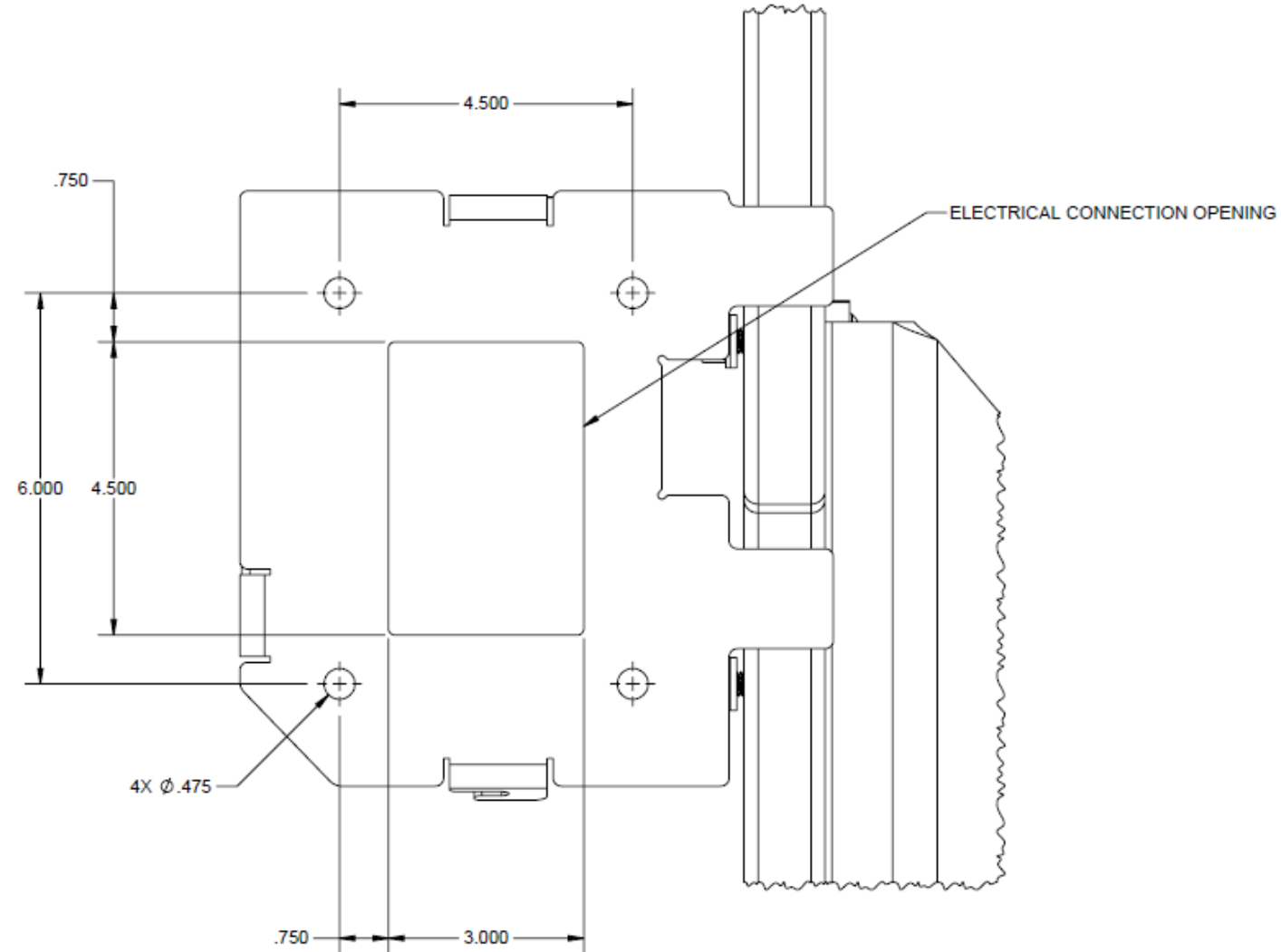
- Knockout punch or step drill



Installation instructions

Step 2: Remove rear panel. Mark docks for anchoring. Remove docks and install anchors per manufacturer's instructions. Installation instructions for optional Saris concrete anchors on following pages.

Anchor holes and
electrical connection
opening dimensions
from below:

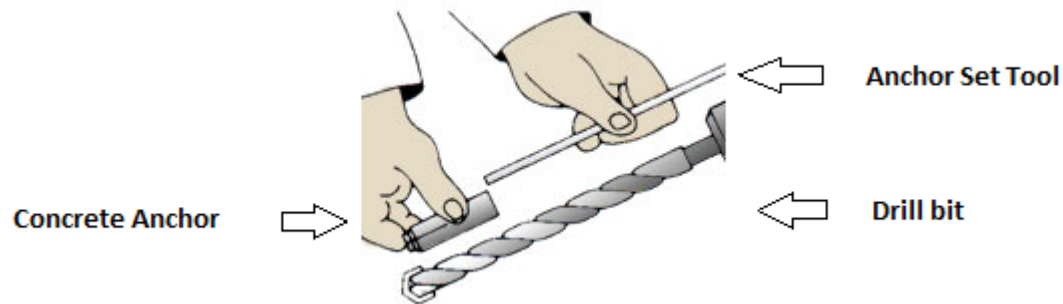




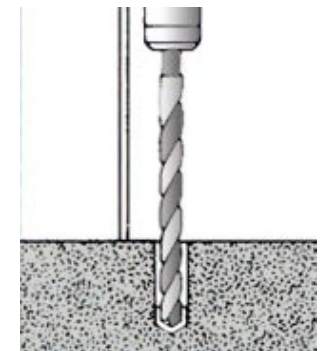
Installation instructions

Step 4: Install 4 concrete anchors for each dock. The concrete anchor (a.k.a “drop in anchor”) is a female anchor designed for use in solid concrete only and cannot be used in brick or block base material. The anchor size is designated by the inside diameter of the anchor. The diameter of the hole to be drilled is the same size as the outside diameter of the anchor which is ½”.

When fastening to solid concrete with a drop in anchor, a hole must first be drilled into the concrete. A hammer drill should be used as it will drill the best quality hole. Once the bit is inserted into the hammer drill, the depth of the hole to be drilled can easily be set by using the depth gauge on the drill or by wrapping the bit with tape at the required depth. We recommend a drill depth of 1-5/8” deep so that the anchor just sets down flush with the surface.



Before starting to drill the hole, it is important that eye and ear protection are used. Make sure the hammer drill is in the hammer mode and start drilling your hole. Continue drilling until the tape on the bit or the drill gauge meets the base material- this means that the required depth has been reached.





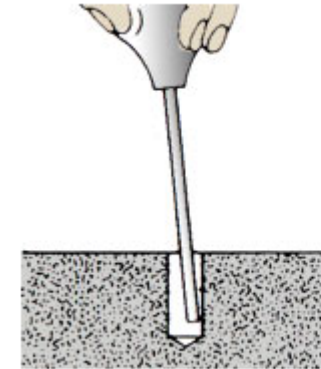
Installation instructions

Step 5: Before proceeding with installation, the hole must be cleaned of all concrete dust to ensure proper fastening. Use a wire brush, a vacuum or compressed air to clean out the hole completely.

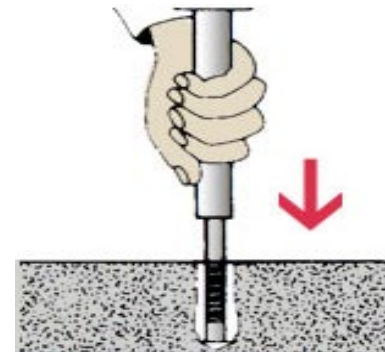
Step 6: Next, insert the drop-in anchor with the open side up. Tap lightly to get the anchor flush with the base material.

Step 7: Now, take the setting tool and insert it into the anchor. Strike the setting tool with the hammer several times until the set tool no longer moves down. This will ensure the anchor is properly set.

Step 8: Reinstall docks into position. Before securing anchors, make sure to place conduit pieces between docks. Tighten anchor hardware.



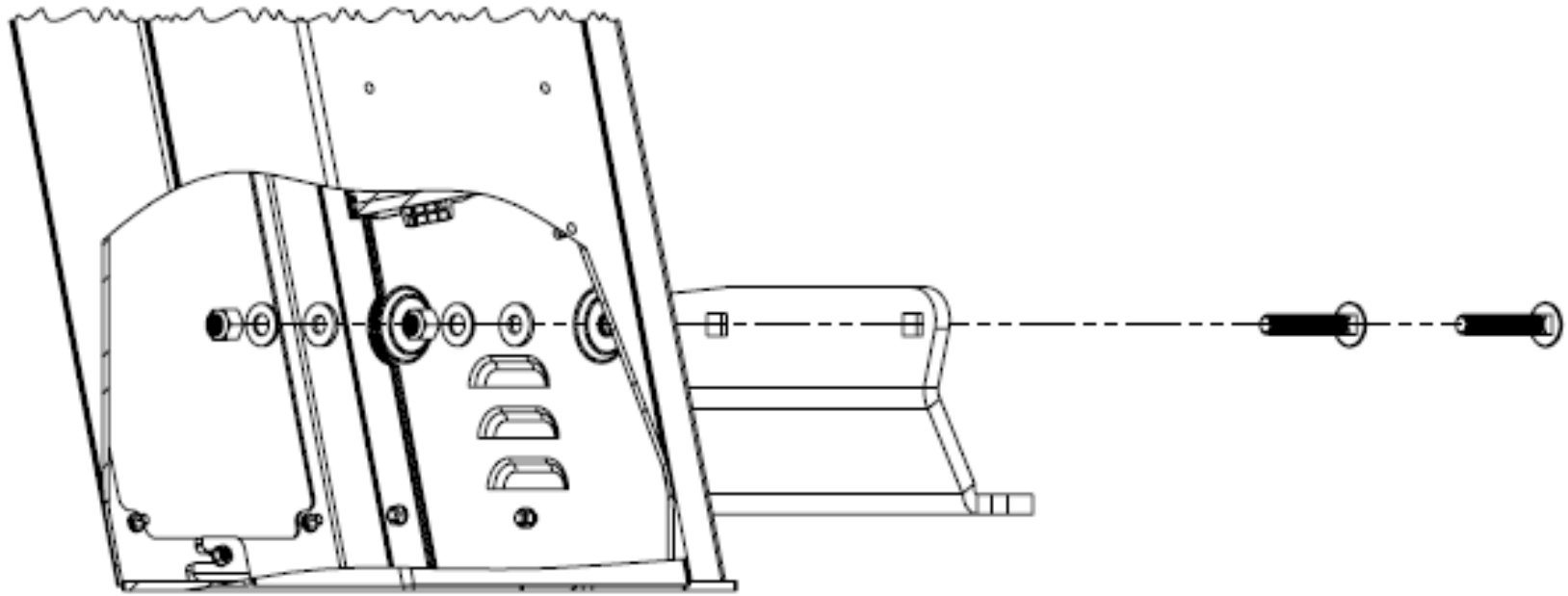
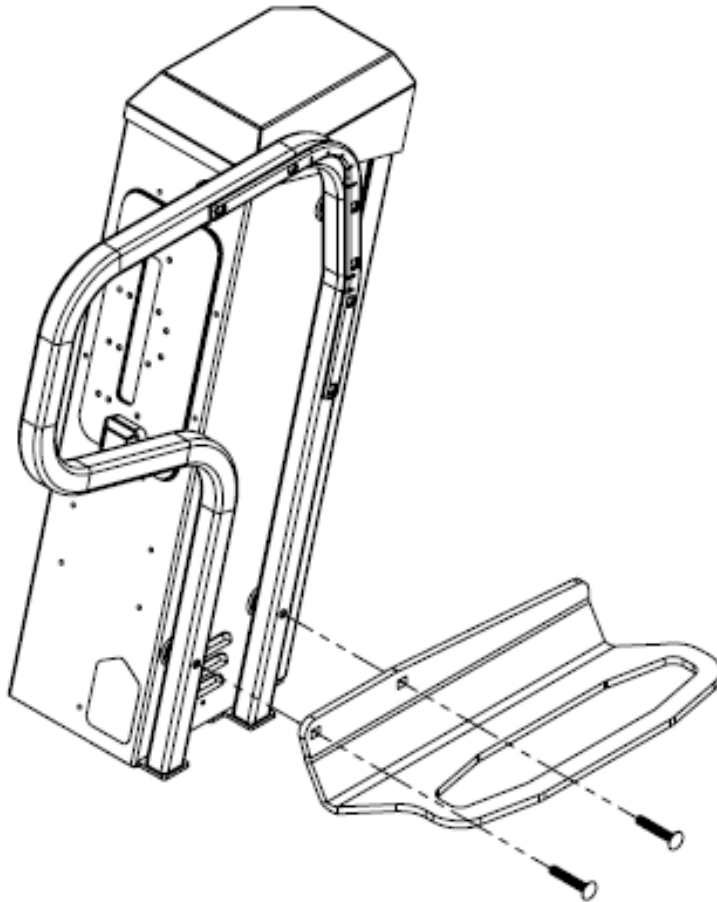
Tool to remove debris
after drilling holes.
Installer provides.





Installation instructions

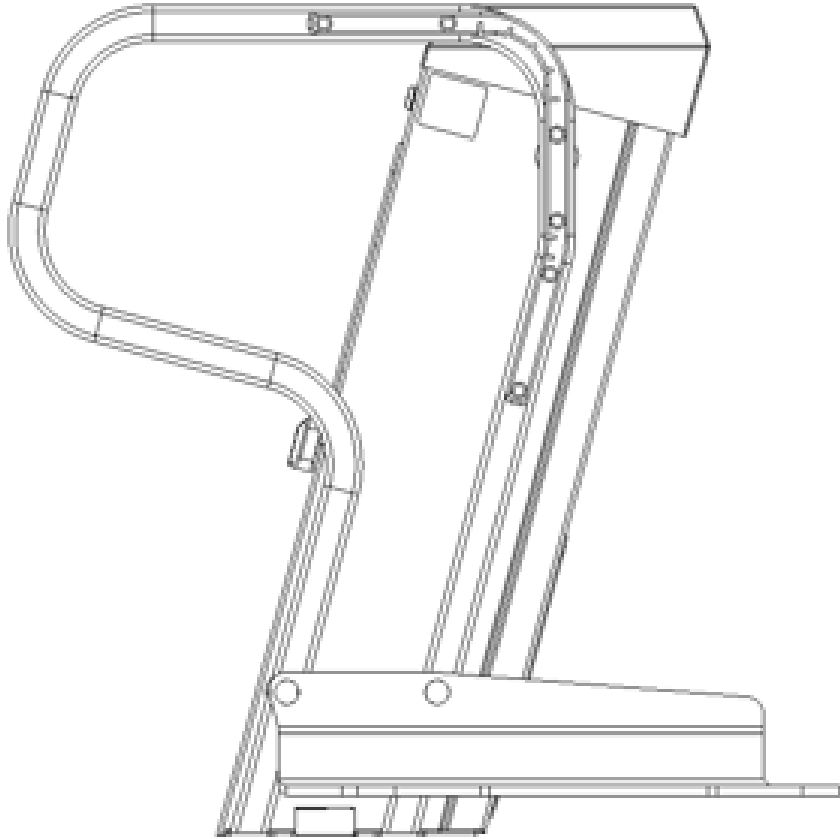
Step 10: Install wheel holders to each dock. Note correct orientation of wheel holder. Insert carriage bolts through wheel holder into the dock. Inside of dock, install in order the rubber washer, steel washer, and locknut onto the carriage bolt. Using 9/16" or 14mm socket, torque to 20-27 N-m (15-20 ft-lbs).





Installation instructions

Step 10 cont.: Assure wheel holder is installed in the correct orientation



CORRECT ORIENTATION



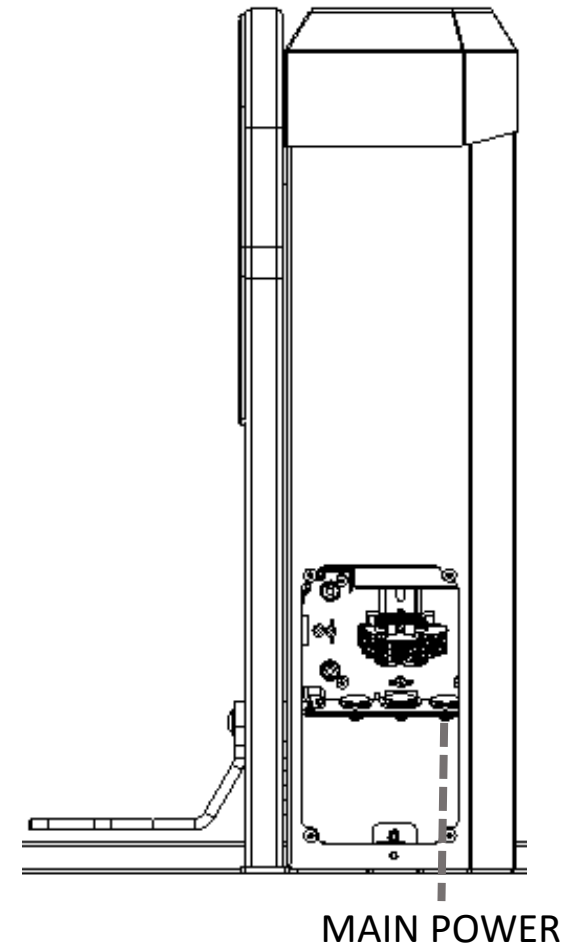
Installation instructions

Step 11: Wire mains power to junction box in dock per local codes. Terminal blocks are marked for Line, Neutral, and Ground connections. Power can be plumbed up from below the unit or a through a knockout placed in the rear of the unit to the right of the access panel.

- If knockout used, debur edges and use watertight connection



Rear view of ground mount system





Installation instructions

Step 12: When all connections have been made, energize mains power. Test each outlet to ensure that power is present at each outlet. Reinstall junction box covers and access panels.



Electrical Specs

Maximum Receptacle Amperage/Wattage: USA/Canada			Maximum Receptacle Amperage/Wattage: EU			Maximum Receptacle Amperage/Wattage: UK			Maximum Receptacle Amperage/Wattage: AUS/NZ		
Model #	# of Docks	Max Amps/Watts	Model #	# of Docks	Max Amps/Watts	Model #	# of Docks	Max Amps/Watts	Model #	# of Docks	Max Amps/Watts
84101320	1	20/2400	84201320	1	16/3600	84301320	1	13/2990	84401320	1	15/3450

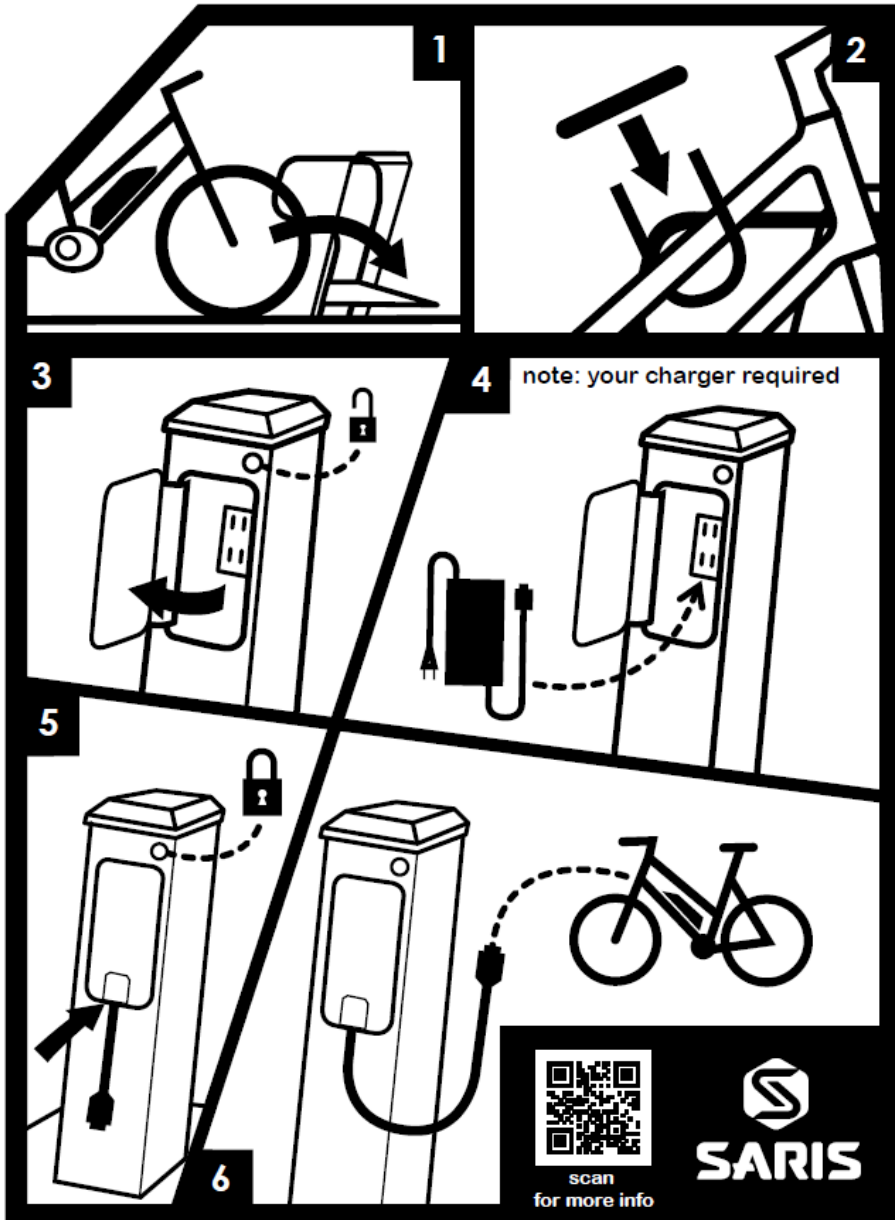
RATINGS BY MODEL #		
Model #	Input Rating	Output rating
84101320	120V/20A ~ 60Hz	120V/20A ~ 60Hz
84201320	230-240V/16A ~ 50Hz	230-240V/16A ~ 50Hz
84301320	230-240V/13A ~ 50Hz	230-240V/13A ~ 50Hz
84401320	230-240V/15A ~ 50Hz	230-240V/15A ~ 50Hz

FCC NOTICE

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



User instructions



Standard system User Instructions:

Step 1: User parks their bike at the dock using the wheel holder.

Step 2: Lock bicycle frame with U-lock.

Step 3: User gains access to locker with key. Keys will typically be supplied/controlled by a property manager or similar authority.

Step 4: User will place their charger into the locker and plug into the provided receptacle.

Step 5: User is instructed to route charger output cable through a port at the bottom of the door and to securely close the door

Step 6: User can then plug charge cable to the charge port on the parked bicycle



Lock mechanism

Locker can be secured with any standard padlock

Push door closed to activate latch

To open, rotate upper latch to the right to release door latch

