



CAGE ASSEMBLY GUIDE

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PREPARED BY:
EMESENT PTY LTD
LEVEL G, BUILDING 4, KINGS ROW OFFICE PARK
40-52 MCDOUGALL ST, MILTON, QLD, 4064 AUSTRALIA

EMAIL: INFO@EMESENT.IO
PHONE: +61 7 3548 9494





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Using this manual

Hovermap is a powerful system that can be used as a Lidar mapping payload but also as an advanced autopilot for drones. It is therefore recommended to read the user manual thoroughly to make use of all its capabilities in a safe and productive way.

Disclaimer and safety guidelines

This product is *not* a toy and is not suitable for children under the age of 18. It must be operated with caution, common sense and according to the instructions in this user manual. Failure to operate it in a safe and responsible manner could result in product loss or injury.


By using this product, you hereby agree that you are solely responsible for your own conduct while using it, and for any consequences thereof. You also agree to use this product only for purposes that are in accordance with all applicable laws, rules and regulations.



Warnings

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Product warnings



Class 1 Laser Product
(21 CFR 1040.10 and 1040.11)

WARNING
HAZARDOUS MOVING PARTS
KEEP FINGERS AND OTHER
BODY PARTS AWAY





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1. Parts and tools list

1.1 Parts list

Name	Part number	Required tool	Quantity
Cage Carbon Uni Plate Assembly	E10-HMC-PLATE		1
Cage Upper Polycarbonate Cover	E34-HMC-PC-TOP		1
Cage Lower Polycarbonate Cover	E34-HMC-PC-BOT		1
Large Carabiner	E31-1031457		1
Cage Quick Release Pin	E31-RWB-1688		2
M5 X 10mm Full Thread Cap Head Screws (DIN 912) - Thread Locking A4	E95-SSCF-M5-10-A4-R360	4 mm hex driver	8
M5 Hexagon Nylon Locking Nuts (DIN 985) - A2	E95-HNN-M5-A2	8 mm spanner	4
M5 Form A Flat Washers (DIN 125) - A2	E95-HPW-M5-A2		8
Lemo to D-Tap Power Cable	E02-HVM-LDP-0300		1
SS Half Cage w/ welded nuts	E32-HMC-SS-LKNT		1
SS Half Cage	E32-HMC-SS		1
M8 X 16mm Full Thread Cap Head Screws (DIN 912) - Thread Locking A4	E98-SSCF-M8-16-A4-R360	6 mm hex driver	6



1.2 Tools list

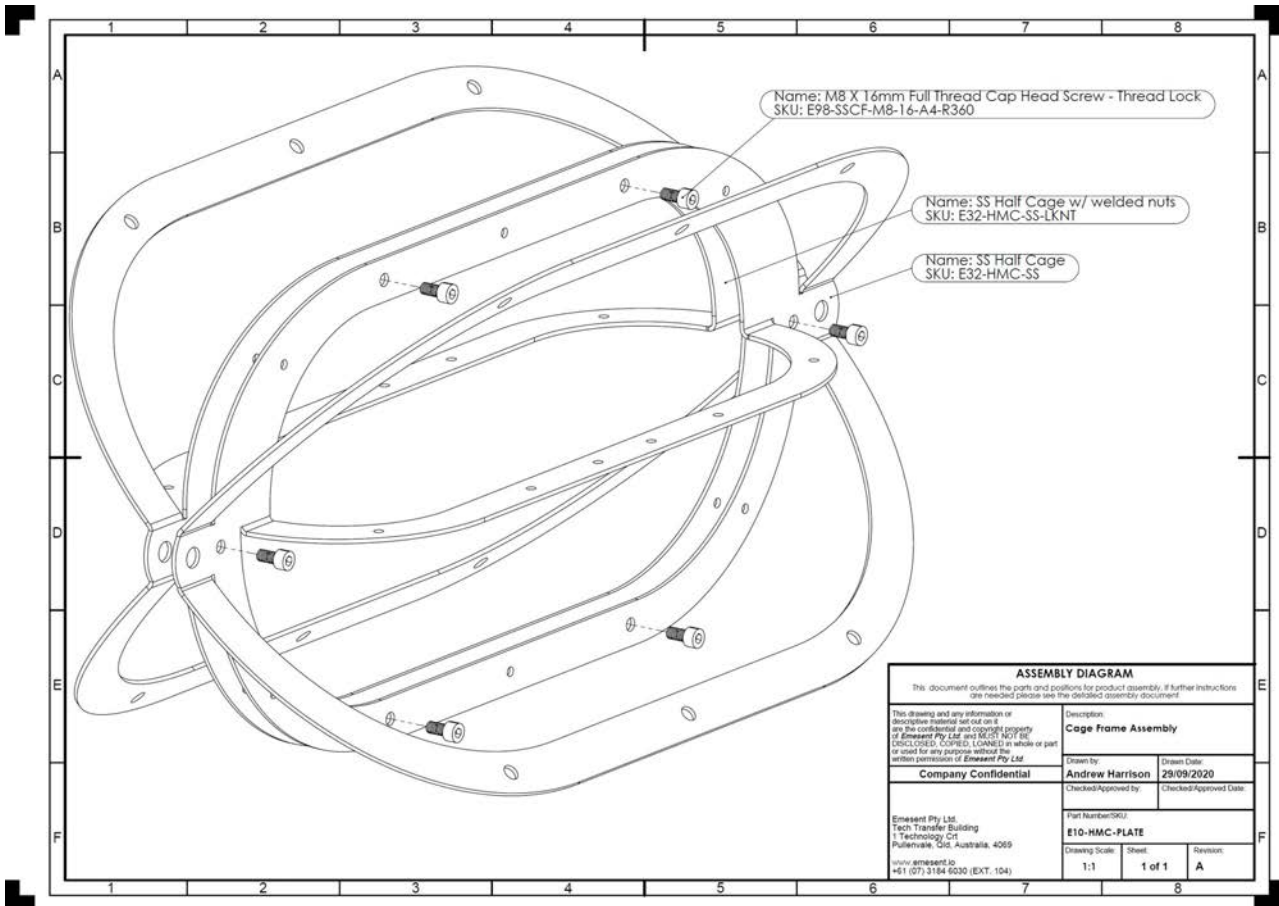
- 3/16 hex driver
- 8 mm spanner
- 4 mm hex driver
- 6 mm hex driver
- 2.5 mm hex driver

2. Cage assembly

2.1 Assemble cage frame

Use the following parts and tools to screw together the *SS Half Cage (E32-HMC-SS)* and the *SS Half Cage w/ welded nuts (E32-HMC-SS-LKNT)*:

- 6 mm hex driver
- *M8 x 16 mm Full Thread Cap Head Screws - Thread Lock (E98-SSCF-M8-16-A4-R360)*

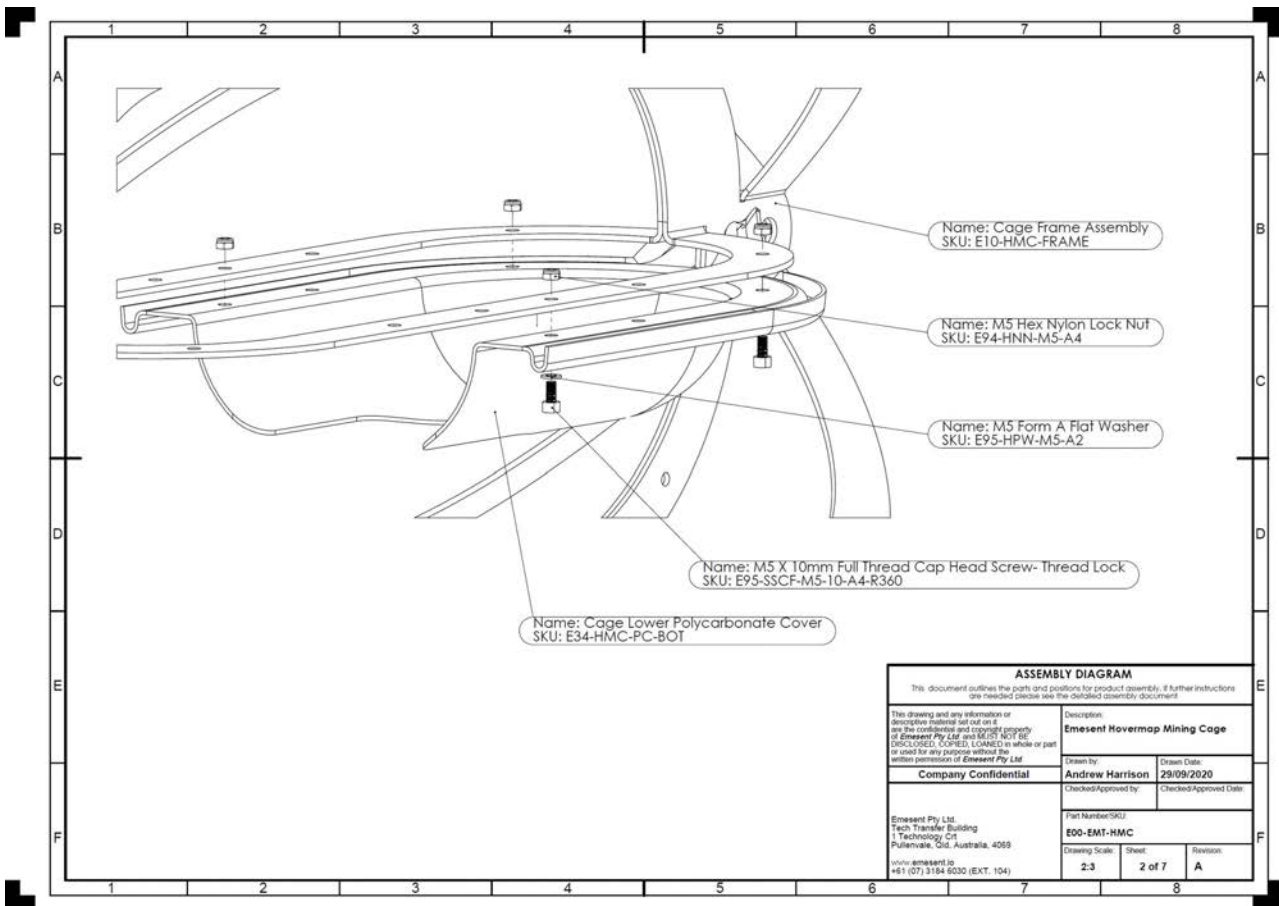




2.2 Attach the lower cover

Use the following parts and tools to screw the *Cage Lower Polycarbonate Cover (E34-HMC-PC-BOT)* to the cage frame:

- 4 mm hex driver
- 8 mm spanner
- *M5 x 10 mm Full Thread Cap Head Screws - Thread Lock (E95-SSCF-M5-10-A4-R360)*
- *M5 Form A Flat Washers (E95-HPW-M5-A2)*
- *M5 Hex Nylon Lock Nuts (E94-HNN-M5-A4)*

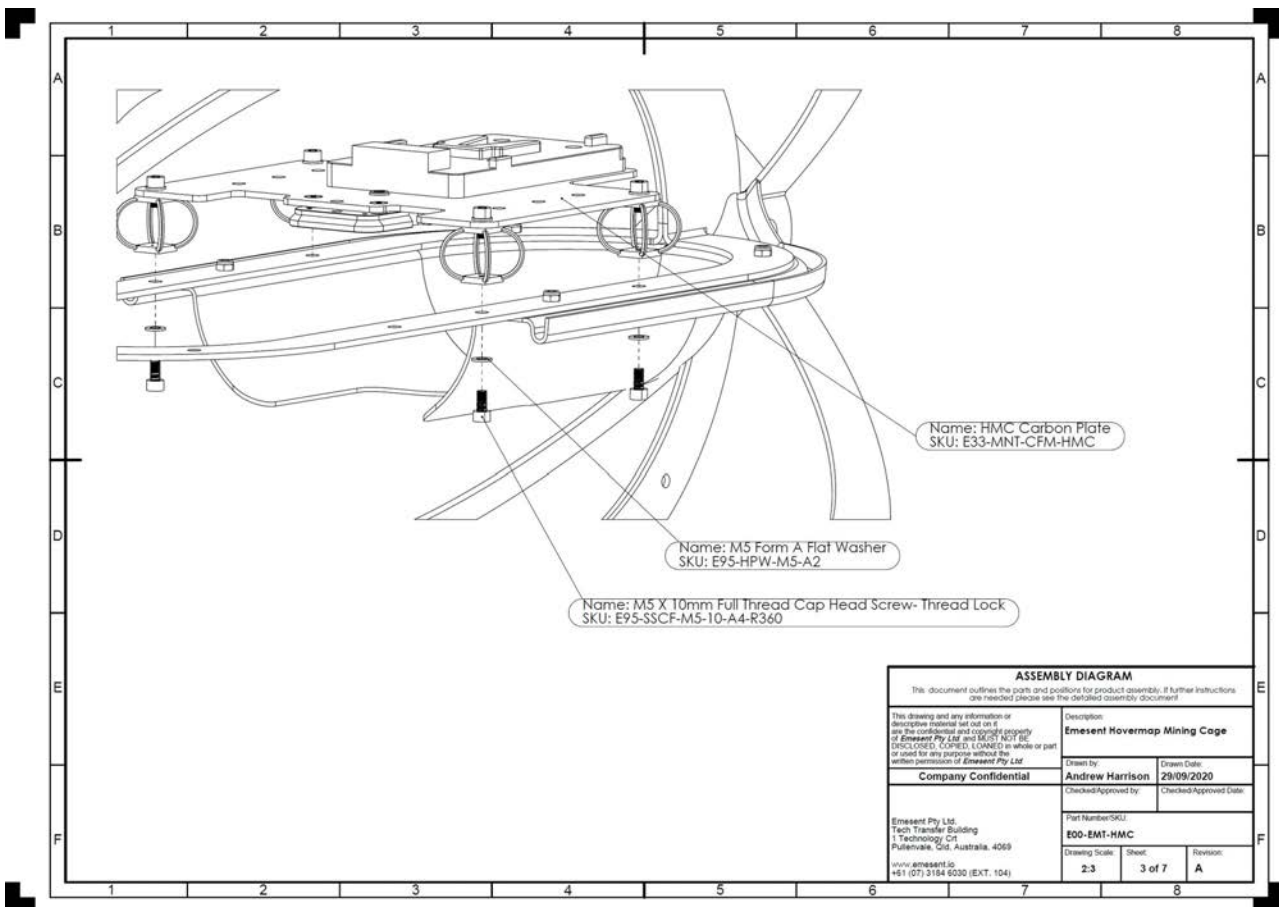




2.3 Attach the HMC carbon plate

Use the following parts and tools to screw the *HMC Carbon Plate (E33-MNT-CFM-HMC)* to the cage assembly:

- 4 mm hex driver
- *M5 x 10 mm Full Thread Cap Head Screws - Thread Lock (E95-SSCF-M5-10-A4-R360)*
- *M5 Form A Flat Washers (E95-HPW-M5-A2)*

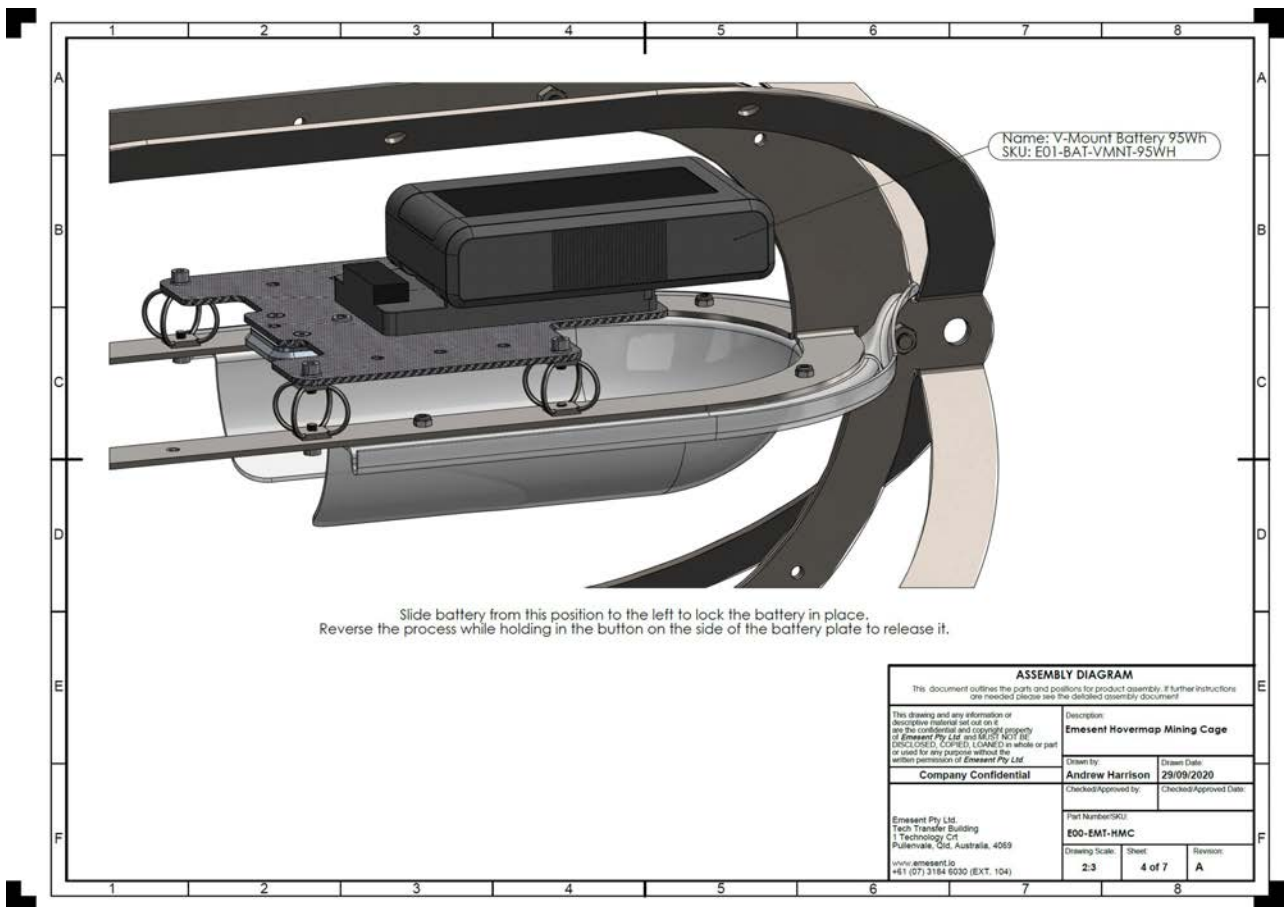




2.4 Attach the battery

Lock the *V-Mount Battery 95Wh (E01-BAT-VMNT-95WH)* in place by sliding the battery from the position shown to the left.

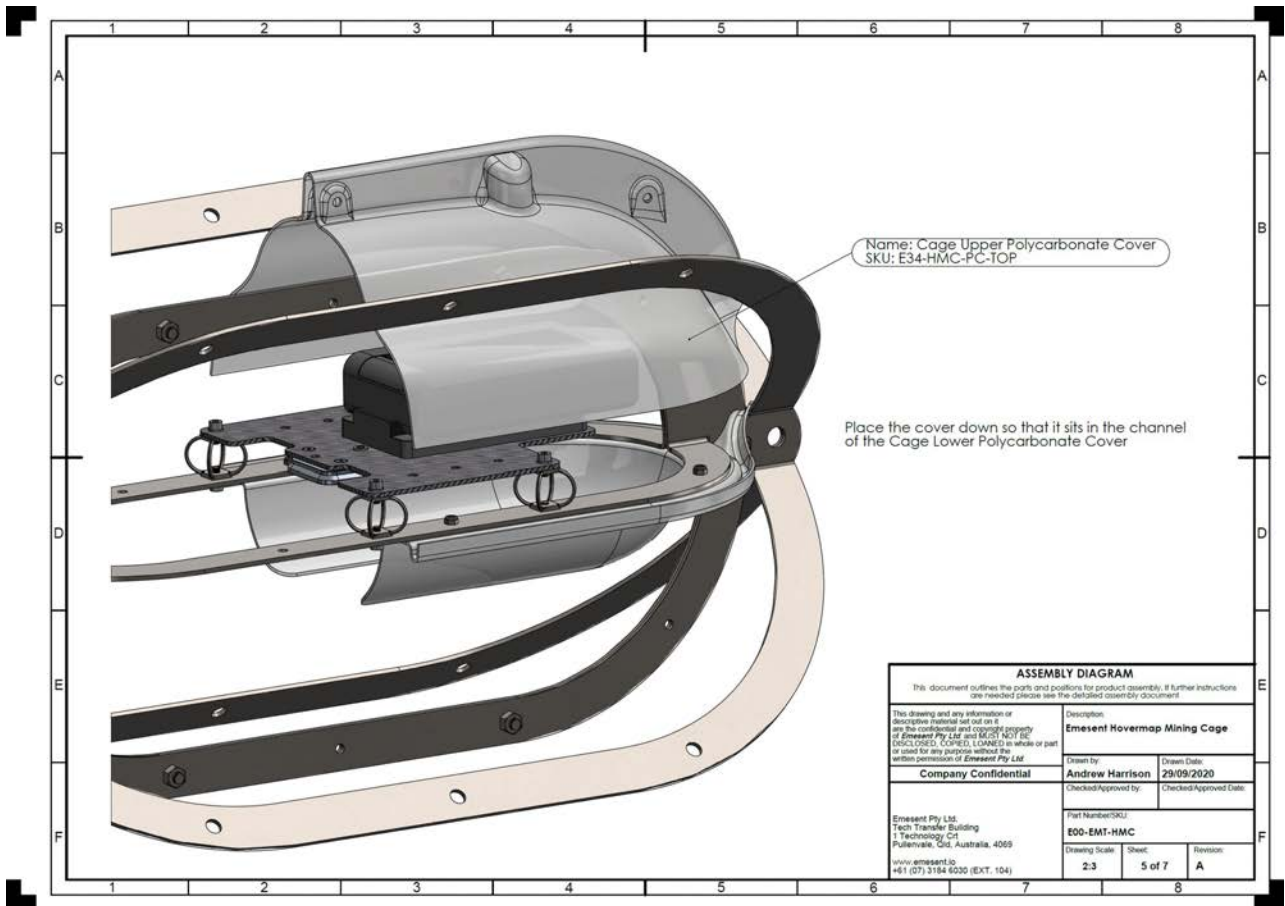
i To release the battery, hold in the button on the side of the battery plate.





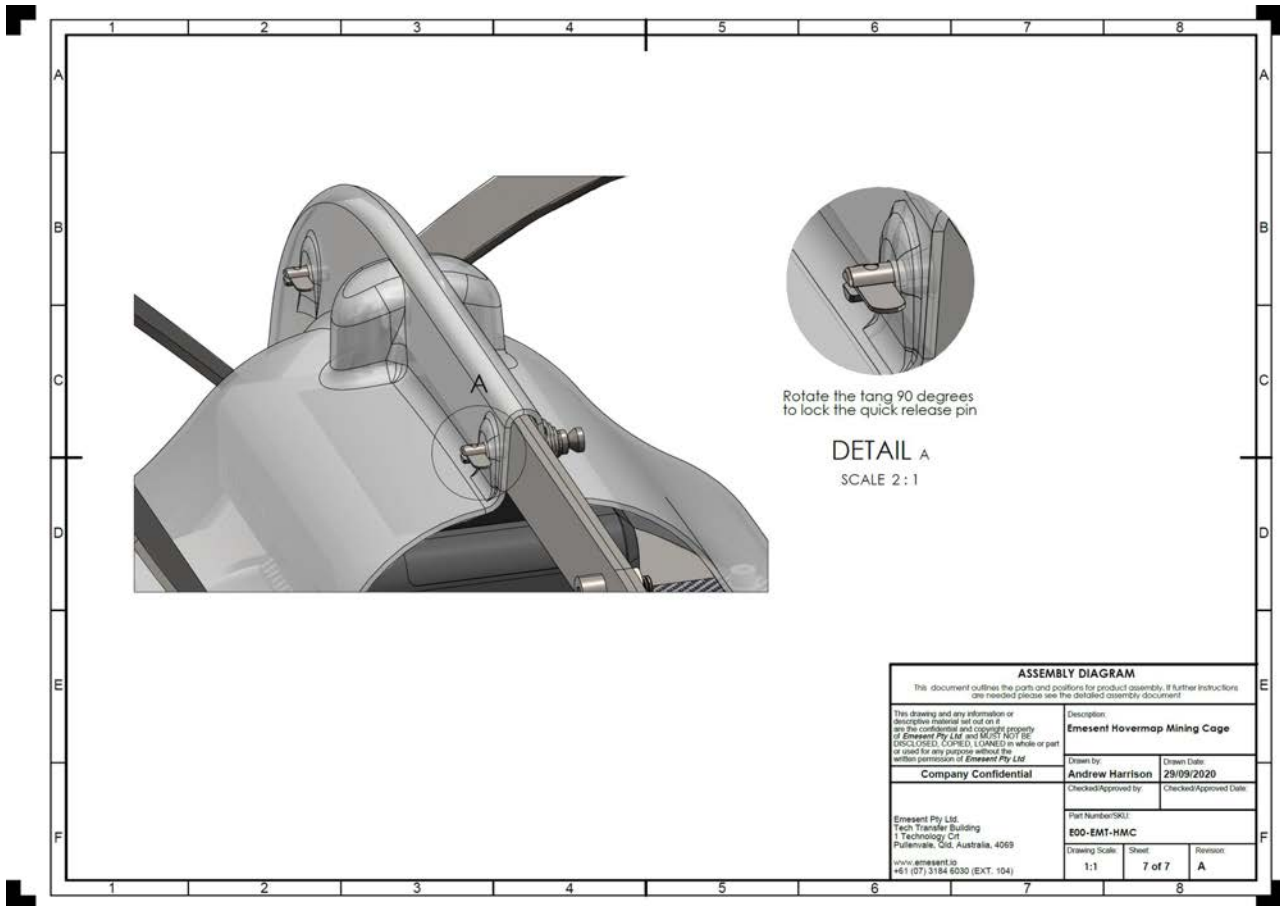
2.5 Attach the upper cover

Place the *Cage Upper Polycarbonate Cover (E34-HMC-PC-TOP)* down so that it sits in the channel of the lower polycarbonate cover.





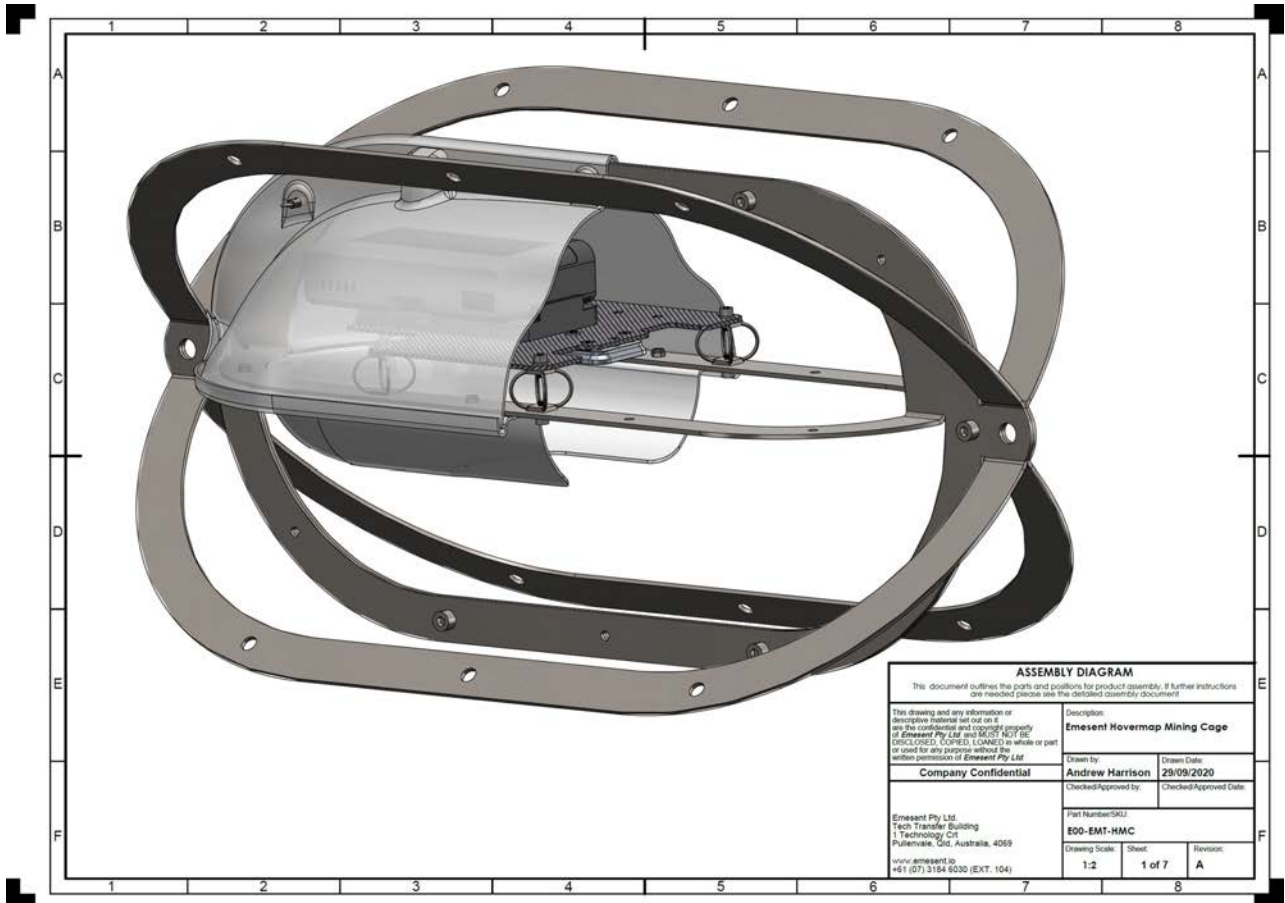
Rotate the tang 90 degrees to lock the quick release pin.





2.6 Assembled product

The final product should resemble the following image.

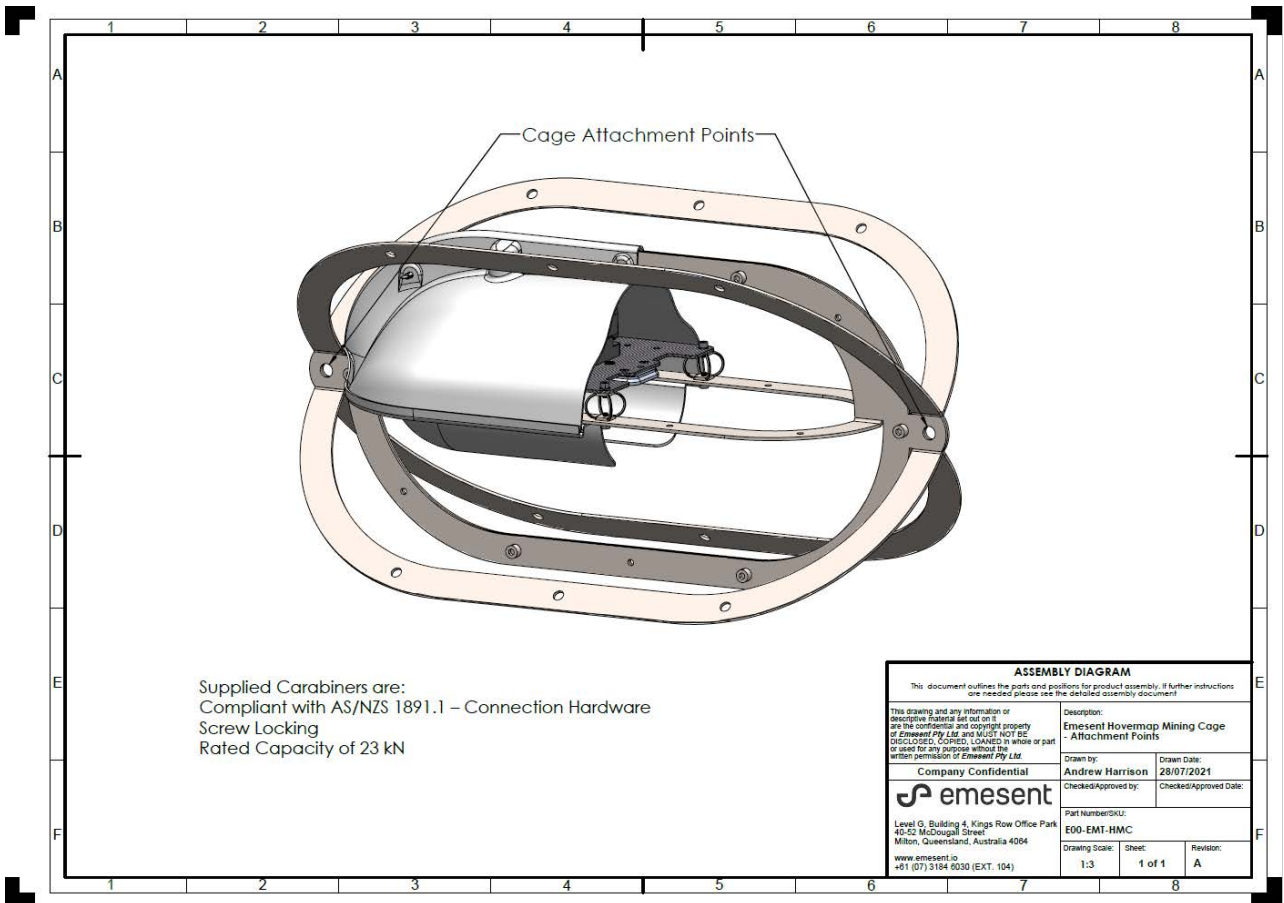




2.7 Attach the carabiner

Attach the carabiner at the point shown in the following image.

✔ **Tip**
 While you can attach the carabiner at either end, we recommend attaching it at the end with the polycarbonate cover. This is so that the Hovermap is pointing down the hole and is sheltered properly by the cover.





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