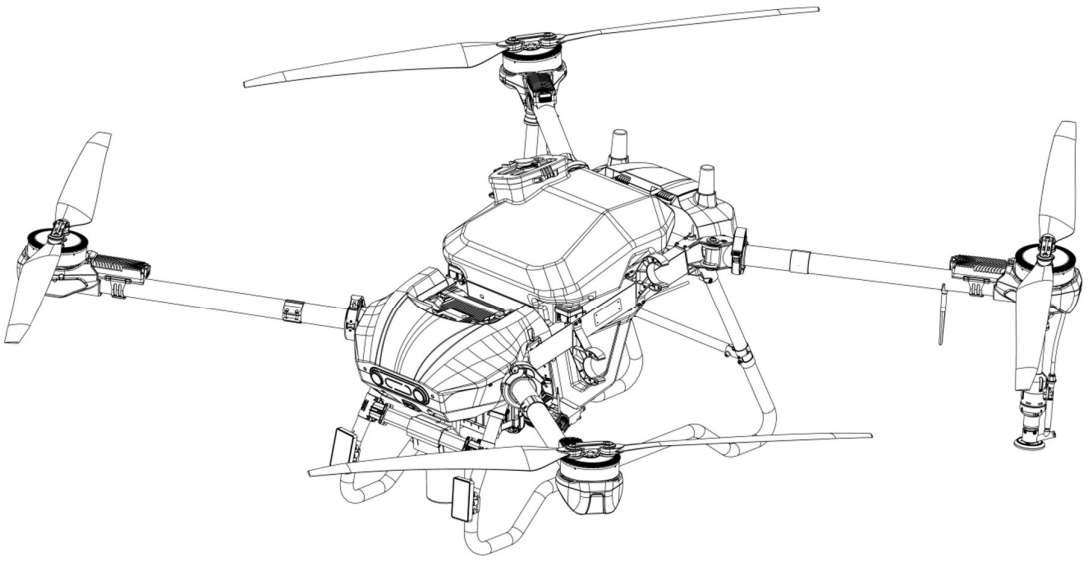
Agricultural Drone Instruction Manual

Airframe Module Assembly

Version 1



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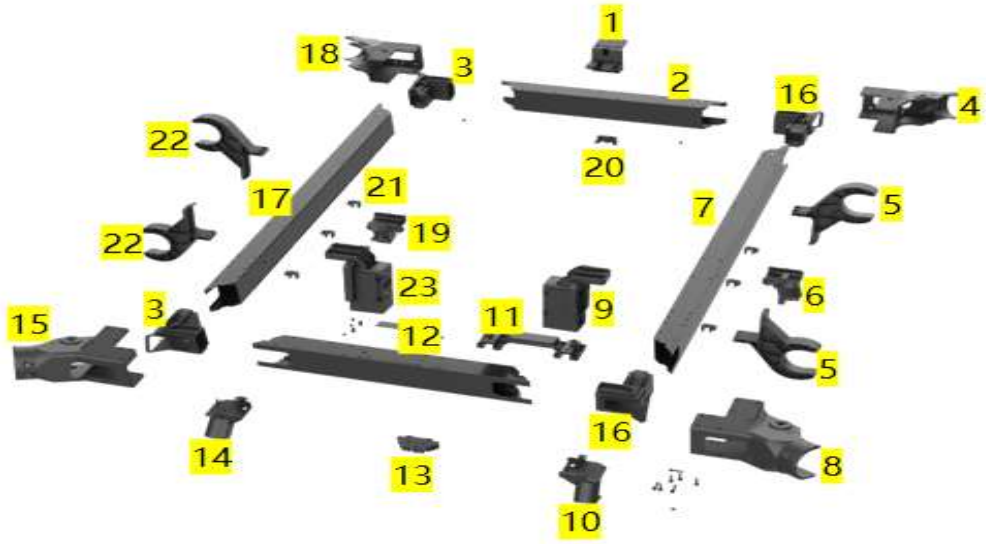
Airframe Module Assembly



Airframe Module Exploded View

Airframe Module Bill of Materials

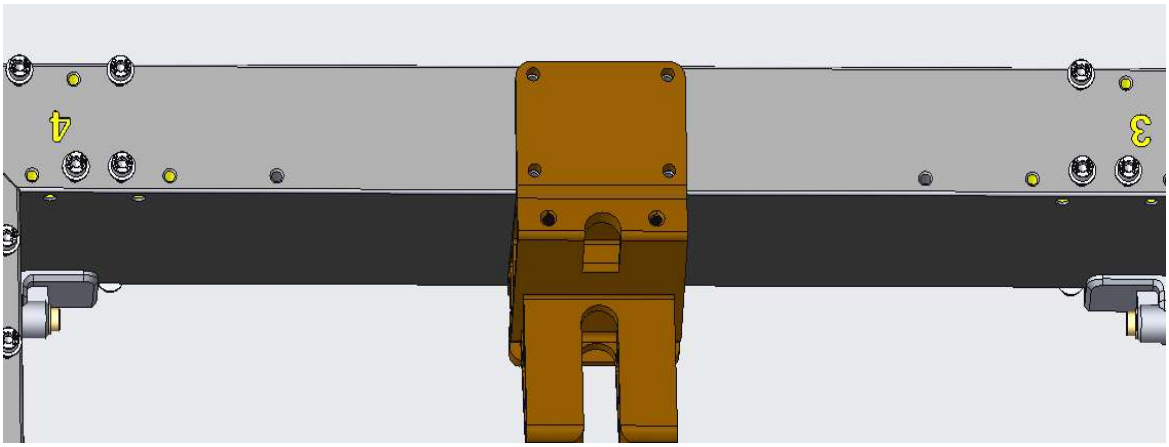
No.	Name	Number	Quantity per Unit
1	HD580 Rear Weighing Bracket	201-001845	1
2	HD580 Rear Main Beam	128-000755	1
3	HD580 Left Inner Liner for Airframe	201-001802	2
4	HD580 Inner Joint No. 3	201-001800	1
5	HD580 Right Tube Clamp B	201-002182	2
6	HD580 Landing Gear Connector No. 3	201-001808	1
7	HD580 Right Main Beam	128-000757	1
8	HD580 Inner Joint No. 2	201-001799	1
9	HD580 Right Battery Mount Assembly	201-001822	1

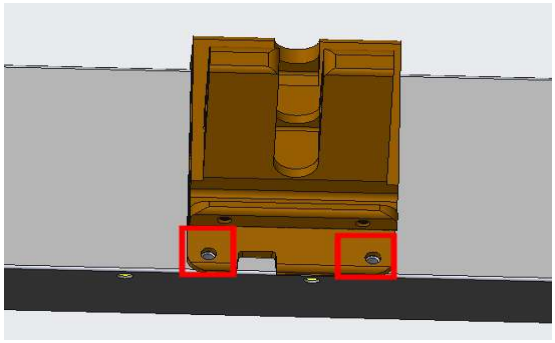
10	HD580 Landing Gear Connector No. 2	201-001807	1
11	HD580 Power Distribution Board Adapter Bracket	201-001823	1
12	HD580 Front Main Beam	128-000754	1
13	HD580 Silicone Cable Clip for Radar Spotlight	201-001824	1
14	HD580 Landing Gear Connector No. 1	201-001806	1
15	HD580 Inner Joint No. 1	201-001798	1
16	HD580 Right Inner Liner for Airframe	201-001803	2
17	HD580 Left Main Beam	128-000756	1
18	HD580 Inner Joint No. 4	201-001801	1
19	HD580 Landing Gear Connector No. 4	201-001809	1
20	HD580 Operation Bus Clamp Block	201-001880	1
21	HD540S D14 Tubing Clip	128-000626	8
22	HD580 Left Tube Clamp B	201-002181	2
23	HD580 Left Battery Mount Assembly	201-001821	1

1. Connection Between the Rear Weighing Bracket and the Rear Main Beam

First, insert the power sleeve fully into the carbon tube. Then, install the silicone wire-protection ring into the inner front end of the arm. Pass the ESC signal wire and power wire through the corresponding holes of the silicone ring, and route them out from the other side of the arm.

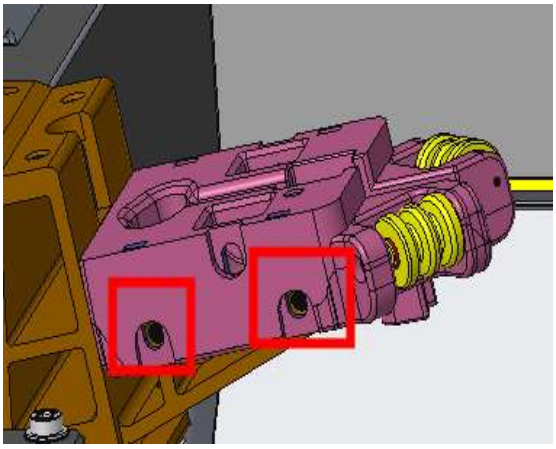
Fasten the weighing bracket to the center position of the rear main beam





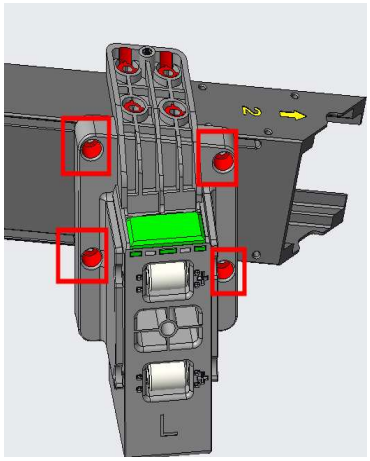
6 pcs M4*14 flange hex head screws
126-000749
Torque: 1.5±0.15NM

2. Connection Between the Rear of the Weighing Base and the Rear Weighing Bracket



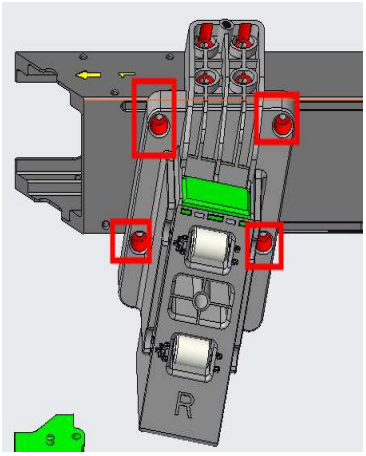
4 pcs (2 on each side)
M4*12 hex socket machine screw
126-000288
Torque: 1.5±0.15NM

3. Connection of the Left and Right Battery Mounts to the Left and Right Main Beams – Part 1



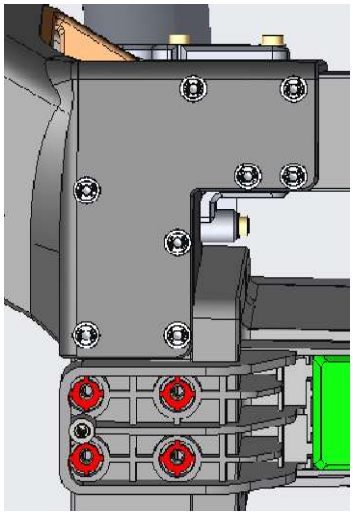
left main beam with
L-shaped battery mount

4 pcs M4*14 flange hex screws on each side (left and right)
126-000749
Torque: 1.5±0.15NM

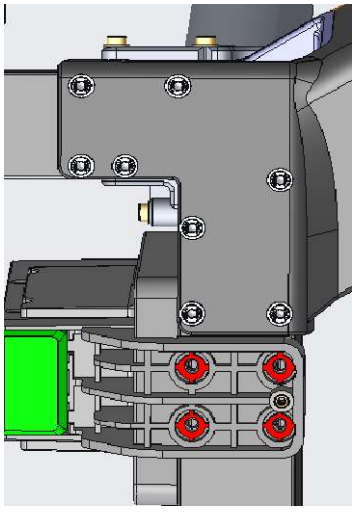


right main beam with
R-shaped battery mount

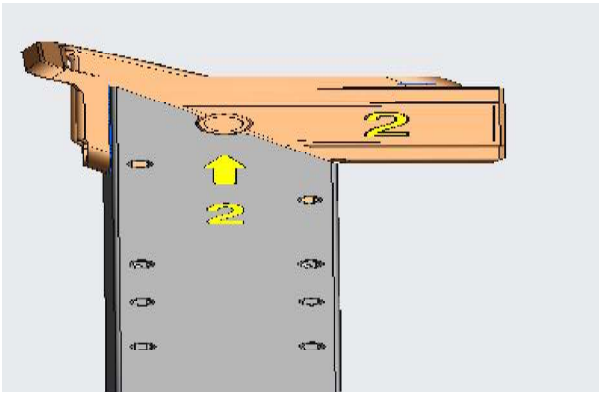
4. Connection of the Left and Right Battery Mounts to the Left and Right Main Beams – Part 2

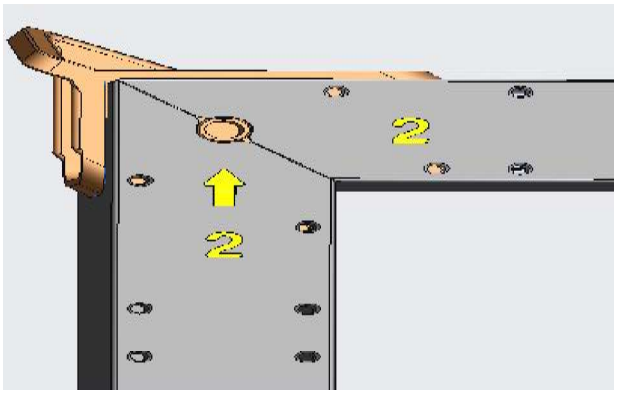


4 pcs M4*14 flange hex screws on each side (left and right)
126-000749
Torque: 1.5±0.15NM

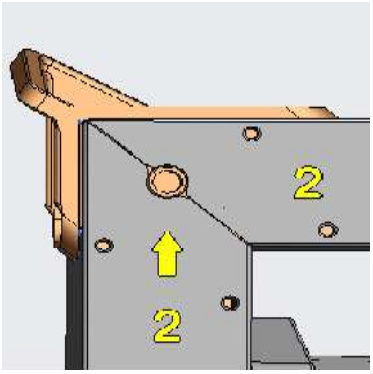


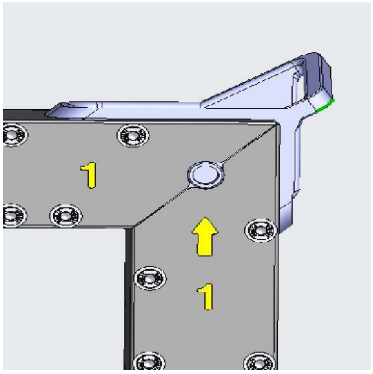
5. Connection Between Inner Liner and Main Beam

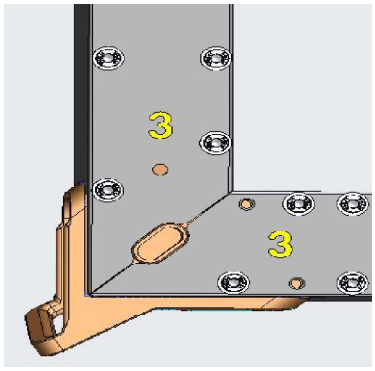


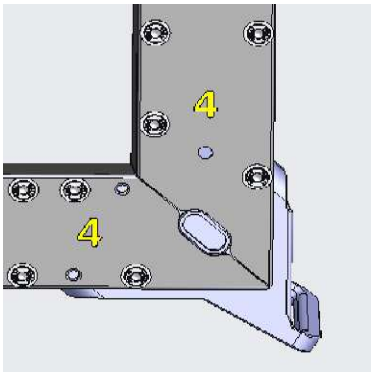


Insert the left and right inner liners into the main beam according to the correct corresponding numbers, orientations, and positions.



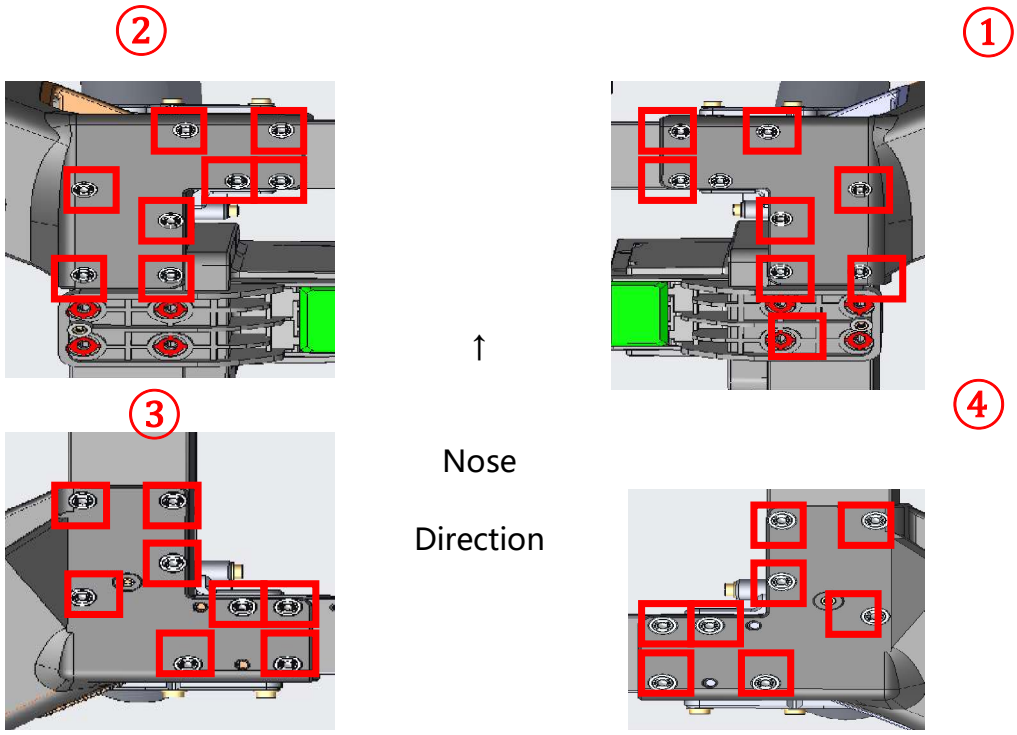






Inner Liner to Main Beam Connection Diagram

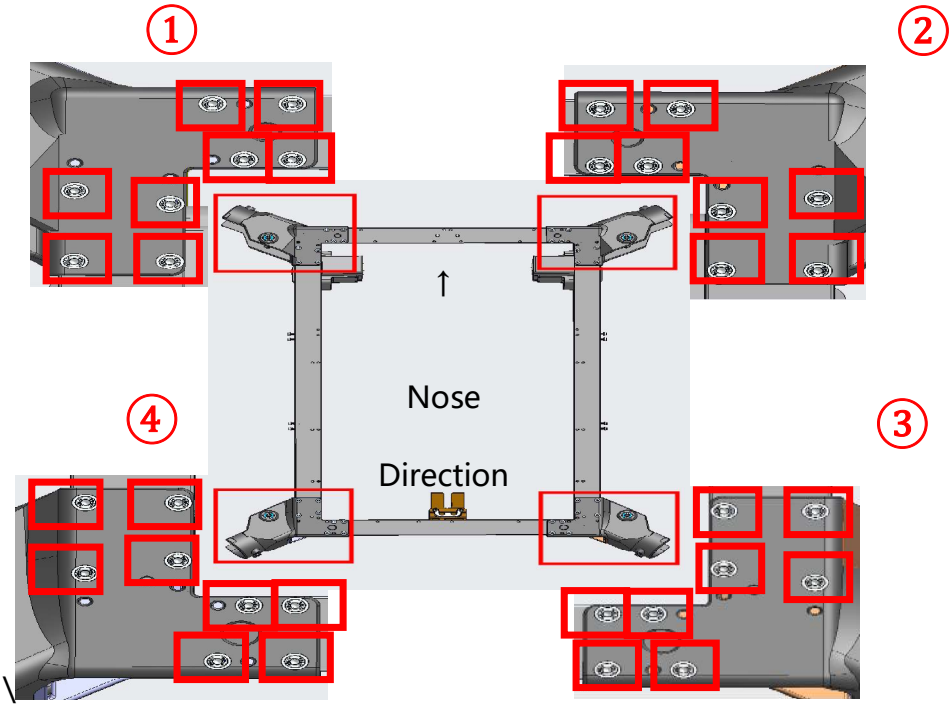
6. Inner Joint to Main Beam Connection – 1



8 pcs M4*14 flange hex screws on top of each of the four inner joints 126-000749

Torque: 1.5±0.15NM

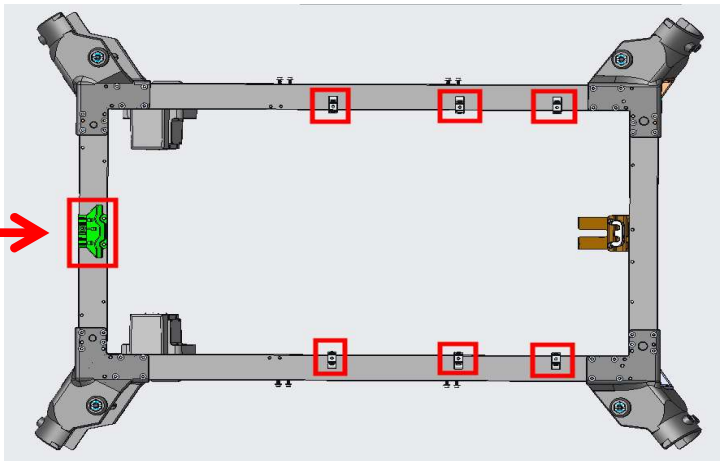
Inner Joint to Main Beam Connection – 2



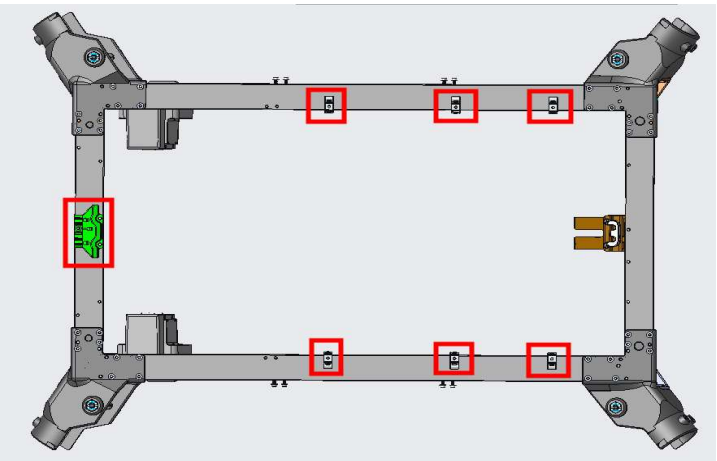
Flip the airframe over, with the bottom facing upward

7. Connection Between Radar Spotlight Silicone Cable Clip and Front Main Beam

3 pcs 5*5+M4*8 stainless steel press-in screws
126-000754
Torque: 1.0±0.1NM

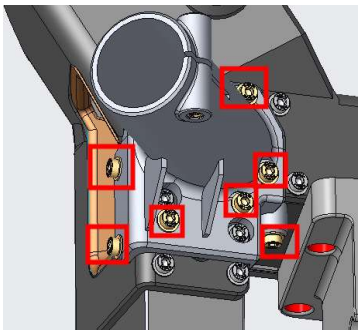


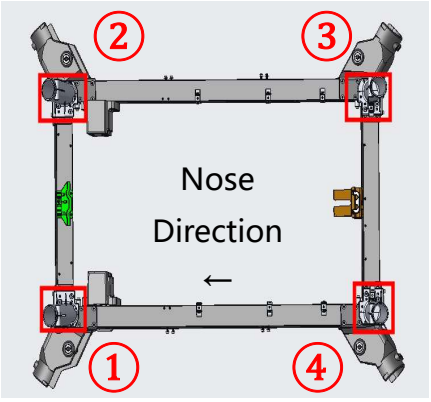
8. Connection Between the D14 Tubing Clip and the Main Beam

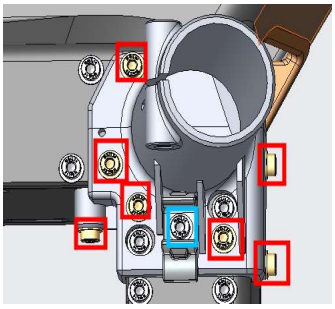


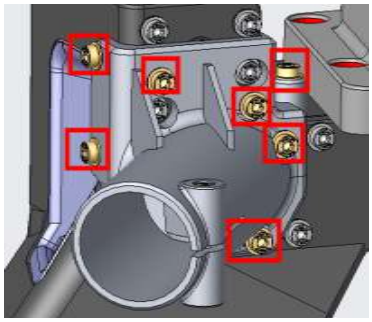
6 pcs M4*14 flange hex head screws 126-000749
Torque: 1.0±0.1NM

9. Connection Between the Airframe Landing Gear Connector and the Airframe

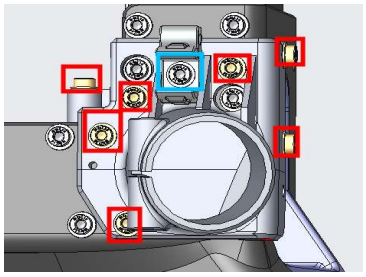




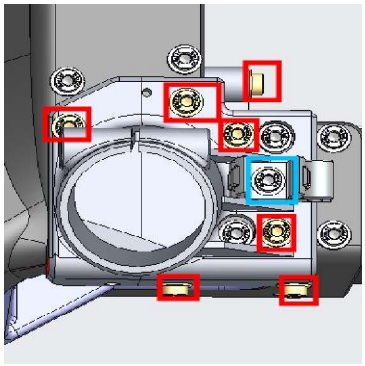




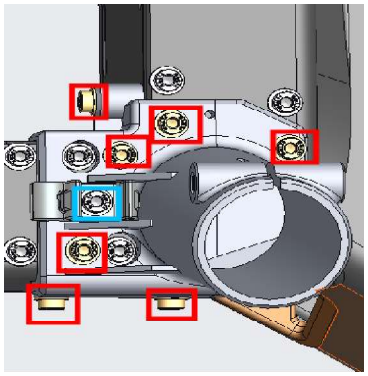
Each of the four airframe landing gear connectors uses 7 pcs of M4*20 flange hex screws.
126-000750
Torque: 1.5±0.15NM



10. Connection Between the D14 Tubing Clip and the Airframe Landing Gear Connector



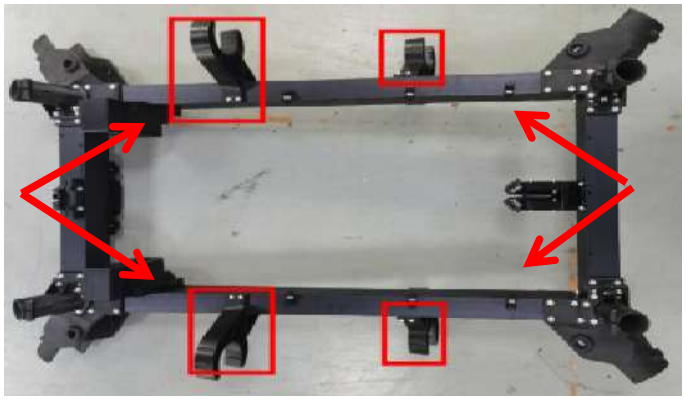
Use one M4*14 flange hex screw for each
126-000749
Torque: 1.0±0.1NM



11. Connection Between Carbon Tube Clamp and Airframe

Left Tube Clamp Total: 12 pcs

2 screws each on the bottom and sides

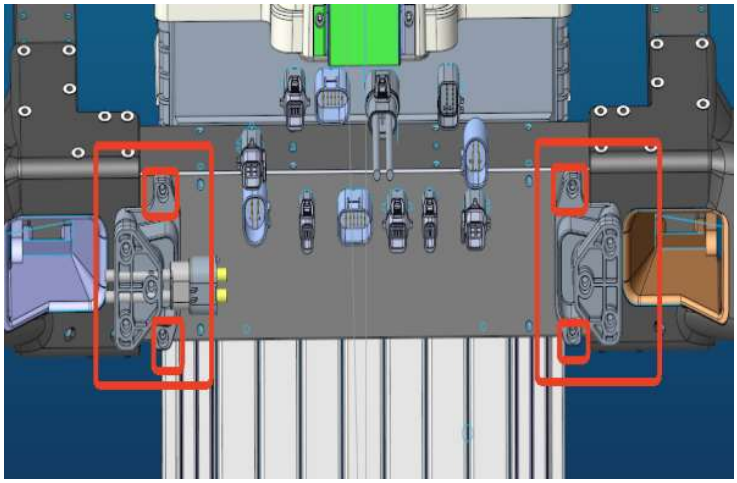


2 screws on each side

M4*14 flange hex screws
126-000749
Torque: 1.5±0.15NM

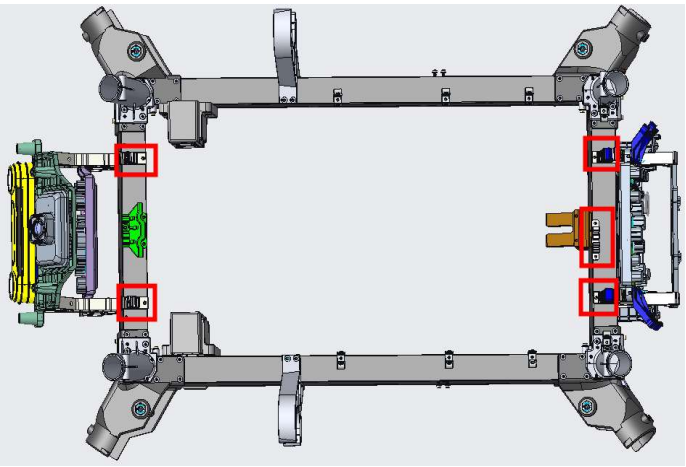
Right Tube Clamp

12. Connection Between Cable Clamp Base and Airframe



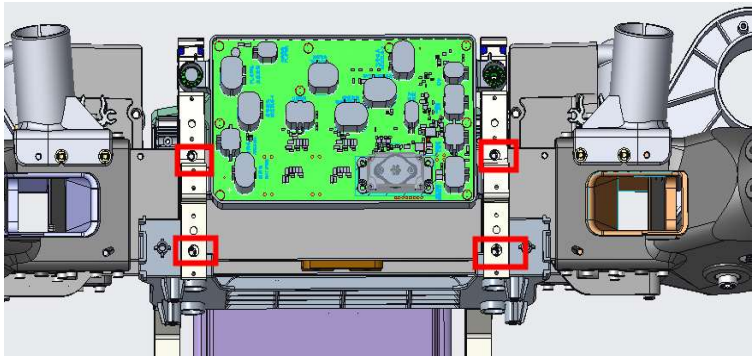
Total: 8 pcs M4*16 hex socket machine screws (front & rear) 126-000289
Torque: 1.5±0.15NM

13. Connection Between Front and Rear Bracket Modules and the Airframe



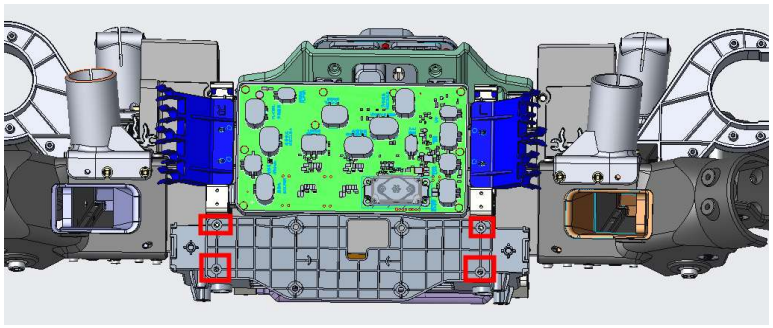
Use 4 pcs of M4*14 flange hex screws at the front and 4 pcs at the rear
126-000749
Torque: 1.5±0.15NM

14. Connection Between Rear Bracket Module and Airframe



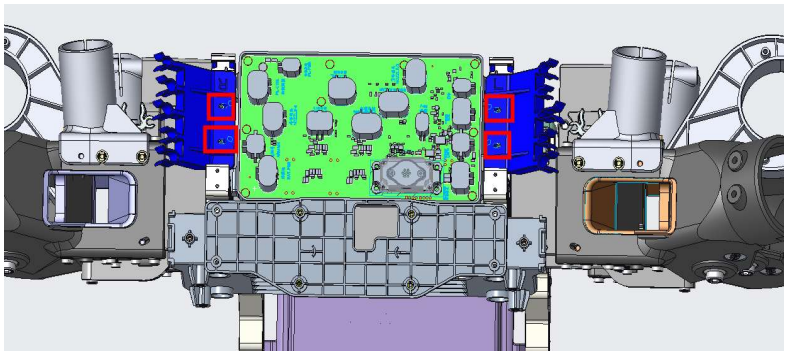
4 pcs M4*14 flange hex head screws
126-000749
Torque: 1.5±0.15NM

15. Connection Between Rear Radar Module and Rear Aluminum Extrusion Bracket



4 pcs M4*12 hex socket machine screws
126-000288
Torque: 1.0±0.1NM

16. Connection Between Rear Cable Clamp and Rear Aluminum Extrusion Bracket

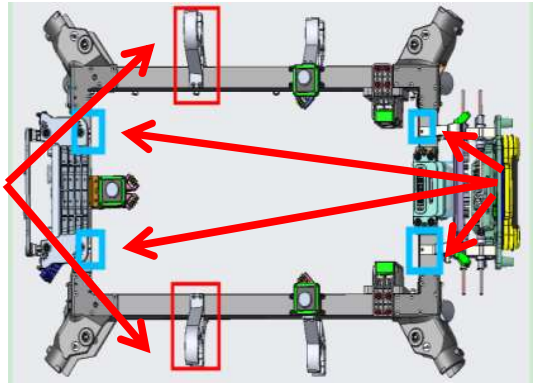


4 pcs M3*10 hex socket screws with Ø8 mm washers
126-000322
Torque: 1.0±0.1NM

17. Front Screw Installation

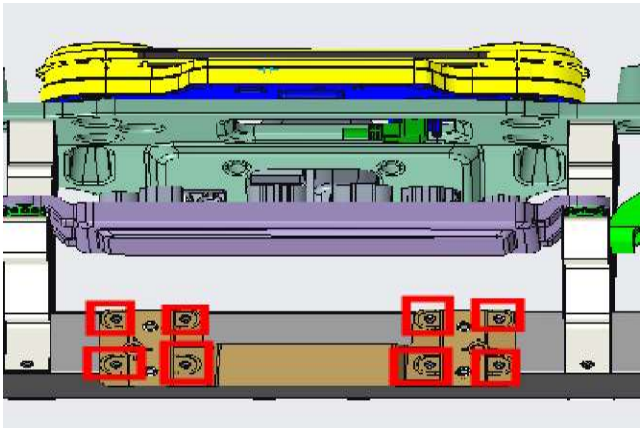
Flip the airframe with the front side facing upward.

4 pcs M4*14 flange hex head screws
126-000749
Torque: 1.5±0.15NM



4 pcs M4*14 flange hex head screws
126-000749
Torque: 1.5±0.15NM

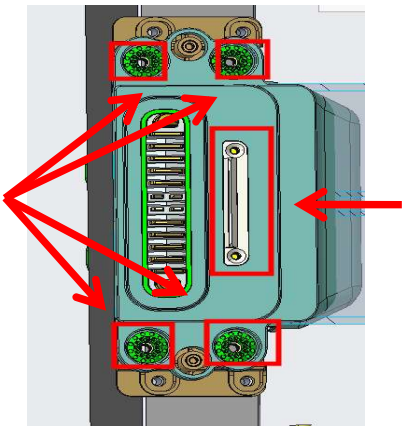
18. Connection Between Power Distribution Board Adapter Bracket and Front Main Beam



8 pcs M4*10 hex socket machine screws
126-000287
Torque: 1.5±0.15NM

19. Installation of Power Distribution Board and Battery Mount

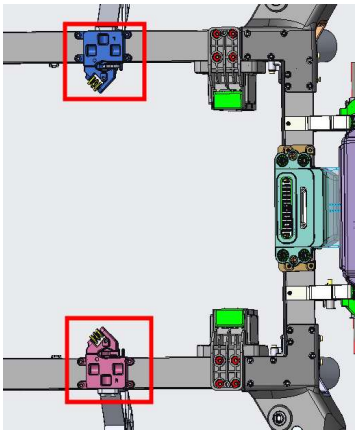
4 pcs 5*12+M4*8 stianless steel press-in screws
4 pcs M6*12*1Stainless Steel Washer 126-000756
126-000296
Torque: 1.5±0.15NM



2 pcs M3*8 phillips countersunk screws
126-000633
Torque: 0.8±0.08NM

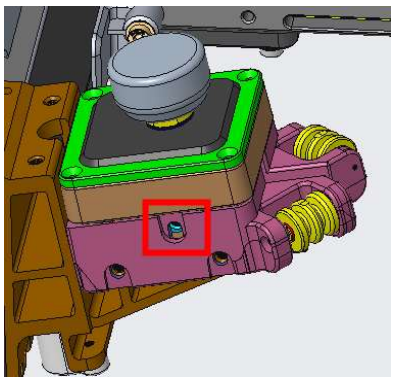
20. Connection Between Weighing Base and Main Beam

Right weighing base: 4pcs M4*12 hex socket machine screws
126-000288
Torque: 1.5±0.15NM

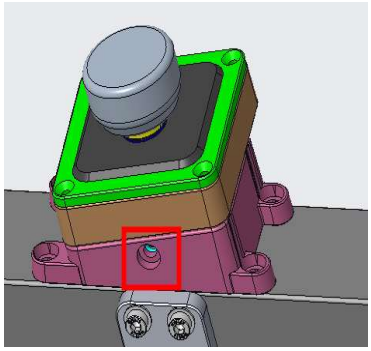


Left weighing base: 4pcs M4*12 hex socket machine screws
126-000288
Torque: 1.5±0.15NM

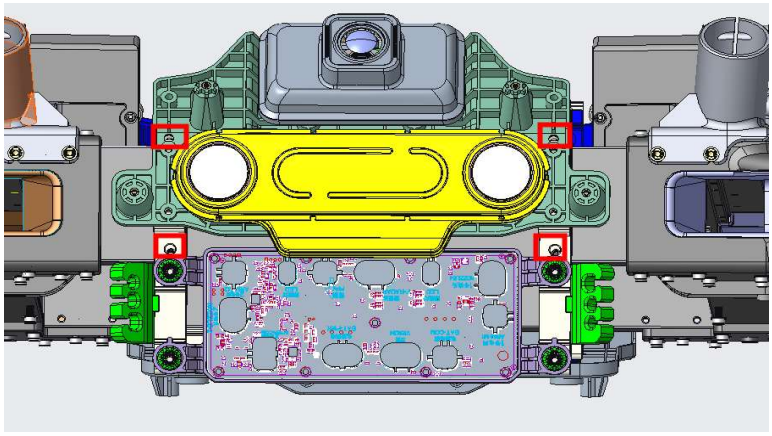
21. Connection Between Weighing Sensor and Weighing Base



Use 2 pcs of M4*12 hex socket machine screws each at the rear, left, and right of the weighing sensor126-000288
Torque: 1.5±0.15NM



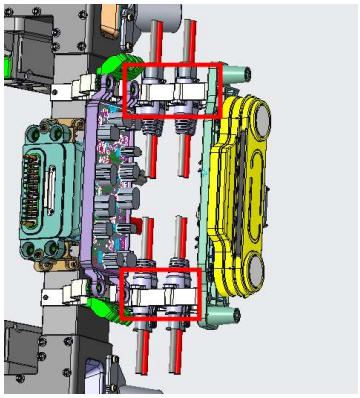
22. Connection Between Front Bracket Module and Airframe



4 pcs M4*14 flange hex head screws
126-000749
Torque: 1.5±0.15NM

23. Power Distribution Board Wiring Harness Securing

A total of 5 wiring harnesses from the power distribution board are inserted into the front bracket port at the designated positions



A total of 10 pcs of M3*10 hex socket screws with Ø6 mm washers are used.
Torque: 0.6±0.06NM