Payload Adapter Installation Guide for the DJI M300

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PAYLOAD ADAPTER INSTALLATION ITEMS

Item number	Part Name	Article Number	Quantity
1	M300 leg plate	PLT1001066A00T	2
2	M300 PLI Carbon Fiber Mounting Plate	ASY1001063A00N	1
3	Loctite Threadlocker Blue 243	MIS1000254A00N	1
4	Antenna mast assembly	ASY1000343A00T	1
5	AV18 antenna	ANT1000705A00T	1
6	Antenna mast plus base	ASY1000347A00T	1
7	M3x6 mm button head screws	AA004803	2
8	M3x12mm button head screws	HDW1000679A00N	4
9	M3x14 mm socket head screws	HDW1000291A00N	8
10	M300 IR cover	ENC1000985A01T	1
11	M300 IR tab	ENC1000984A01T	1
12	M300 Coax adapter – top	ENC1001046A00T	1
13	M300 Coax adapter - bottom	ENC1001046A00T	2
14	M3 washer	HDW1000162A00N	2
15	M2,5x6 Button Head Hex Screw	A004506	2

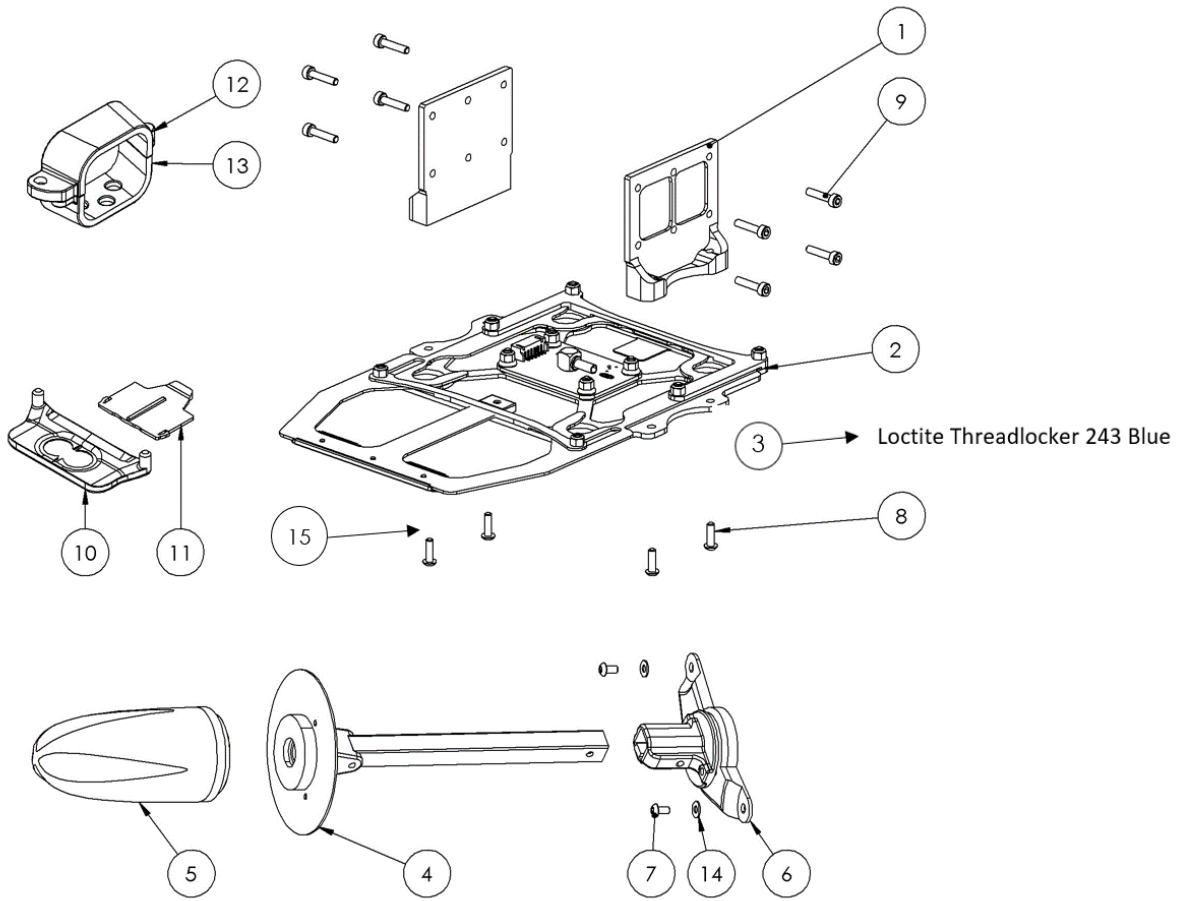**Table 1. List of payload adapter installation items.**

Loctite Threadlocker 243 Blue

Figure 1. Payload adapter installation items.

DJI M300/DJI M350 CARRIER CASE FOAM MODIFICATION

M300 Carrier Case Top Foam Modification

The following steps summarize how to modify the top foam of the DJI M300 carrier case:

1. Using a ruler and marker, trace a 180mm x 210mm rectangle starting from the top right corner of the center foam for the DJI m300 drone leg pockets as shown in **Figure 2**.

2. Using a box cutter, carefully remove the marked foam from step 1 down by a depth of 15mm. Make sure to wear proper Personal Protective Equipment (PPE), (cut resistant gloves, safety glasses) before performing this step to minimize chances of injury.
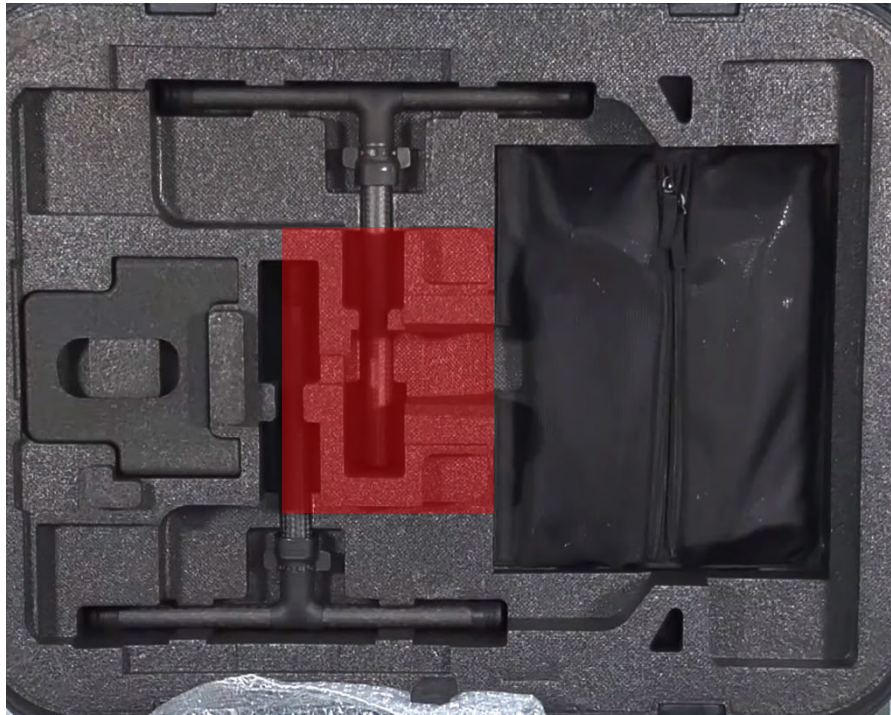

Figure 2. DJI M300 top foam with modification area highlighted.

Figure 3. DJI M300 top foam with successful modification.

M300 Carrier Case Bottom Foam Modification

The following steps summarize how to properly modify the bottom foam of the DJI M300 carrier case:

1. Using a ruler and marker, trace a 17mm x 26mm rectangle starting approximately from the midpoint along the right edge of the M300's main body pocket (i.e., deepest pocket) as shown highlighted by the number 1 in **Figure 4**.

2. Using a ruler and marker, trace a 21mm x 58mm rectangle starting approximately 15mm from the right edge of the M300's main body pocket (i.e., deepest pocket) as shown highlighted by the number 2 in **Figure 4**.

3. Using a box cutter, carefully remove the marked foam from steps 1 and 2 to a depth of 26mm. There should be no remaining foam if done correctly as shown in **Figure 5**. Make sure to wear proper PPE (cut resistant gloves, safety glasses) before performing this step to minimize chances of injury.

4. Using a box cutter, remove the top right foam bumper of the main body's pocket highlighted by the number 3 in **Figure 4**.
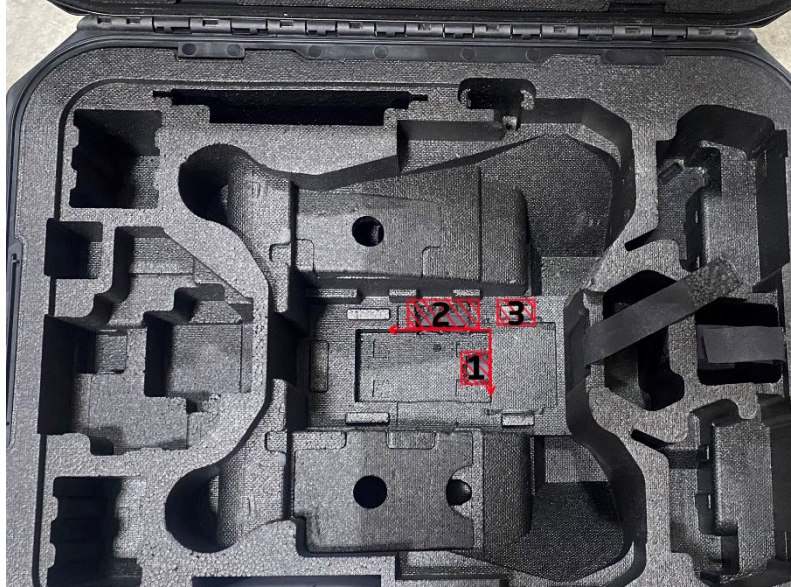
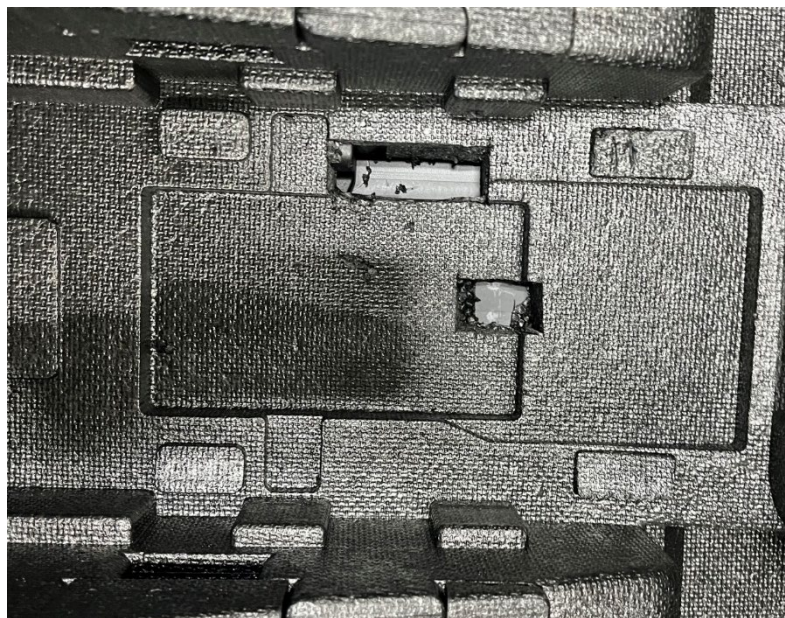Figure 4. DJI M300 bottom foam modification area highlighted.

Figure 5. DJI M300 bottom foam with successful modification.

M350 Carrier Case Top Foam Modification

The following steps summarize how to modify the top foam of the DJI M350 carrier case:

1. Using a ruler and marker, trace a 180mm x 210mm rectangle starting from the top left corner of the center foam for the DJI m350 drone leg pockets as shown in **Figure 2**.

2. Using a box cutter, carefully remove the marked foam from step 1 down by a depth of 15mm. Make sure to wear proper PPE (cut resistant gloves, safety glasses) before performing this step to minimize chances of injury.
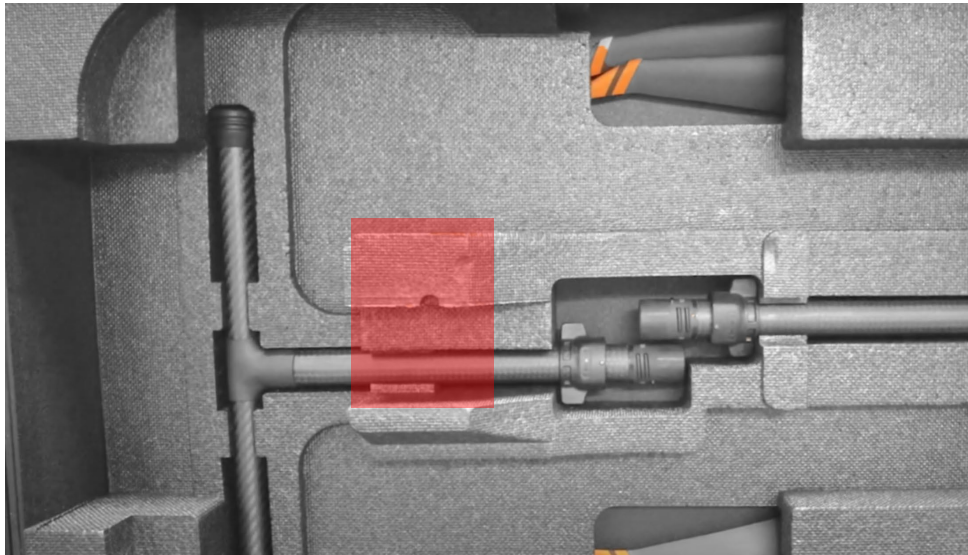

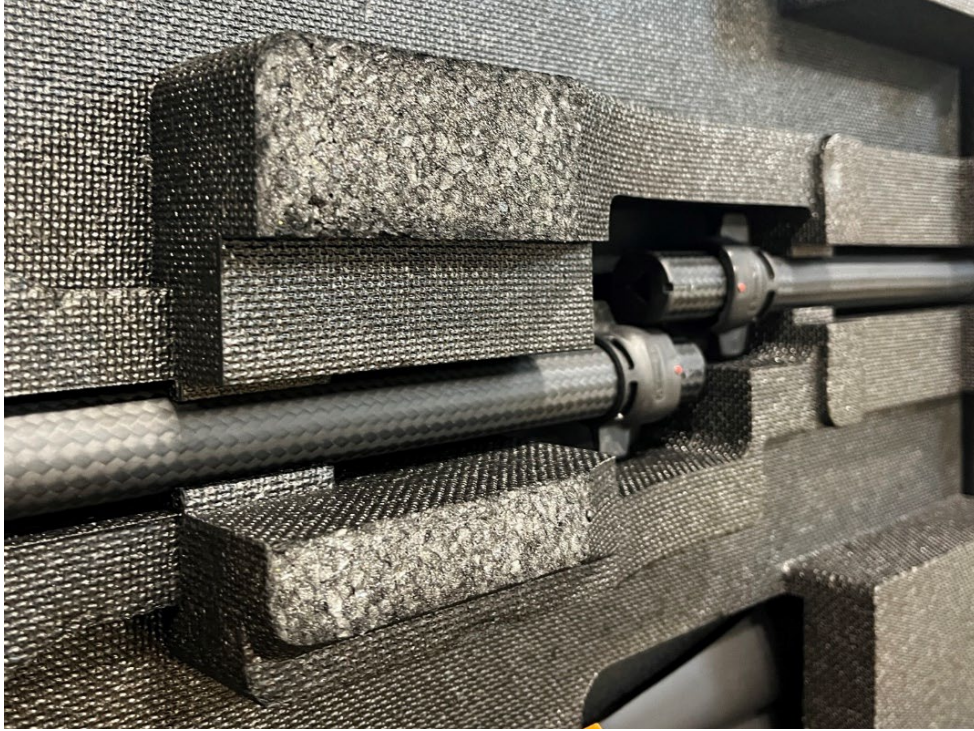**Figure 6. DJI M350 top foam with modification area highlighted.**

Figure 7. DJI M350 top foam with successful modification.

M350 Carrier Case Bottom Foam Modification

The following steps summarize how to properly modify the bottom foam of the DJI M350 carrier case:

1. Using a ruler and marker, trace a 17mm x 26mm rectangle starting from the midpoint along the left edge of the M300's main body pocket (i.e., deepest pocket) as highlighted by the number 1 in **Figure 8**.

2. Using a ruler and marker, trace a 21mm x 58mm rectangle starting approximately 15mm from the left edge and along the bottom edge of the M300's main body pocket (i.e., deepest pocket) as highlighted by the number 2 in **Figure 8**.

3. Using a box cutter, carefully remove the marked foam from steps 1 and 2 to a depth of 26mm. There should be no remaining foam if done correctly as shown in **Figure 9**. Make sure to wear proper PPE (cut resistant gloves, safety glasses) before performing this step to minimize chances of injury.

4. Using a box cutter, remove the top right foam bumper of the main body's pocket highlighted by the number 3 in **Figure 8**.

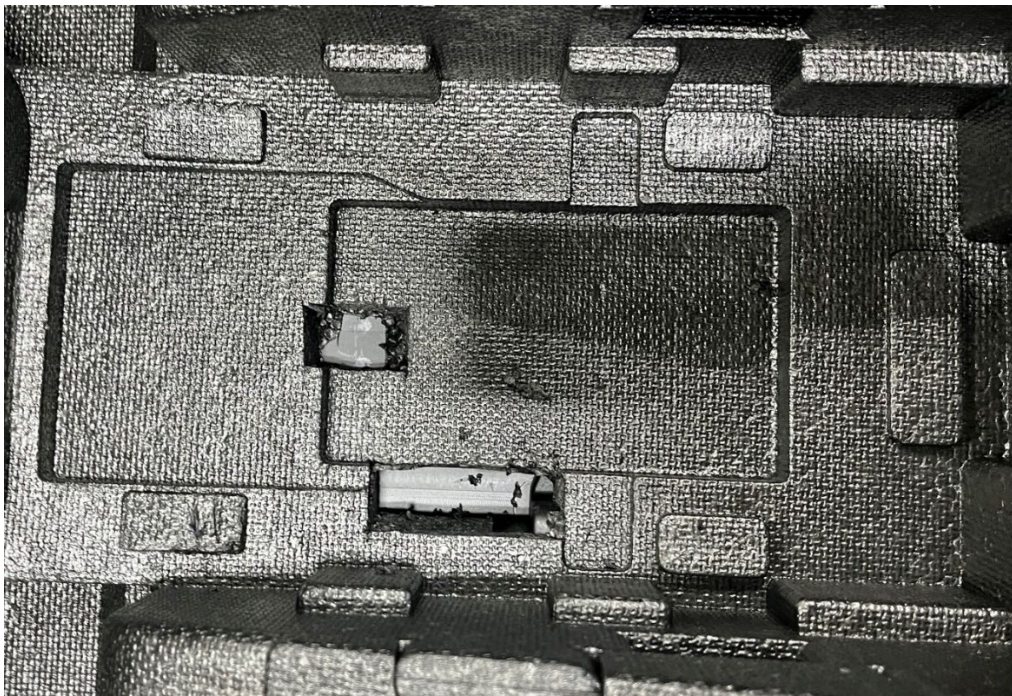Figure 8. DJI M350 bottom foam with modification area highlighted.

Figure 9. DJI M350 bottom foam with successful modification.

DJI M300 THIRD PARTY INTEGRATION

DJI M300 Third Party Integration: Payload Adapter

The following steps summarize how to integrate the drone side payload interface:

1. Remove the four (4) M3x10mm screws (retain these screws for future use) holding the leg of the DJI M300 drone.
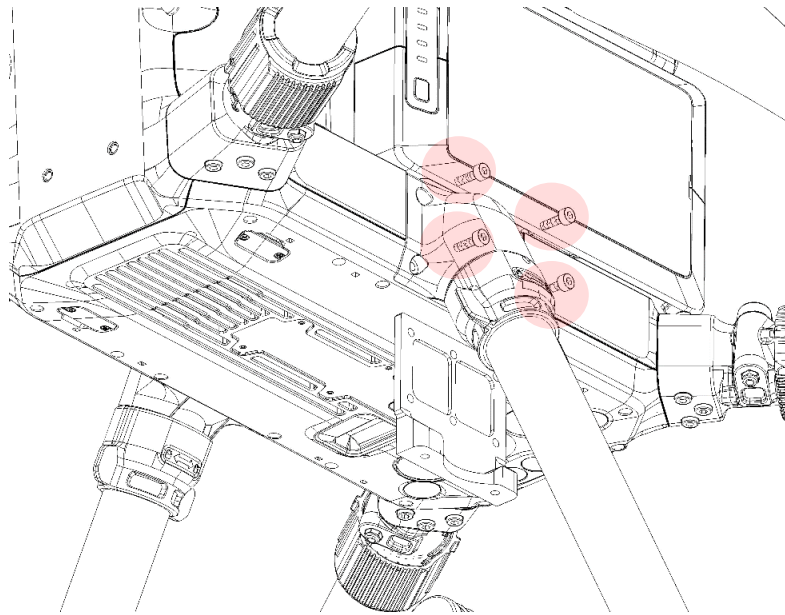

Figure 10. Remove the four screws holding the leg of the DJI M300 drone.

2. Insert the M300 aluminium leg plate between the leg and the body of the drone.
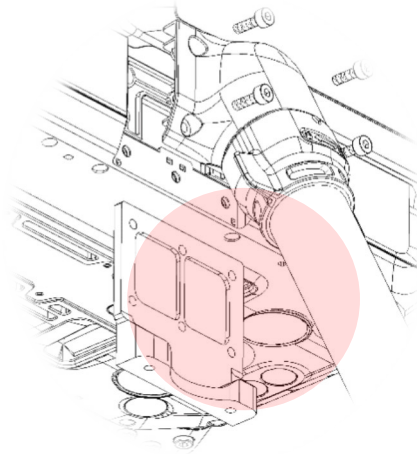

Figure 11. Insert the M300 aluminum leg plate here.

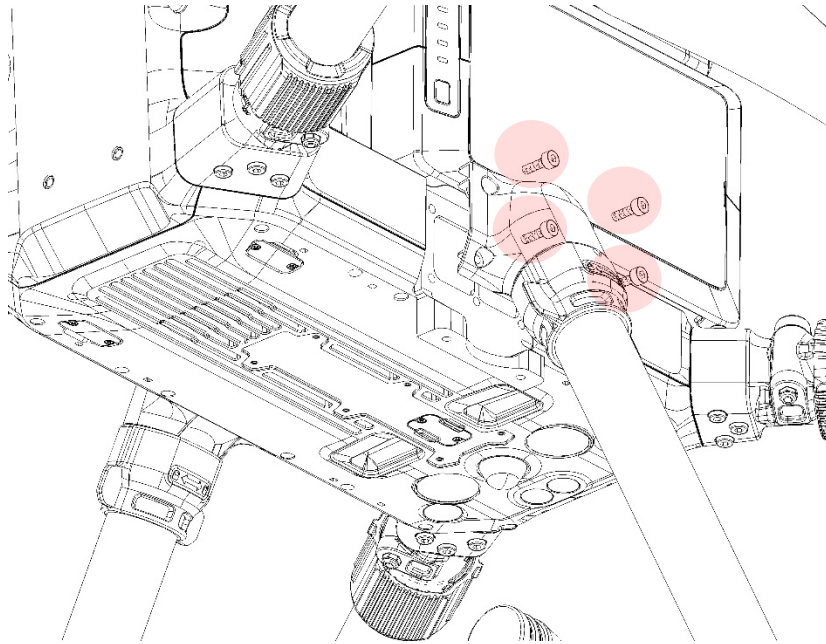3. Screw in the four (4) **new** M3x14 mm socket head screws (supplied) to secure the leg into place.

Figure 12.Screw in the four new M3x14 mm screws.

4. Repeat Step 1 through Step 3 on the other side of the drone.

5. From the bottom side of the drone, attach the main plate assembly to the M300 leg plate fixation points using four (4) **new** M3x12mm screws (supplied).

6. Be cautious of the orientation of the main plate and make sure the coordinate symbol arrow points towards to the front of the drone.
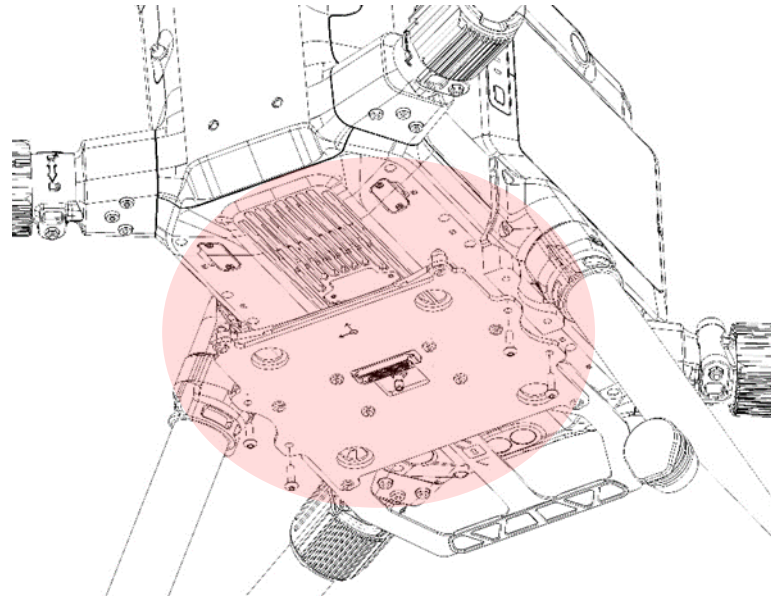
Figure 13. Attach the main plate assembly to the M300 leg plate fixation points.

NOTE

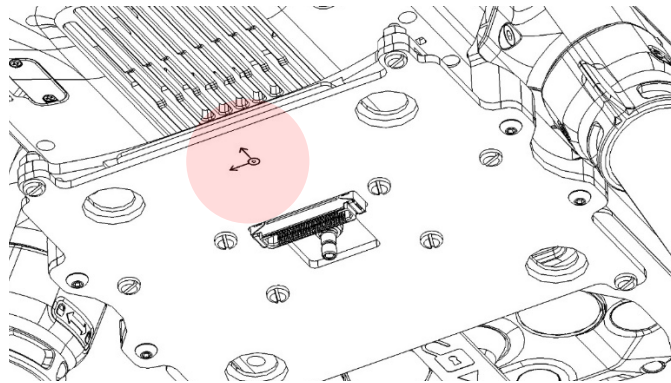The coordinate symbol arrow points towards the front of the drone.

Figure 14. Coordinate symbol arrow pointing to the front of the drone.

DJI M300 Third Party Integration: AV18 Antenna Mast Installation

1. Insert a square piece of double-sided adhesive tape to the bottom of the ASY1000347A00T (Antenna Mast plus base). Make sure both sides of the adhesive have been peeled to allow for proper joint cohesion.

2. Secure the Antenna Mast plus base (ASY1000347A00T) to the top of the DJI M300 drone using two M3x6 18-8 stainless steel button head hex drive screws and two M3 washers.

3. Attach the Antenna Mast Assembly (ASY1000343A00T) provided inside the payload carrier case to the Antenna Mast plus base (ASY1000347A00T) . Press the antenna mast down until the spring pin locks into the Antenna Mast.
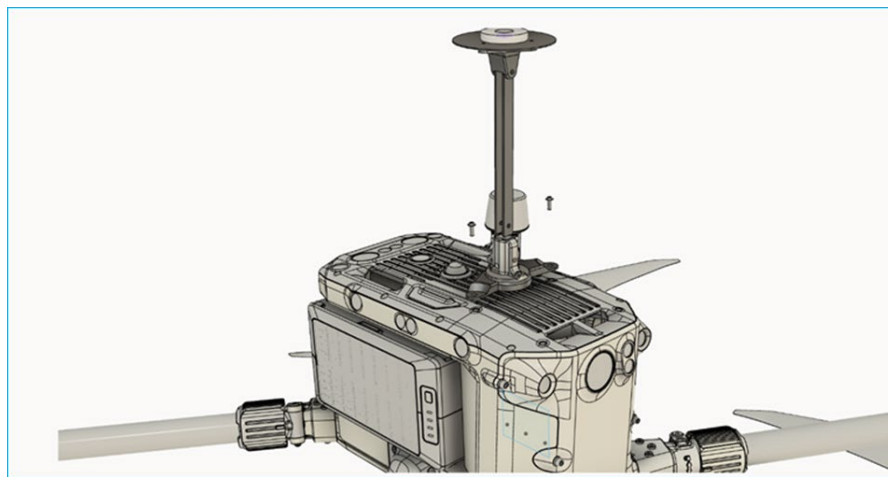

Figure 15. Antenna mast installation.

DJI M300 Third Party Integration: Cable Management

1. Install the M300 GNSS cable adapter (COA01 & COA02, ENC1001046A00T) to the front starboard motor arm using two M2.5x6mm 18-8 stainless steel socket head hex drive screws. See **Figure 16** below.

2. Pass all cabling (coaxial cable to antenna and power cable for payload) along the starboard side of the drone.
    a. The coaxial cable goes to the GNSS adapter. A secondary cable connects from the GNSS adapter to the antenna mount. Use a cable clip on the top of the drone to reduce cable movement during operation as shown in **Figure 17**.

    b. The power cable goes to the USB-C connector on the top of the drone on the starboard side. Use a cable clip on the top of the drone to reduce cable movement during operation as shown in **Figure 17**.

Figure 16. DJI M300 GNSS cable adapter.

Figure 17. DJI M300 top side connectors.

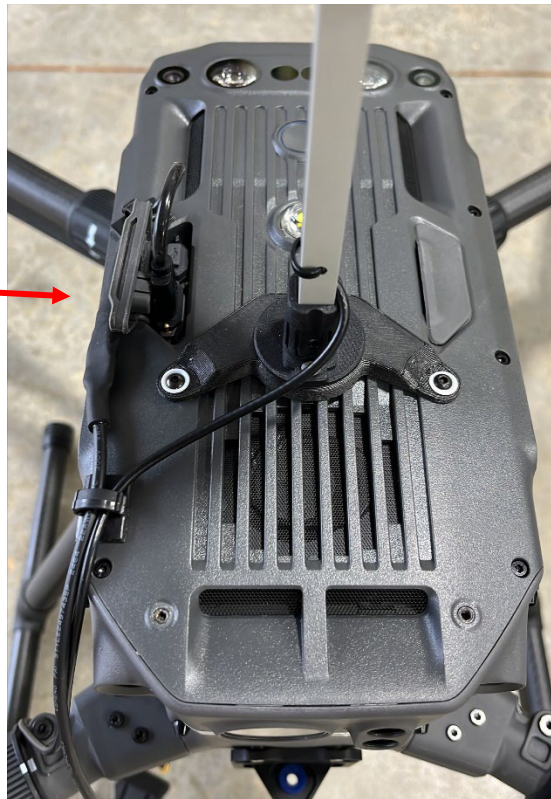**Insert USB-C power connector under this flap.**

Figure 18. Starboard USB-C connector.

DJI M300 Third Party Integration: IR Cover

1. Assemble the IR cover by pressing in the tab into the cover until it is fully retracted. Note that the topside of the IR tab has an extrusion. Make sure the extrusion is facing the top as shown in the **Figure 19** below.
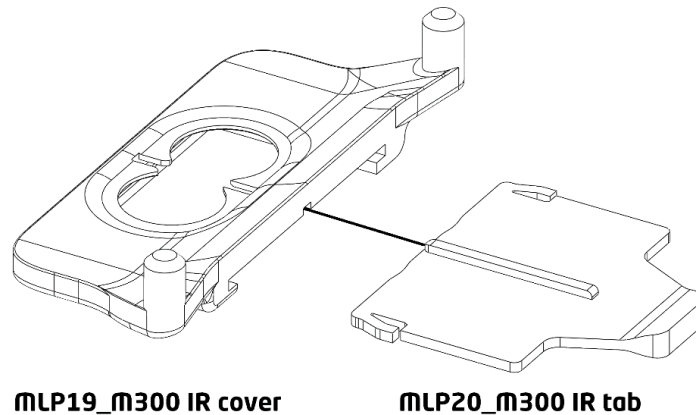

MLP19_M300 IR cover　　　　**MLP20_M300 IR tab**

Figure 19. IR cover assembly.

2. Apply two (2) pieces of double-sided adhesive on top of the pins of the IR cover assembly.

3. Mount the assembled IR cover under the base of the M300 drone by pressing the pins of the cover into the highlighted holes.
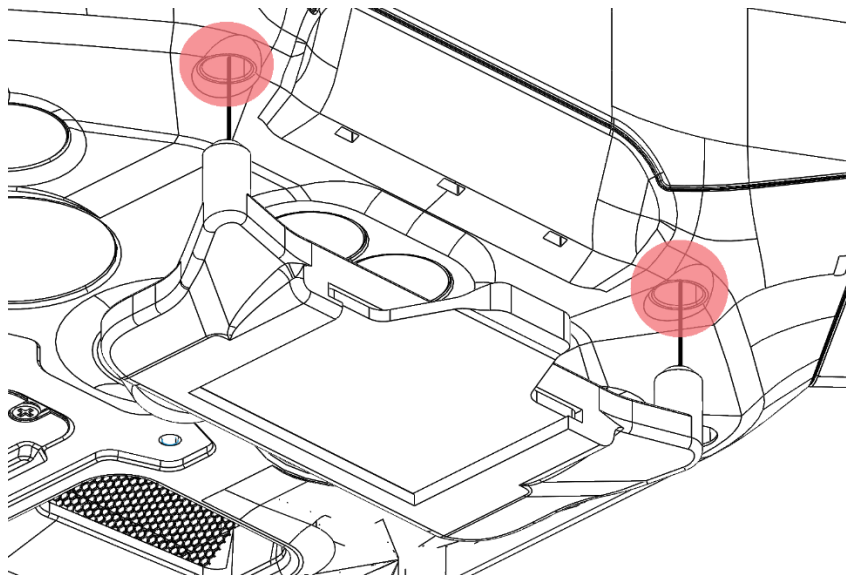

Figure 20. IR cover installation to DJI M300.

4. Make sure the IR cover is fitted tightly into the M300 drone and that all parts are fully in contact with each other.

Disable Obstacle Avoidance

The integration of the IR Cover will cause disruption to the M300's built-in obstacle avoidance detection systems. If these systems are not disabled, they can cause erratic and potentially dangerous behavior including loss of control of the drone. To disable obstacle avoidance, perform the following steps:

1. Launch the DJI Pilot2 application, open a mission, or go into manual view.

2. Tap the Ellipsis menu (…) on the top right corner of the screen.

3. Tap the second icon from the top Obstacle Sensing Settings.

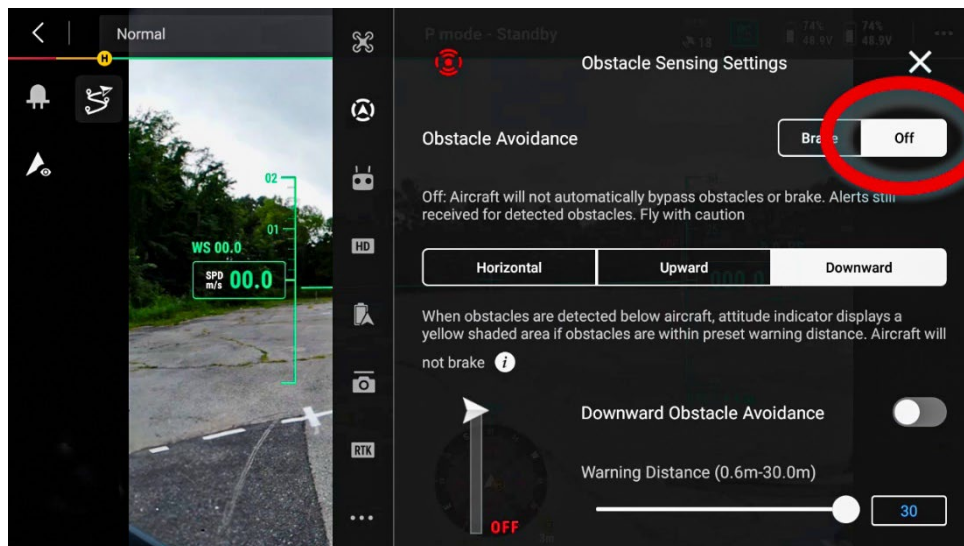4. Tap each tab for Horizontal, Upward, and Download tap the toggle button off for each category.

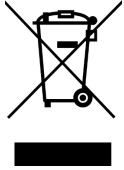

Figure 21. DJI Pilot 2 – Obstacle sensing settings menu.

⚠️ **WARNING**	Fly with caution when obstacle avoidance has been disabled.

DISPOSAL

Do not put batteries or other electrical equipment into general waste containers. Substances in batteries are harmful to human health and the environment. Dispose of electrical equipment at a collection point or recycling center. Contact your local authority for detailed information.

SUPPORT

Our searchable support knowledge base contains information on workflows, tips, hints, and probable resolutions to error messages or commonly encountered situations.

Normal support business hours are **Monday - Friday, 8 AM — 5 PM** USA Central Time.

Our GeoCue Support website contains general workflow information, in addition to specific issue and error messages that you may encounter. Click on the link and search for information contained in the knowledge base.

If a support request is sent during business hours a representative will typically get back to you within 4 hours. If received after hours, a response will be sent the following day. To speed response time please include the following information in your request:

- Contact information - please include e-mail address and phone number
- Company name
- Product name and version number
- Model and Serial Number

If your request includes problems pertaining to a specific error message, please include a screenshot of the error message.

For hardware and software support contact: support@geocue.com

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