

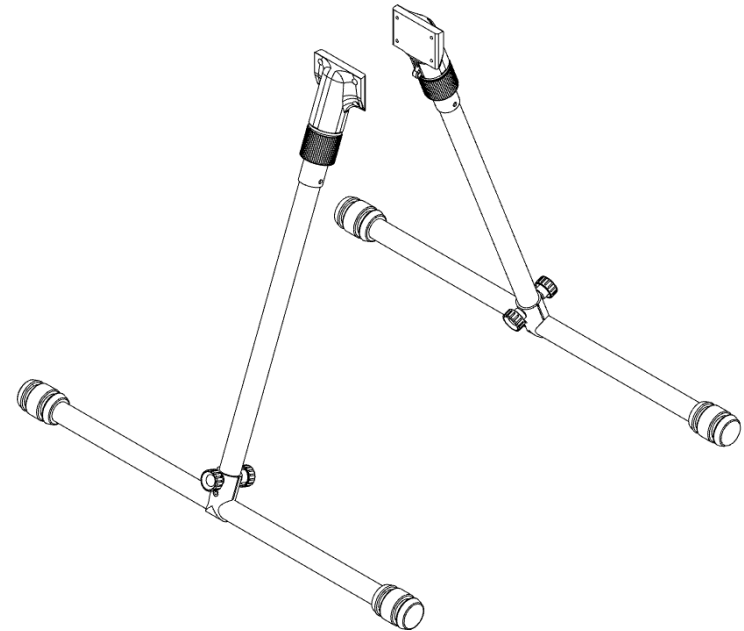
DISCLAIMER AND SAFETY GUIDELINES

Date: 28/04/2024 - Rev: 1.2

1. Installation, Assembly, and Disassembly - Do not disassemble the landing gear in any way (except for maintenance according to guidelines provided by Aerostrive or according to the guide contained within this manual.). Do not overtighten any bolt or handle any parts of the landing gear with disregard and roughly, always follow the instructions in this manual. **2. Environmental Considerations** - Only use in moderate weather conditions with temperatures between -10° to 50° (-14° to 122° F) and do not submerge the landing gear in any liquids. This also includes mud, wet sand, etc. Be careful when using sandy environments, avoid sand entering mechanical parts of the landing gear. Ensure to dry the landing before storage if used in wet or damp environments. **3. Pre-flight** - Before every flight always ensure the quick release is tightened properly, both thumb screws are tightened properly and the angle of the landing is within acceptable range ($\pm 10^{\circ}$). **4. Operation** - Avoid / Don't push or pull the body of the drone and avoid movement of the drone when landing to reduce unnecessary stress to the landing gear. **5. Post-Flight** - After every flight Re-tighten Folio Quick-Release and Re-Tighten Thumb Screws, and the angle of the landing is within acceptable range ($\pm 10^{\circ}$). **5. General, Maintenance, and Upkeep** - Be mindful of sharp parts and pinching of fingers. Do not use it if the carbon tubes have but are not limited to delamination, are chipped, or otherwise damaged. Store the landing gear in a cool and dry place with temperatures between 22° and 30° C (71° and 86° F), and avoid exposure to direct sunlight. If roughness or harshness is observed during suspension travel, lubrication may be added to the carbon tube shielded behind the rubber bellow.

DISCLAIMER AND SAFETY GUIDELINES and other collateral documents are subject to change at the sole discretion of AEROSTRIVE. For up-to-date product information, please contact info@aerostrive.com

Shall any part of the aforementioned "DISCLAIMER AND SAFETY GUIDELINES" or the "Aerostrive M-Ascend User Manual" not be followed or respected AEROSTRIVE, holds no liability or responsibility for the use and collateral effects of such actions. The right to refuse service, refund, repair, legal responsibility or otherwise compensation can also be used if the aforementioned are not followed by the operators of the product.



Aerostrive M-Ascend User Manual

Product Name: M-Ascend - Product Code: MAS - Date: 28/04/2024 - Rev: 1.2

Introduction	2
Product Information	3
General Safety Rules	3
Specifications	4
Diagram	4
Assembly Guide	5
DJI Mounting Plate	5
Assembly Photo	5
Installation Description	5
Carbon Tubes (ONSHORE MODEL)	6
Assembly Diagram	6
Installation Description	6
Carbon Tubes (OFFSHORE MODEL)	7
Assembly Diagram	7
Installation Description	7
Thumb Screws	8
Assembly Diagram	8
Installation Description	8
Folio Quick-Release	9
Assembly Diagram	9
Installation Description	9
Other Tasks	10
Magnet Releasement	10
Diagram	10
Task Description	10

Introduction

The following materials have been produced to help users make full and safe use of the Aerostrive M-Ascend.

- User Manual
- Quick Start Guide
- Disclaimer and Safety Guidelines *(Provided Digitally)*

Should these documents not be provided with your product please contact info@aerostrive.com

Reading the Disclaimer and Safety Guidelines before is recommended. Afterward, prepare for your first flight using the M-Ascend using the Quick Start Guide. Refer to this manual for more comprehensive information.

All instructions and other collateral documents are subject to change at the sole discretion of AEROSTRIVE. For up-to-date product information, please contact info@aerostrive.com

Legends are used to highlight important information, please familiarize yourself with the different legends used through the documentation below.

⚠ Important ⚠ Warning ⚡ Hints & Tips

Please carefully read and understand all safety instructions before use to mitigate the risk of accidents, malfunctions, and injuries.

Product Information

The M-Ascend series is a raised landing gear designed for the DJI MATRICE™ 300 RTK (M300 RTK) & DJI MATRICE™ 350 RTK (M350 RTK), the series is comprised of two models Aerostrive M-Ascend Onshore & Aerostrive M-Ascend Offshore. The Aerostrive M-Ascend Offshore is equipped with an industry-grade gas dampener to help absorb shocks from landing on bobbing boats and has intergraded N42 neodymium magnets in the lower part of the landing gear to help with staying in place on a tilting boat, as opposed to the Onshore model which does not feature these, though they both share the quick-release mechanisms on both the upper and lower part of the landing gear.

Furthermore, a Safety Wire Kit is available for purchase and can be installed on both models. This kit is specifically designed to prevent any parts from detaching from the landing gear, catering primarily to offshore applications but also adaptable for onshore models.

To learn more about all accessories, please visit www.aerostrive.com.

General Safety Rules

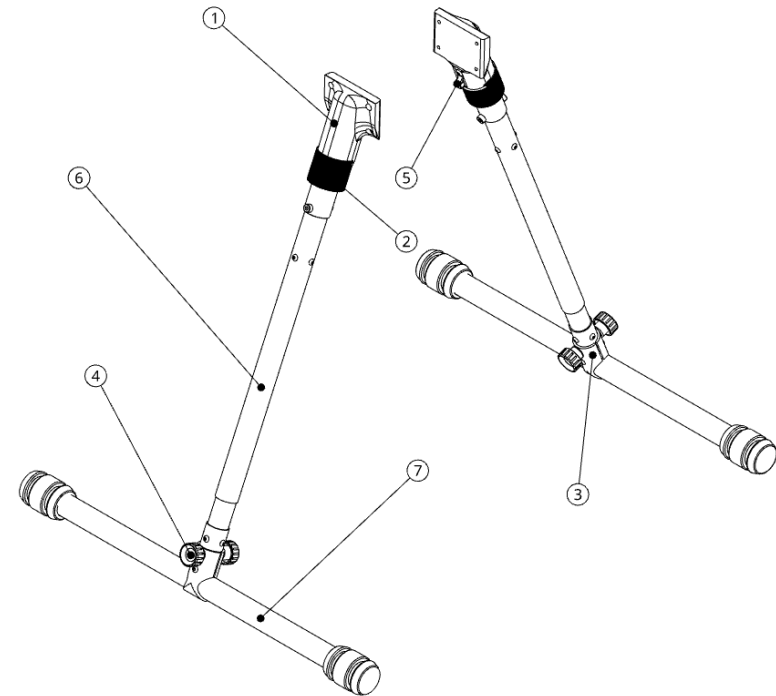
When utilizing the M-Ascend Series of Landing Gear, it is imperative to adhere to the following guidelines. In organizational settings, ensure that operators receive thorough safety briefings and that user manuals and disclaimers are readily accessible.

1. Ensure comprehension and adherence to provided instructions at all times.
2. Exercise caution to prevent finger or hand entrapment within operational components.
3. Exercise caution to prevent cuts on your fingers or hands from sharp components.
4. Exercise diligence during assembly and disassembly procedures.
5. Adhere strictly to assembly and disassembly guidelines to mitigate accidents and minimize product wear.
6. Refrain from overloading the landing gear.
7. Prevent forceful or sudden maneuvers of the drone body to prevent undue stress on the landing gear

Specifications

Dimensions	Assembled, drone height excluded, 500mm×20×443 mm (L×W×H) Dissamebled, 500×50×50 mm (L×W×H)
Added height to drone	Approx. 380mm
Weight	Approx. 800 g (Single) Approx. 1600 g (Set)
Max Drone Weight	Approx. 15 kg
Supported DJI Drones	DJI MATRICE™ 300 RTK (M300 RTK) & DJI MATRICE™ 350 RTK (M350 RTK)
Ingress Protection Rating	IP53
Operating Temperature	-10°C to 50°C (-14°F to 122° F)
Materials	3K Twill Carbon Fiber 7075 Aluminum 10.9 Grade Steel Silicone Polybutylene Terephthalate Acrylonitril Styrene Acrylate

Diagram



*Image might vary depending on your model and revision.

- 1. DJI Mounting Plate 2. Folio Quick-Release 3. T-Splitter
- 4. Thumb Screw 5. Carabiner Point 6. Upper Carbon Tube
- 7. Lower Carbon Tube

Assembly Guide

Adhere closely to the provided guides for each step of the assembly and installation process to ensure the correct mounting and installation of all components.

You may refer to this assembly guide as needed, either for your own reference or as a manual for operators in the field. Alternatively, you can utilize the Quick Start Guide, but it is recommended to thoroughly read and understand the full user manual.

DJI Mounting Plate

Assembly Photo



*Image might vary depending on your model and revision.

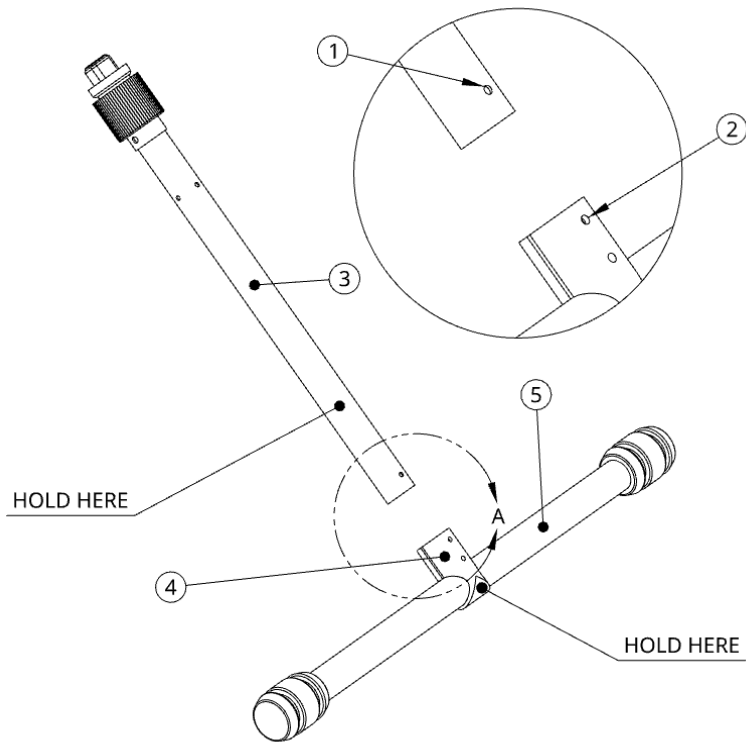
Installation Description

Install the Mounting Plate using M3X12MM Bolts into the designated holes on the DJI MATRICE™ as indicated by the white circles in the assembly image. Do NOT use power tools; instead, use hand tools exclusively. Exercise caution to avoid over-tightening the bolts. (MAX 1.2Nm / 0.12kgf)

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- ⚠ • After installation, ensure the bolts are tightened.
 - ⊘ • Avoid over-tightening bolts to prevent mount cracking
 - ⚙ • It's recommended to use thread lock on the bolts to prevent them from loosening.
-

Carbon Tubes (ONSHORE MODEL)

Assembly Diagram



*Image might vary depending on your model and revision.

- | | | | | |
|------------------------|--------------------------|----------------------------|------------------|----------------------------|
| 1. Carbon
Tube Hole | 2.
T-Splitter
Hole | 3. Upper
Carbon
Tube | 4.
T-Splitter | 5. Lower
Carbon
Tube |
|------------------------|--------------------------|----------------------------|------------------|----------------------------|

Installation Description

Grasp the 3. upper carbon tube at the specified "HOLD HERE" location as shown in the assembly diagram. Similarly, grasp the 5. lower carbon tube at its designated "HOLD HERE" point.

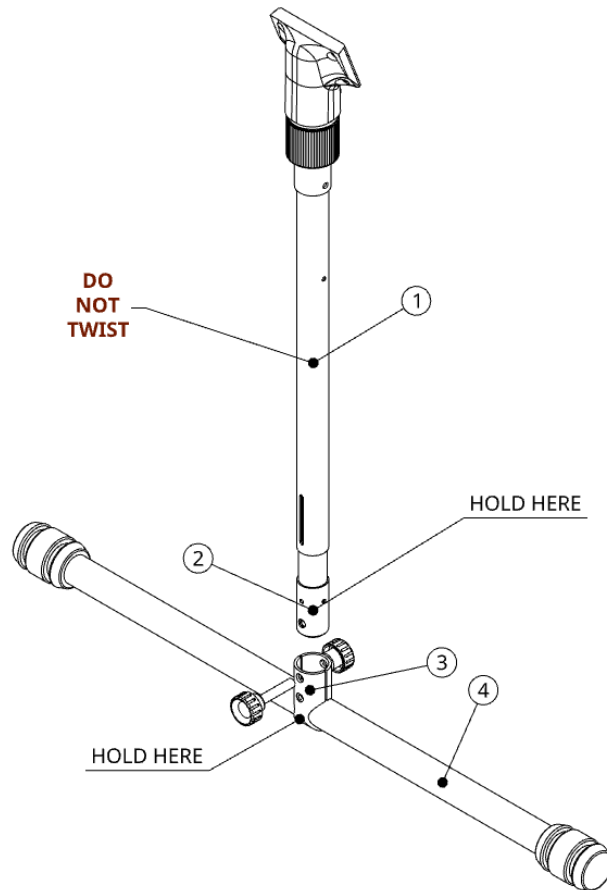
Subsequently, exert pressure while simultaneously rotating the 3. upper carbon tube into the 4. T-Splitter. Once inserted, continue to twist the 3. upper carbon tube until the 1. carbon tube hole and the 2. T-splitter hole align.

It is imperative to only rotate the components while firmly gripping them at the designated locations delineated in the assembly diagram.

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- ⚠ • Post-installation, ensure the Upper Carbon Tube stands level within the T-Splitter.
 - ⚠ • Exercise caution to avoid finger and hand injuries.
 - ⦿ • Only hold them in the designated spots indicated.
 - ⚙ • Adjust the T-splitter bolt if excessively loose or tight.
-

Carbon Tubes (OFFSHORE MODEL)

Assembly Diagram



*Image might vary depending on your model and revision.

1. Upper CT 2. T-Split CT 3. T-Splitter 4. Lower CT

Installation Description

Grasp the 2. T-Split CT at the specified "HOLD HERE" location as shown in the assembly diagram. Similarly, grasp the 4. Lower CT at its designated "HOLD HERE" point.

Subsequently, exert pressure while simultaneously rotating the 2. T-Split CT into the 4. Lower CT. Once inserted, continue to twist the 2. T-Split CT until the holes align.

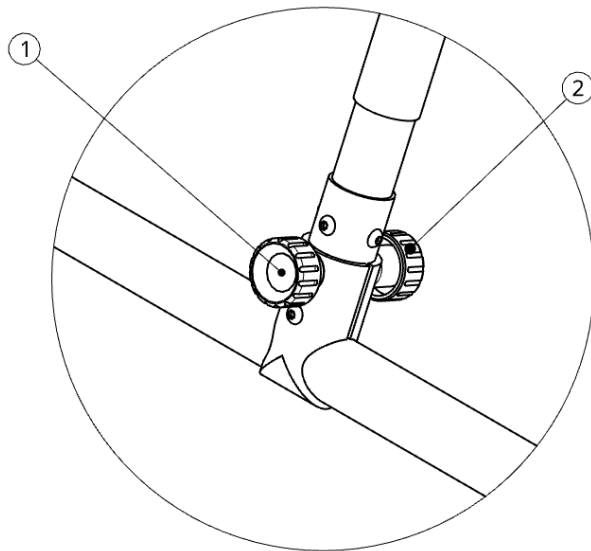
It is imperative to only rotate the components while firmly gripping them at the designated locations delineated in the assembly diagram.

Never rotate the 1. Upper CT while assembling or while the landing gear is assembled.

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- ⚠ ● Post-installation, ensure the Upper Carbon Tube stands level within the T-Splitter.
 - ⚠ ● Exercise caution to avoid finger and hand injuries.
 - ⦿ ● Only hold them in the designated spots indicated.
 - ⚙ ● Adjust the T-splitter bolt if excessively loose or tight.
 - ⦿ ● Never excessively twist the landing gear.

Thumb Screws

Assembly Diagram



*Image might vary depending on your model and revision.

Thumb Screw with M6
Thread (Outside)

Thumb Screw with
M6 Nut (Inside)

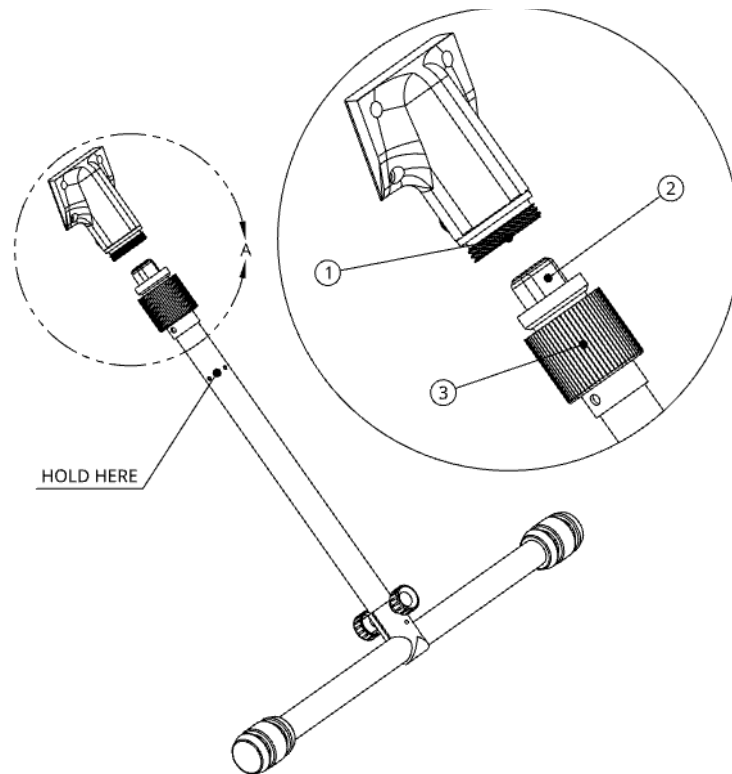
Installation Description

One of the thumb screws will have threading, while the other will serve as a nut. Insert the thumb screw with threading from the outside through the T-Splitter and tighten the nut on the inside.

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- ⚠ • After installation, make sure the thumb screws are tightened properly.
 - ⚠ • After each flight, ensure that the thumb screws are still properly tightened.
 - ⊘ • Do not attempt to loosen the thumb Screw with M6 threading during disassembly.
-

Folio Quick-Release

Assembly Diagram



*Image might vary depending on your model and revision.

1. Folio
Alignment
Hole

2. Folio
Alignment
Piece

3. Folio
Thread
Ring

Installation Description

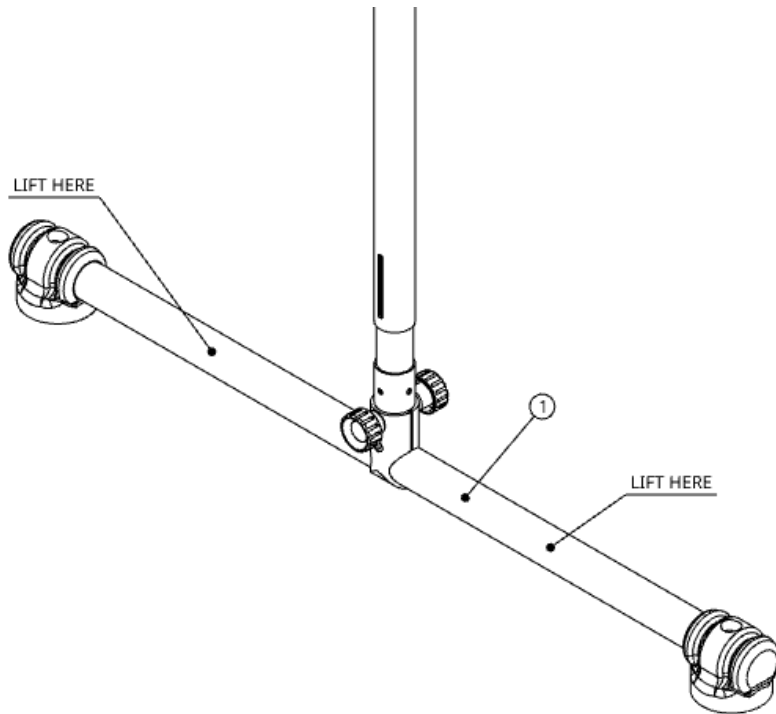
Grasp the upper carbon tube at the designated “HOLD HERE” indicated in the assembly diagram. Proceed to insert the 2. Folio Alignment Piece into the 1. Folio Alignment Hole until both surfaces align seamlessly. Once aligned, securely tighten the 4. Folio Thread Ring

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- ⚠ • After installation, make sure the Folio Thread Ring is tightened properly.
 - ⚠ • After each flight, ensure that the Folio Thread Ring is still properly tightened.
 - ⊘ • Do not attempt to tighten the Folio Thread Ring if surfaces do not align seamlessly.
 - ⊘ • Do not twist the carbon tube while the Folio alignment piece is inserted
-

Other Tasks

Magnet Releasement

Diagram



*Image might vary depending on your model and revision.

1. Lower CT

Task Description

Grasp the 1. Lower CT at the marked "LIFT HERE" location indicated in the diagram. Lift carefully until the magnets release.

Attempt to reduce unnecessary strain on the dampener by lifting from the designated points and avoiding any twisting or turning motions when releasing the magnets.

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- ⚠ • Exercise caution to avoid finger and hand injuries.
 - ⊘ • Never excessively twist the landing gear.
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