

MATRICE 600

Maintenance Manual



V1.0 2016.06

To ensure optimal performance and flight safety for your aircraft, **comprehensive maintenance is recommended every 50 flights or after flying for over 20 hours**. This manual is intended to help users maintain their aircraft for maximum reliability.

I. Checking the Battery

1. Ensure that your firmware and DJI GO app are up-to-date. Launch DJI GO app to confirm that all the battery cells are fully charged to the same voltage level. If all the cells are above 3.7 V but one cell differs by 0.2 V or more, contact DJI™ for analysis. You can also check the battery warning history. If any warning is reported, contact DJI.
2. Check the electrodes in the battery compartment. Return-to-factory service will be required if they appear severely burnt.
3. Check the battery compartment's plastic components to ensure that they are in good condition and that all screws are secure. This prevents the battery from becoming loose during flight.
4. Check the contact pins in the battery compartment to ensure that they are clear. They should be able to establish easy contact with the battery and should not be bent.
5. Check the battery for damage and deformities. If there are any signs of severe damage to the battery, stop using it and discharge the battery to 10% or below for disposal. Do not disassemble the battery for any reason.
6. Check the battery's gold fingers besides the battery port and rub them clean with an eraser if any residue is observed. This will help to ensure a more reliable connection.
7. Check the battery port's metal connectors for damage. Replace the battery immediately if the connectors appear severely burnt.
8. For long term storage, refer to the Intelligent Flight Battery Safety Guidelines and check the battery once a month to avoid damage to the battery.

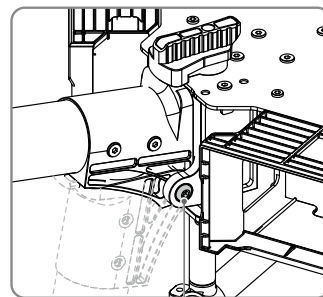
II. Checking the Center Frame

1. Check the upper and lower plates of the center frame for cracks and damage. If wear exists, but you're not sure whether it is safe to fly, contact DJI Support for help.

2. Check the red knob for wear, e.g. if the frame arm is loose after the knob is locked. If it is, replace the knob with a spare knob that comes with the MATRICE™ 600.
3. Turn on the aircraft and listen for any abnormal noise or vibration from the cooling fan located on the upper cover of the aircraft. If a loud noise is detected, replace the fan.
4. Check the damper on the flight controller for wear and severe deformities.
5. Check all the cable connections on the flight controller and Lightbridge 2 Air System.
6. Check the square head screws on the power cables of the frame arm at the bottom of the center frame. Use the square socket wrench that comes with the Matrice 600 to tighten the screws if loose.
7. Check the screws connected to the expansion mounting kit and center frame. Apply medium strength threadlocker and then tighten the screws if loose.
8. Check the screws connected to the retractable modules and center frame. Apply medium strength threadlocker and then tighten the screws if loose.

III. Checking the Foldable Frame Arms

1. Check if the frame arm can move freely, e.g. if the frame arm is loose after the knob is locked. If it is, but the knob is in good condition, tighten the screw at the connection point.

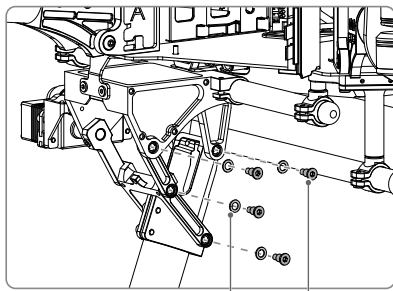


Screw

2. Check the motor base for cracks and damage. If wear exists, but you're not sure whether it is safe to fly, contact DJI Support for help.
3. Check the connection between the motor base and the arm tube.
4. Check if the propeller ends on two neighboring frame arms are aligned. If the vertical difference is over 1 cm, use the arm inclination holder to adjust the arm inclination.

IV. Checking the Retractable Landing Gear

1. Check the servo cables for wear. Ensure that the connection points are secure.
2. Check the power cable connector for wear. Replace the connector or return to factory for repairs.
3. Hold the aircraft body, and then raise and lower the landing gear to the ground several times to ensure that the retractable landing gear can move freely.
4. Check if there is any white plastic debris around the shaft screws of the landing gear. If there are, replace the washers under the screws.



Washers Shaft Screws

5. Check the shaft screws of the landing gear. If they are loose, apply high strength threadlocker and then tighten the screws. It is recommended to affix the screws with 0.45±0.05 N·m torque.

V. Checking the Propulsion System

1. Check the motor rotor by gently shaking it up and down. If it is obviously loose, but you're not sure whether it is safe to fly, contact DJI Support for help.
2. Check the motors for deformities by confirming that the gap between the motor and motor base is even, and the motor spins freely and looks fine. If not, replace the motors.
3. Remove the propellers and start the motors. Carefully examine the edge of the motor rotor and confirm that the shaft is perfectly centered on the motor. Check for any abnormal or excessive vibration. If excessive vibration is detected, replace the motors.
4. Remove the propellers and start the motors. Listen carefully for any abnormal noise, which may indicate that the bearings have worn out and the motors need to be replaced.

5. Check the propellers. If there is any bending, breakage or cracks on a propeller, do not use it.
6. Attach the propeller to the motor, turn on the aircraft, and place it on the ground. Stand 3 meters away from the aircraft and observe the spinning propellers. If you can see two distinct propeller outline layers, when looking at a spinning propeller from the side, this propeller is damaged. This will increase the aircraft vibration and reduce flight safety and performance. Replace the propeller.

VI. Checking the IMU

1. Ensure that your firmware and DJI GO app are up-to-date. Launch DJI GO app to check the condition of the IMU and perform an advanced IMU calibration. Place the aircraft in a cool environment and on a flat, stable surface. Do not touch the aircraft during calibration.

VII. Checking the GPS-Compass Pro

1. Check the module to make sure it is securely mounted. Ensure that the arrow on it points to the front of the aircraft.
2. Ensure that your firmware and DJI Assistant 2 are up-to-date. Launch DJI Assistant 2 to check the mounting position settings to ensure that they are correct.

VIII. Checking the Control and Video Transmission System

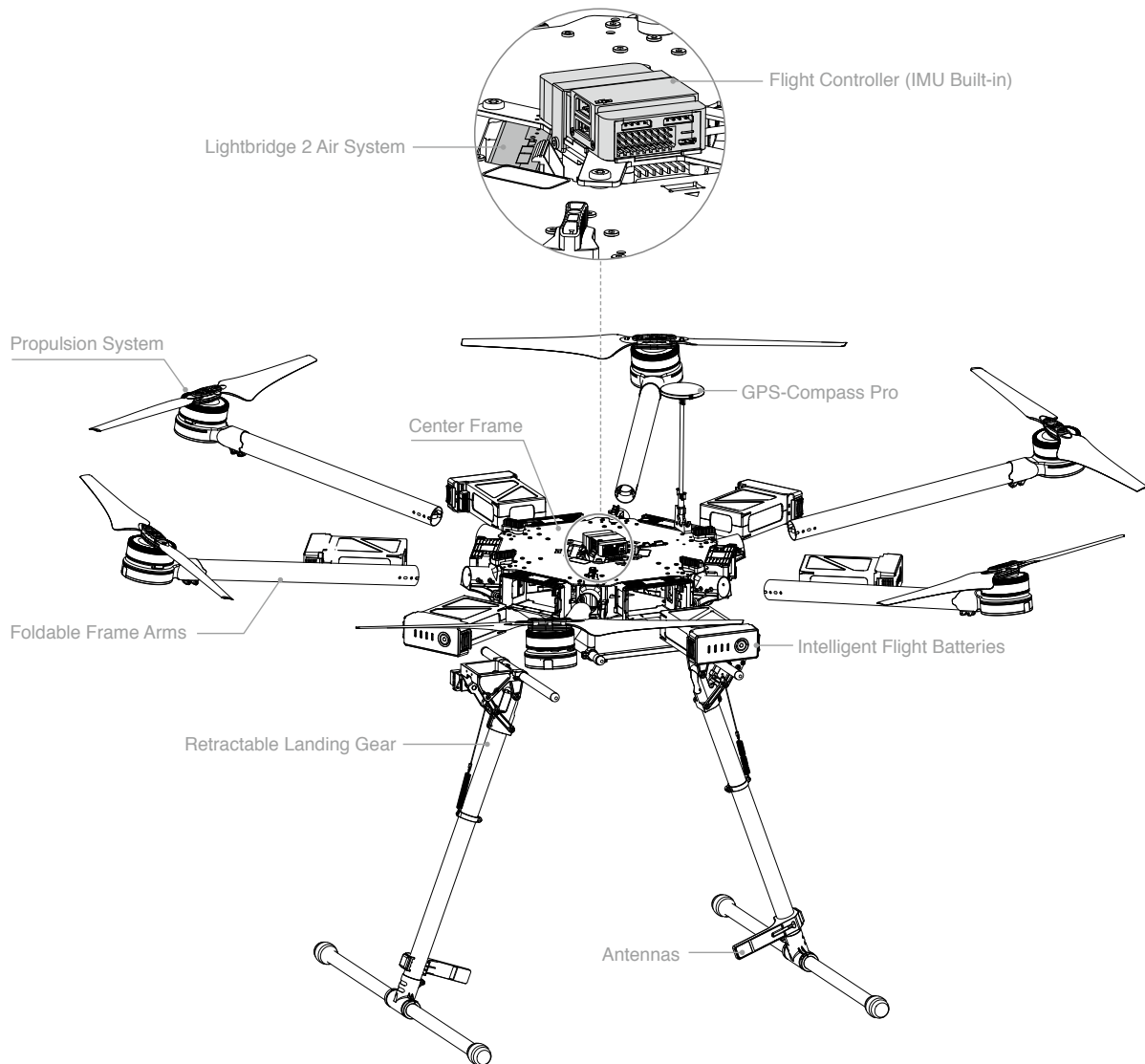
1. Check the two antennas on the landing gear legs to ensure that they are secure. Check the antenna cables at the bottom of the center frame or on the Lightbridge 2 Air System for any bending or damage. Ensure that they are securely connected. (Note: Attach or detach the cable in the direction aligned to the connector pin to avoid damage.)
2. Check the remote controller antennas for damage.

DJI Support
<http://www.dji.com/support>

Recommended Server Center
<http://www.dji.com/service/repair>

For details on our after-sales policy, visit:
<http://www.dji.com/service>.

If you are unable to view the webpage or would like to request a hard copy of our policy, please contact your local DJI branch office or authorized dealer.



The content is subject to change.

Download the latest version from
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