



3 - Assembly

This guide will step through the main assembly checklist items.

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TOOLS:

- [3/16 Ball Driver](#) (1)
- [7/64 Ball Driver](#) (1)
- [9/64 Ball Driver](#) (1)

Step 1 — Mounting the Arms and Landing Gear



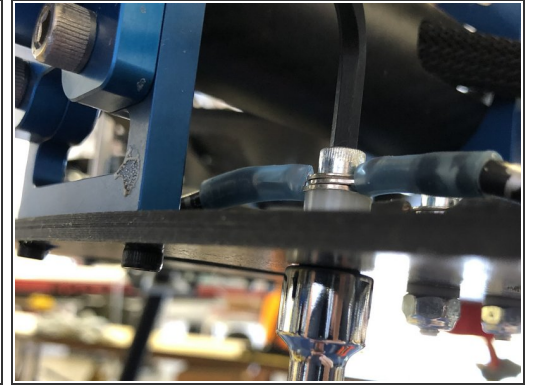
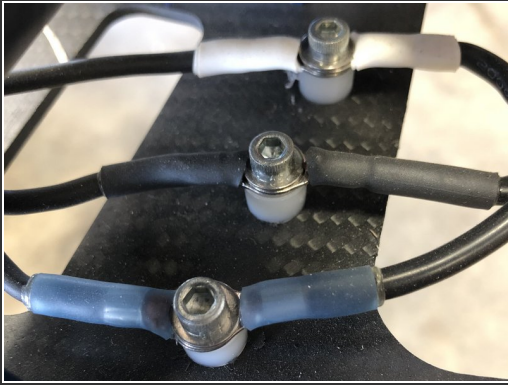
- Use the provided 3/16 Hex Key to secure arm mount screws (3 per arm)
- Use the provided 7/64 Hex Key to secure the landing gear tube to the landing gear mount
- ⓘ Based on when the HLM was assembled, certain hardware may have similar coatings. Ensure that only the circled screws are tightened and loosened for landing gear installation

Step 2 — Securing Landing Gear



- Using the mounted safety pin, fully insert into safety pin hole (above the lower bracket)

Step 3 — Connect Arm Terminals (only for drones shipped prior to Dec 2020 that have been retrofitted)



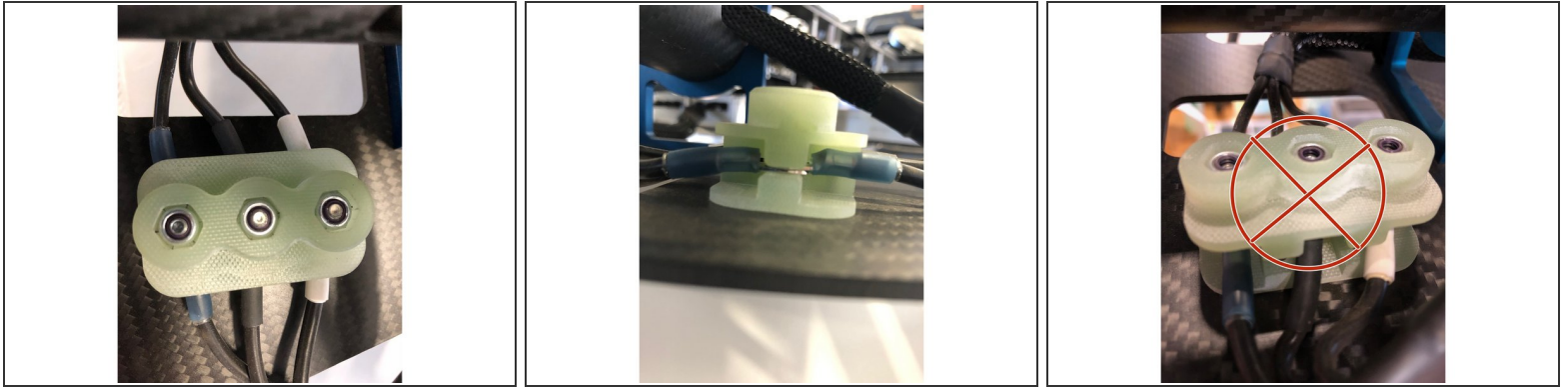
- Separately fasten each of the three terminals for each arm
- ⚠ Be sure to fasten corresponding colors to each other!
- When fastening the power terminal, the order is: Bolt, washer, ring terminals, nylon spacer, lower carbon fiber plate, nylon stud, nut
- Use the 11/32 nut driver and 9/64 Hex L-key to fasten the terminal bolt and nut to wrist-tight

Step 4 — Arm Terminals (for all drones shipped after Dec 2020)



- Connect corresponding arm terminals on post
- ⚠ Be sure to connect corresponding colors to each other!
- Use included 9/64 ball driver to securely fasten the upper terminal block
- ⚠ The lower terminal block is permanently fastened to the lower frame, do not remove!

Step 5 — Terminal Block Fastening

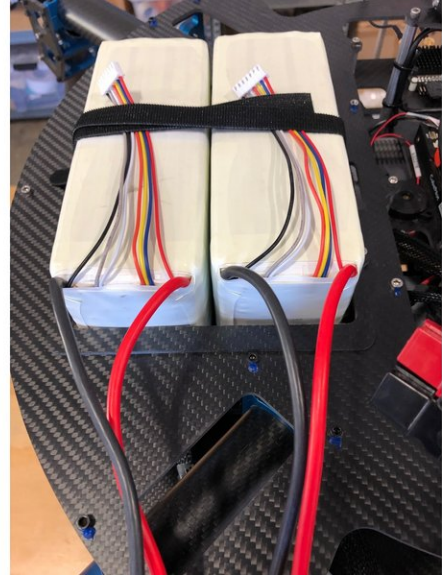


- Ensure that the arm terminals are properly aligned (each terminal needs to stick straight out from the terminal block)

⚠ If the terminals are not properly straightened, the terminal block cannot be fully tightened. This can lead to power loss to the arm in flight

⚠ Make sure that the terminal lines do not impede the terminal block from fully seating (if they are crossed they will be pinched by the terminal block when tightening). This can lead to sparking and power loss to the arm in flight. (Picture 3)

Step 6 — Main Batteries



- Secure the main batteries into the battery trays using the attached velcro straps
- ⓘ Ensure that you have installed the correct battery chemistry (Li-Ion or Li-Po) based on what was ordered with your specific configuration
- ⚠ Do not power on the plane at this step!

Step 7 — Aircraft C2 antenna



- Check C2 antennas
- Check that each antenna is securely fastened

Step 8 — Motors (regardless of type)



- Ensure that the motors spin freely by hand
- Check each lower motor mount screw for blue torque indicator (torque indicator should be intact with no cracking)
- (Only for models configured with vibration mounts) Check each rubber dampener for excessive wear or chafing

Step 9 — Attach Propellers (Only for models configured with T-Motor quick adapt propellers)



- Line up corresponding marked propeller and quick adapters (clockwise propeller will be solid black, counter-clockwise propellers will have white markings)
- Line up the propeller parallel with the quick adapter tabs and press down
- rotate the motor counter to the propeller direction, the quick adapter tabs will "click" upwards
- Ensure that the propeller has seated fully in the quick adapter, the quick adapter tabs will be in an up position

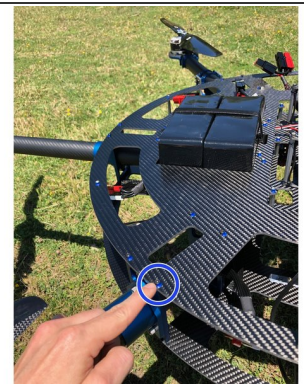
Step 10 — Propeller Direction



 Ensure that the propeller blade direction matches the arm root

- Clockwise propellers will have two tabs racing up at the arm root
- Counter-clockwise arms will have one tabs facing up at the arm root

Step 11 — Frame



- Check the integrity of torque indicator for any fastener on the drone on which indicator came installed

Step 12 — Payload



- Customer specific
- Ensure that your payload (if applicable) is safe for flight