ГЕОПРИБОР EST.2000

Installing Fora ONE PPK on the Autel EVO 6K



Stage 1

Preparing

Tools and fasteners:

Инструменты и крепеж:

- [x] Torx screwdriver 6T (usable rod's length 50 mm and Ø ≤ 3 mm)
- [x] Torx screwdriver 6T (usable rod's length 70 mm and Ø ≤ 3 mm)
- [x] Hex screwdriver 1.5 mm
- [x] Cross-point screwdriver 00x50
- [x] Plastic spatulas 2 pcs
- [x] A set of spudgers
- [x] Drill
- [x] Drill bit Ø 3.0 mm
- [x] Drill bit Ø 1.5 mm
- [x] Sidecutter
- [x] Self-attack screw Ø 2 мм, 6 mm length with a cup head (3 pcs)

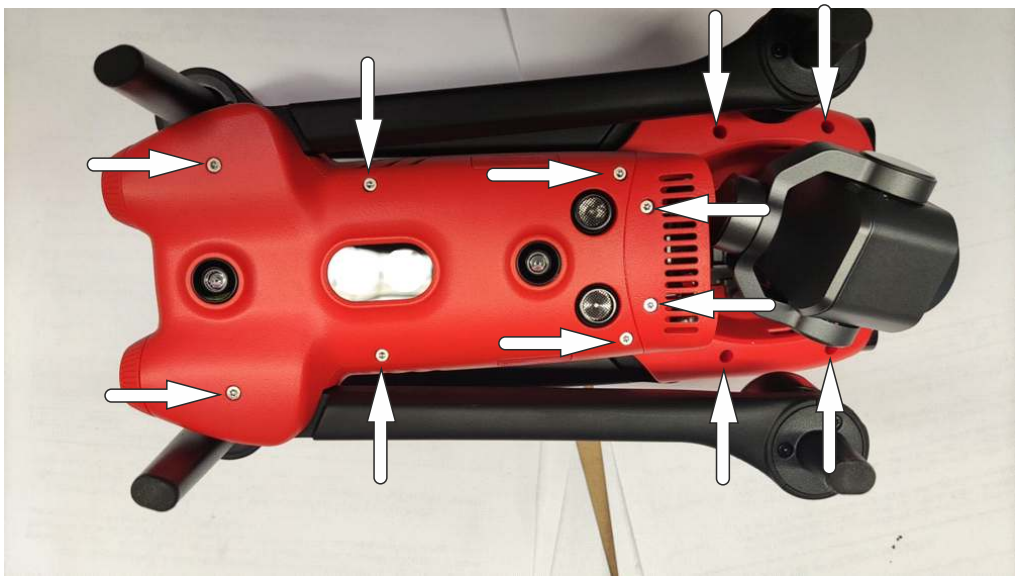
Step by step instruction

Removing the battery and SD card





With a torx screwdriver 6T, unscrew 8 silvery and 4 black tapping screws



Unscrew the fixing plastic nuts



Remove the suspension's protective decorative overlay

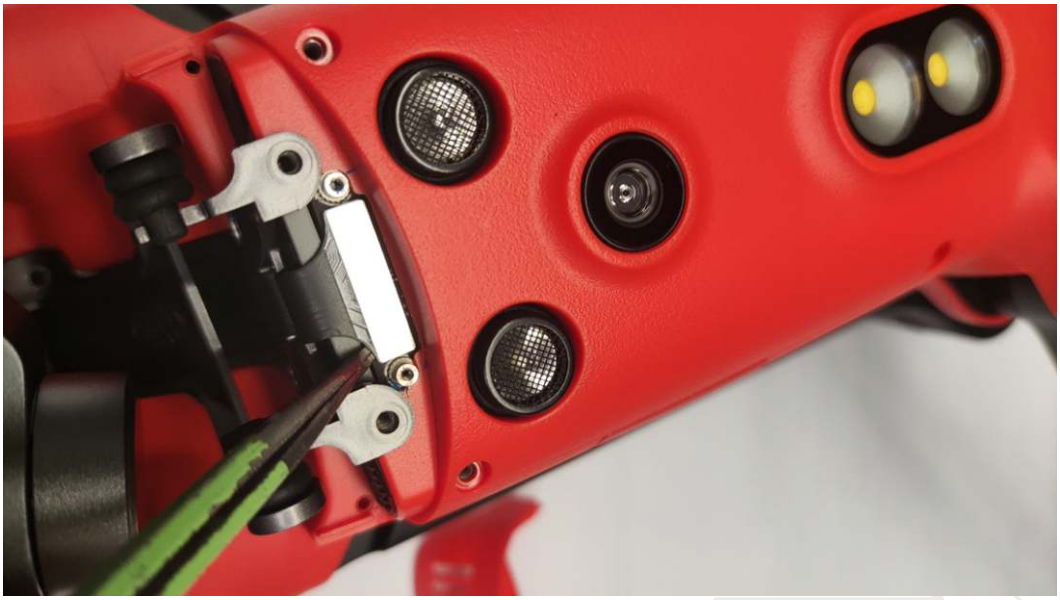


With a cross-point screwdriver unscrew the retaining plate for ribbon cable





Gingerly, using the thin tool as a pry bar, unplug the connector from the slot

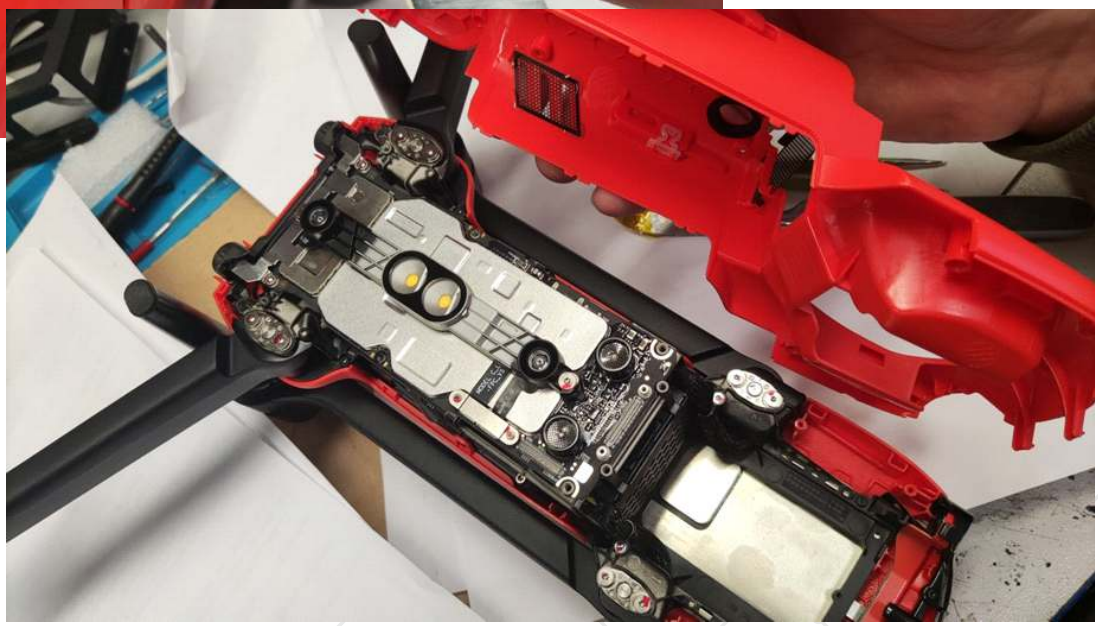


Removing the suspension with a camera

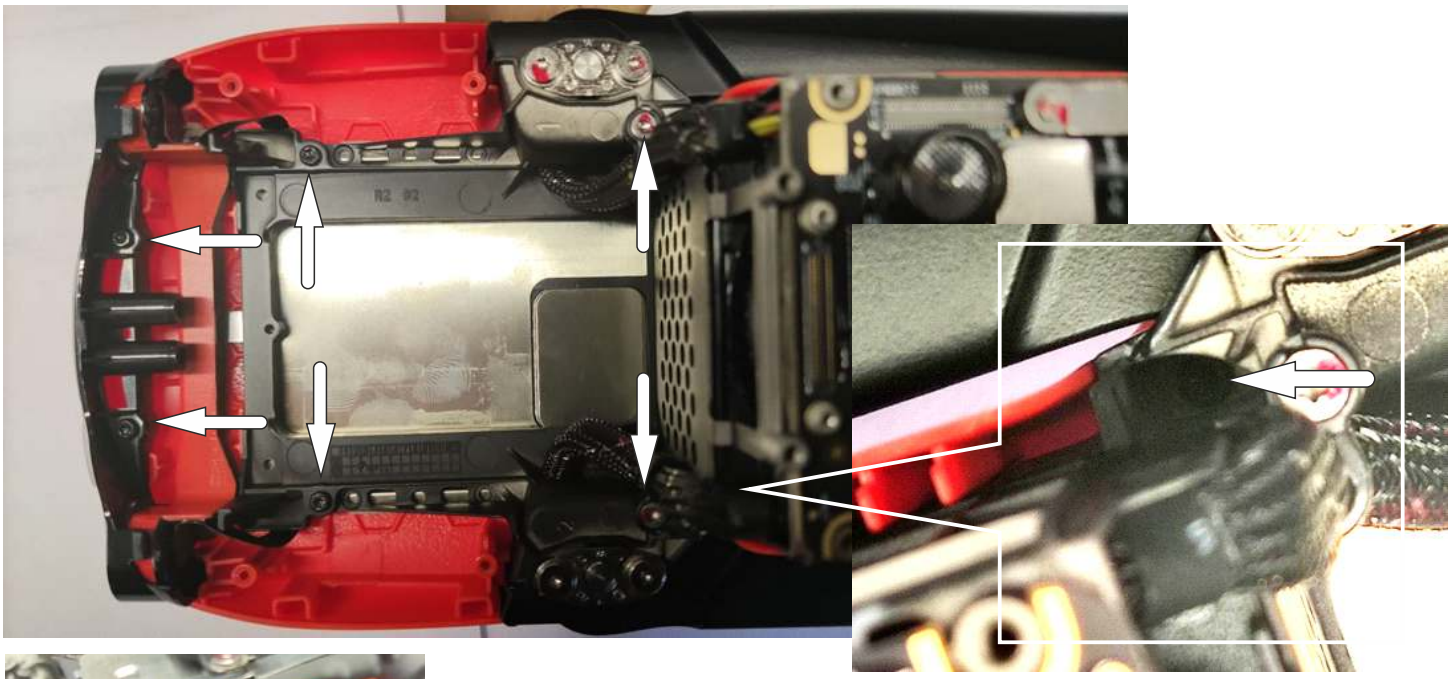


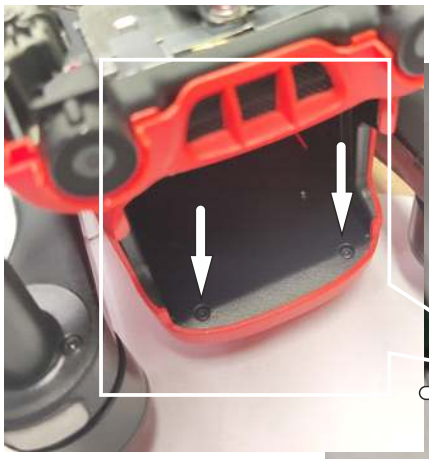
Gingerly, using the thin tool as a pry bar, we unlatch along the seam a top and a bottom parts of a body from opposite sides

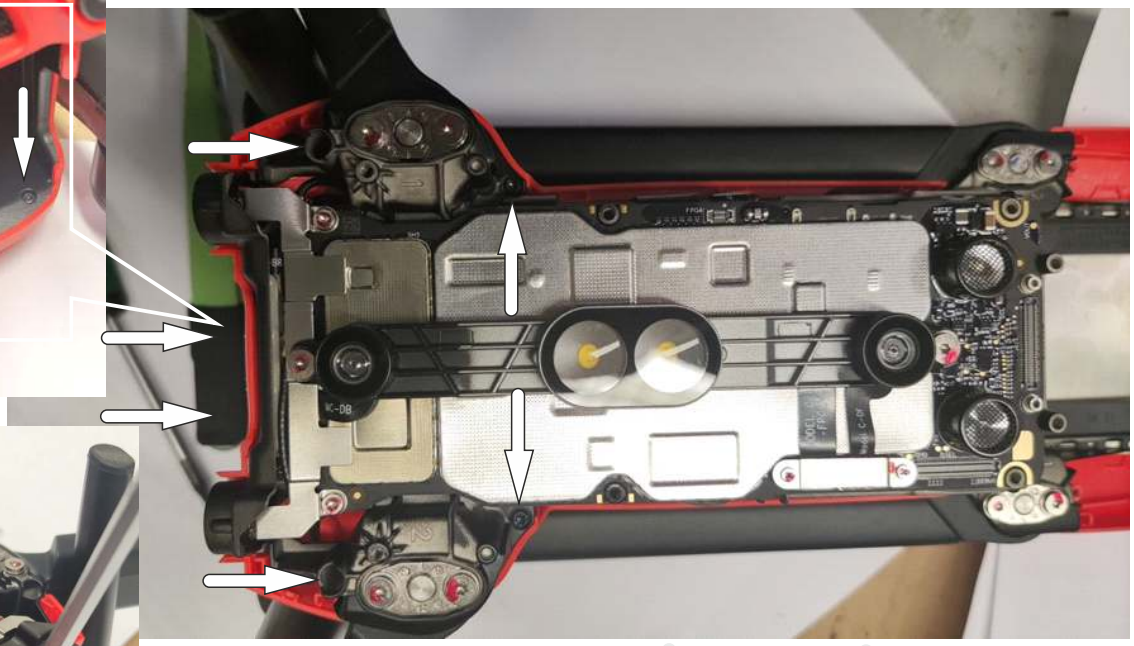


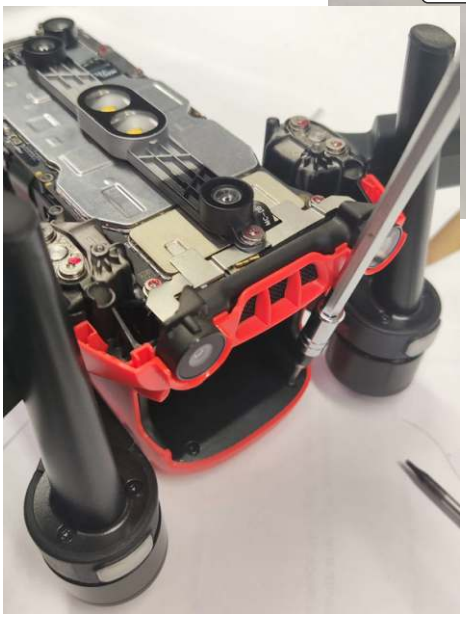


Gingerly to prevent the screw head slots destroying, using a torx screwdriver 6T, unscrew 12 black tapping screws (marked with arrows on picture). NOTE: We'll need the screwdriver with usable rods length 70 mm and Ø ≤ 3 mm for two tapping screw in the battery section









Unscrew one and another screws located at the opposite body sides

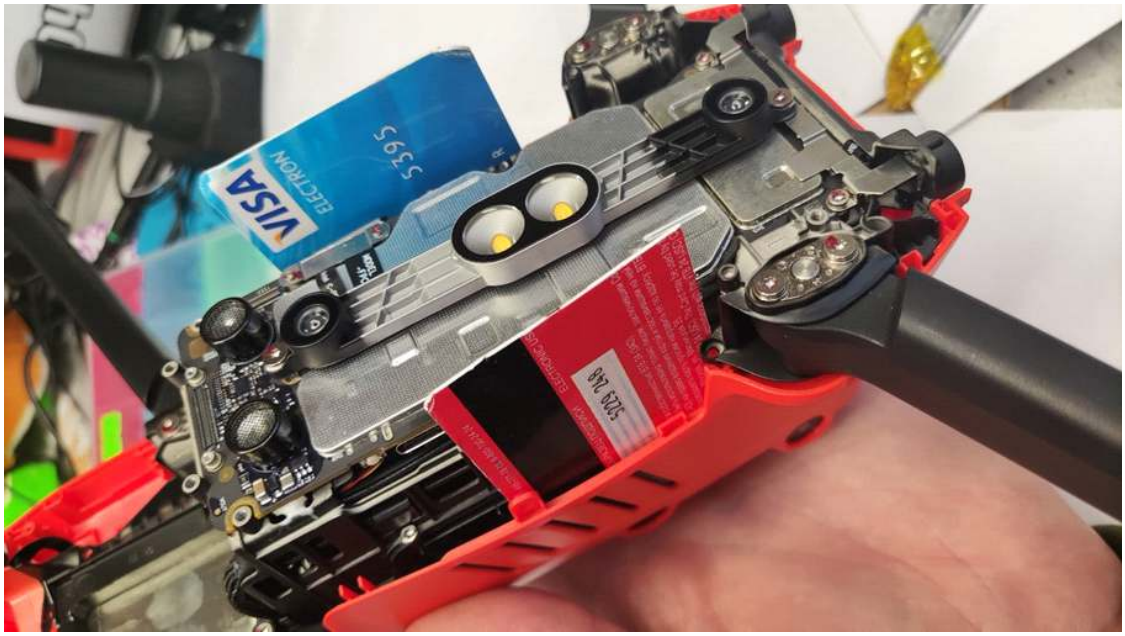




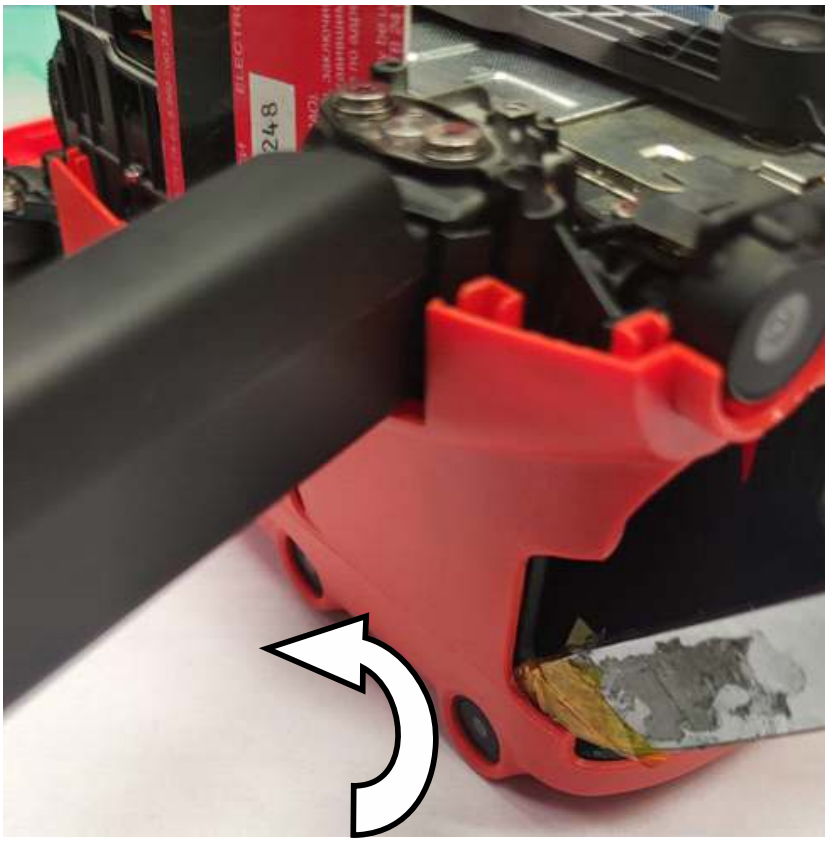
Gingerly, we uninstall the black unit from the front of a body



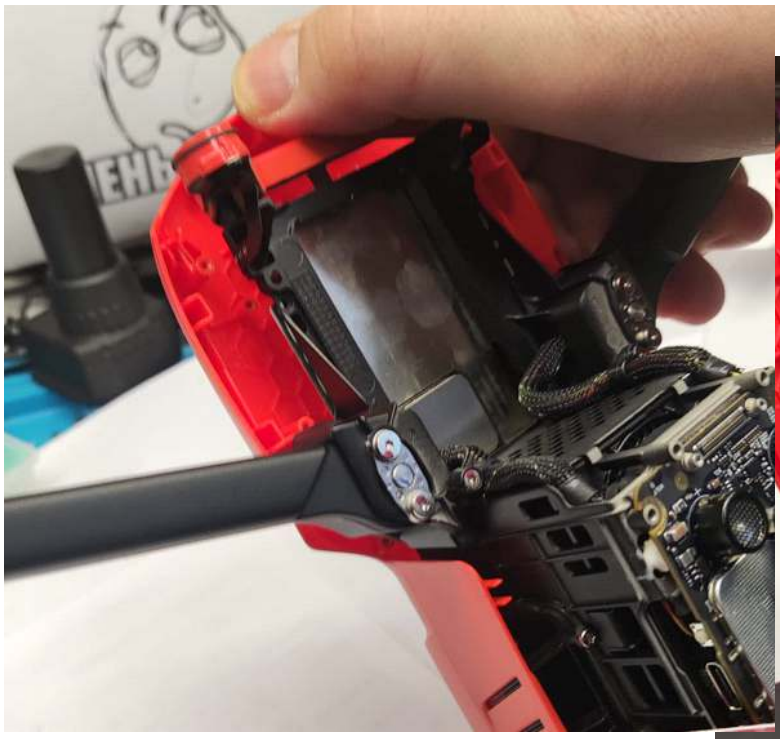
If every listed above tapping screws had been removed, insert two spatulas under the each side of the drone's jacket until they stop. NOTE: you can use standard plastic cards as shown in pic. With a spudger we force out the plastic body's jacket so as it slips off from the viewfinders of the side-mounted sensors

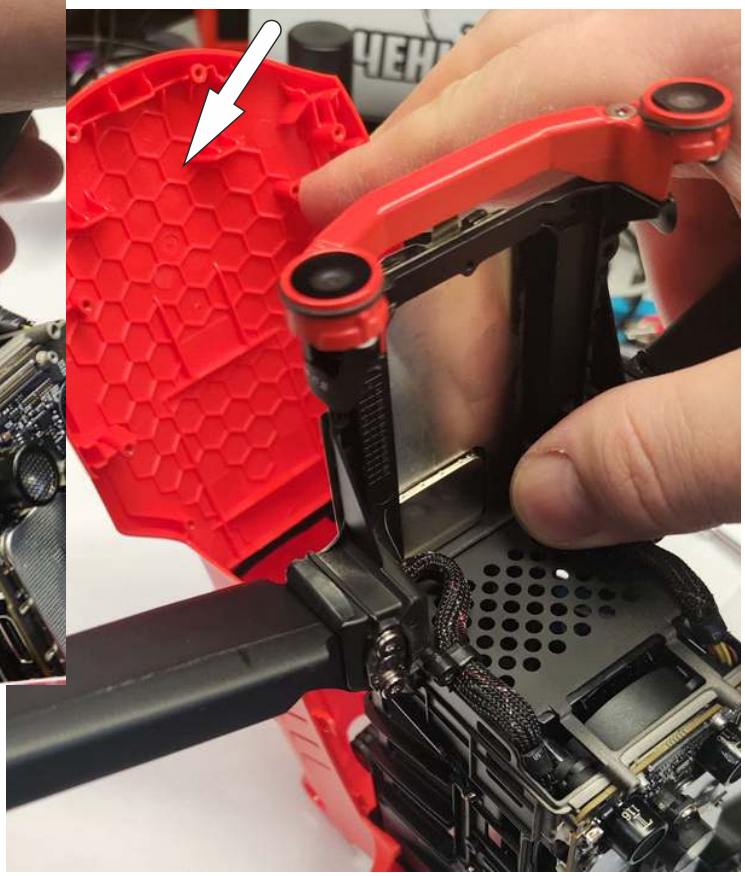


With a spudger we force out the plastic body's jacket so as it slips off from the viewfinders of the side-mounted sensors



Gingerly detach the top of a body as shown in pic.





Drill a Ø 3mm through bore at the point marked in pic





Detach with a hex driver the underframe of a data logger

Fair the hole you can see in detached part of logger to the bore that have been drilled in a body and then align logger according to longitudinal and transverse drone's axes as shown in pic



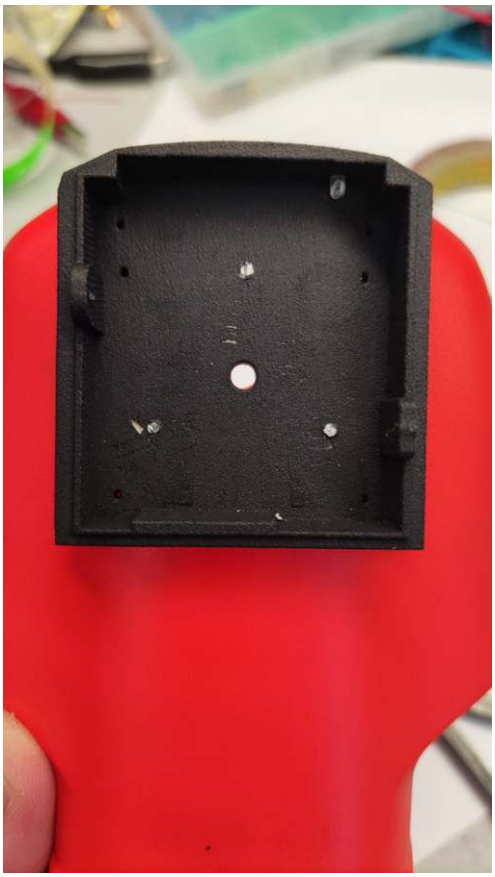


Drill two Ø 1.5 mm through bores from the side of the logger's underframe to fix it by the self-attack screws.



Drill a Ø 1.5 mm trough bore from the inside of the body panel and then twist in from inside all three screws until they stop (see the pic). If the screw's nib points protrude outwards, cut them with a sidecutter.





Stage 2

Soldering the data and power cables for data logger

Tools you will need:

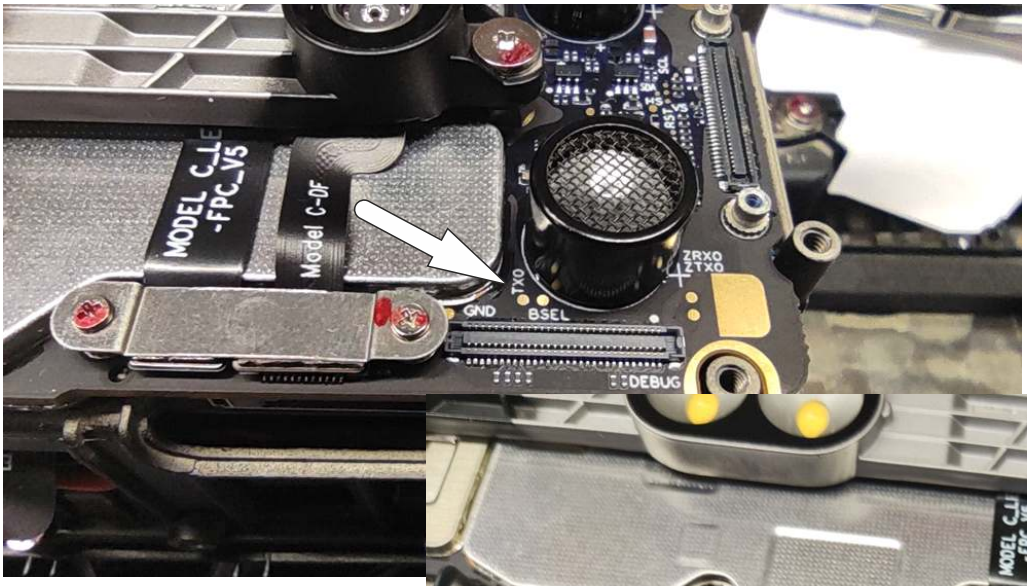
- Soldering station
- Heat gun
- Sidecutter
- Stripper for wires
- Screwdriver Torx 6T

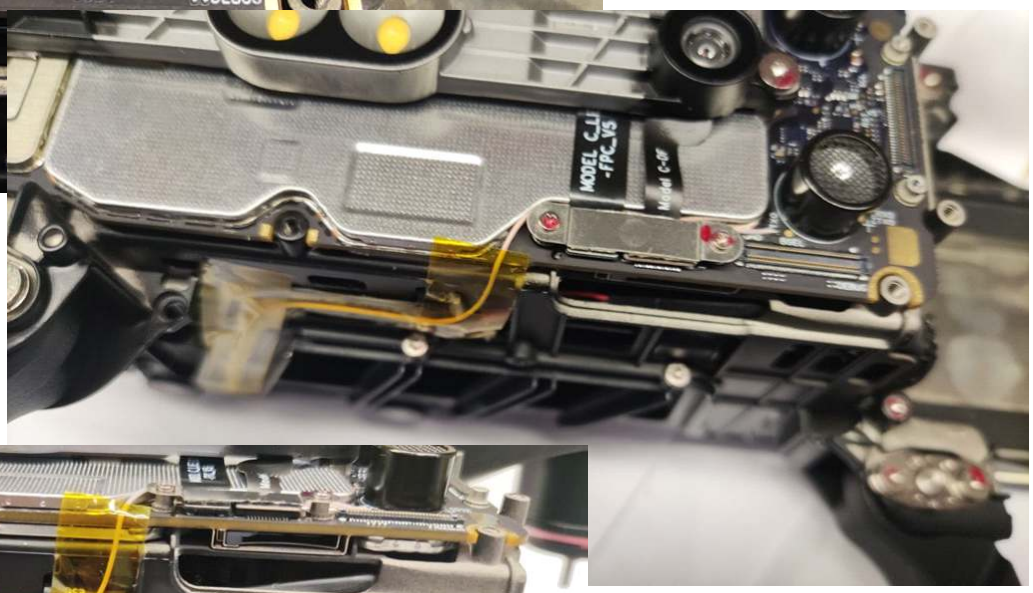
Expendable material:

- Teflon-coated cable 0.12 sq.mm. (pwer)
- Teflon-coated cable 0.03 sq.mm. (data)
- Solder alloy Sn63Pb37
- Solder flux gel (neutral, no-clean)
- Heat shrink tube Ø 1.5 mm
- Heat resistant scotch tape 8-11 mm wide
- Alcohol or petroleum-based solvent and cotton swabs to cleaning places for soldering

Step by step instruction

We solder teflon-coated cable 0.03 sq.mm to the TX0 contact and then lay it as shown in the pic

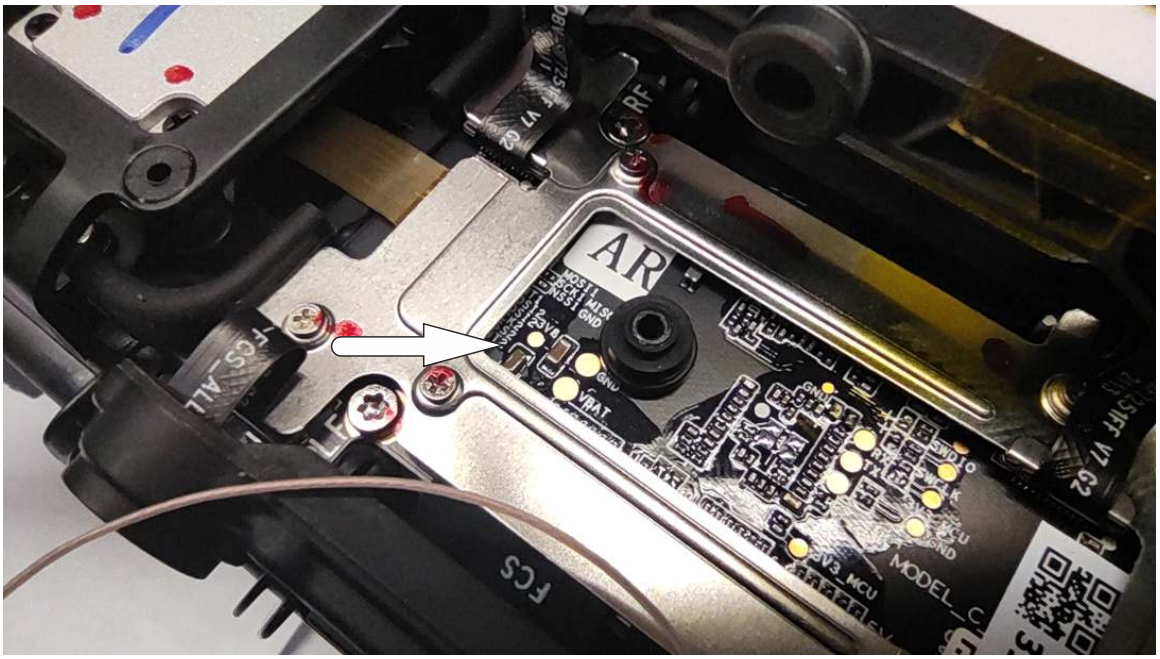




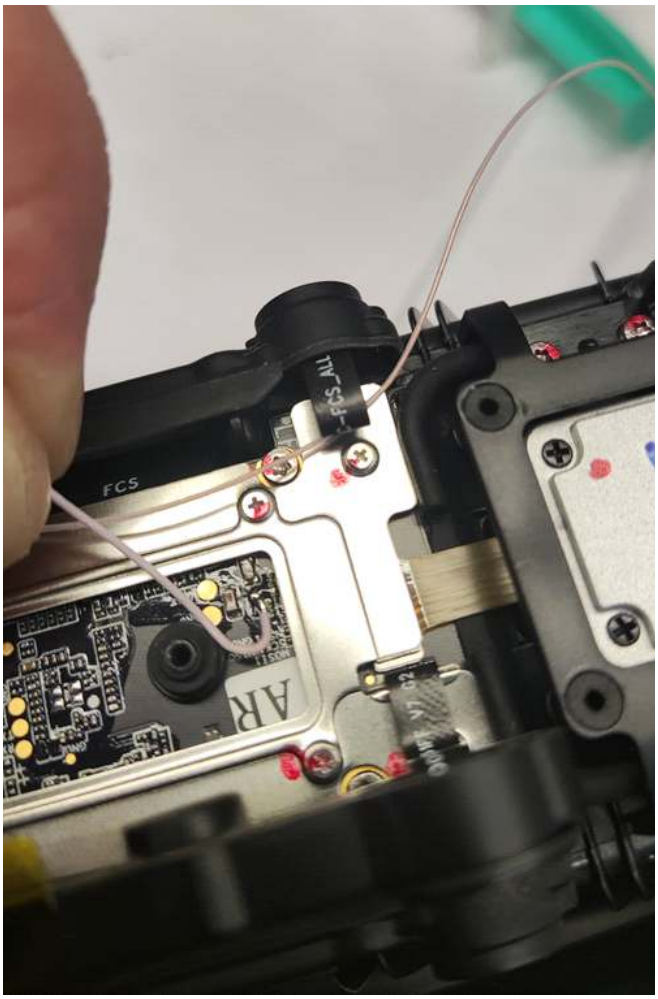




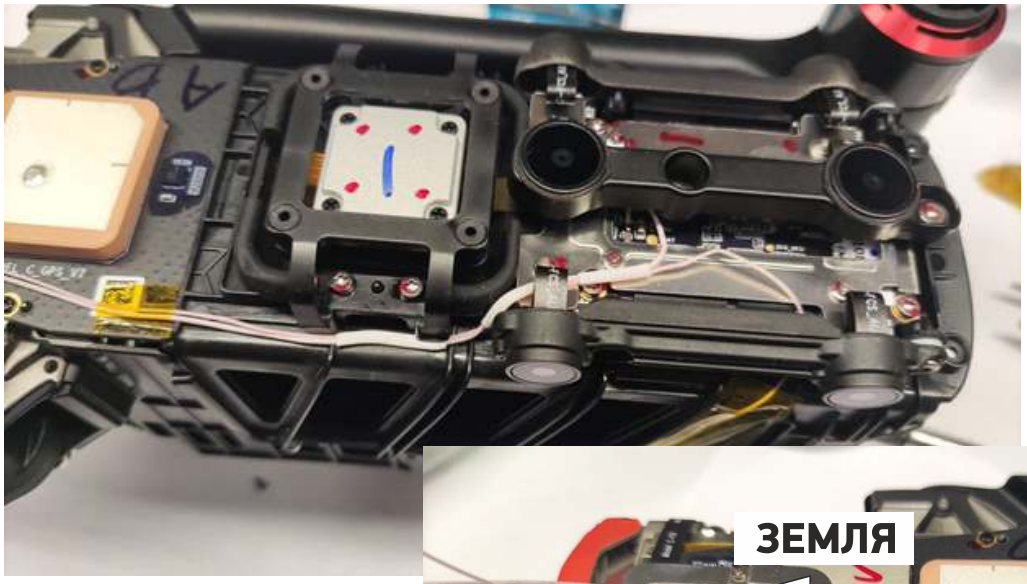
With a torx screwdriver 6T, unscrew some fixture elements for the visors of proximity transducer unit and then uninstall it

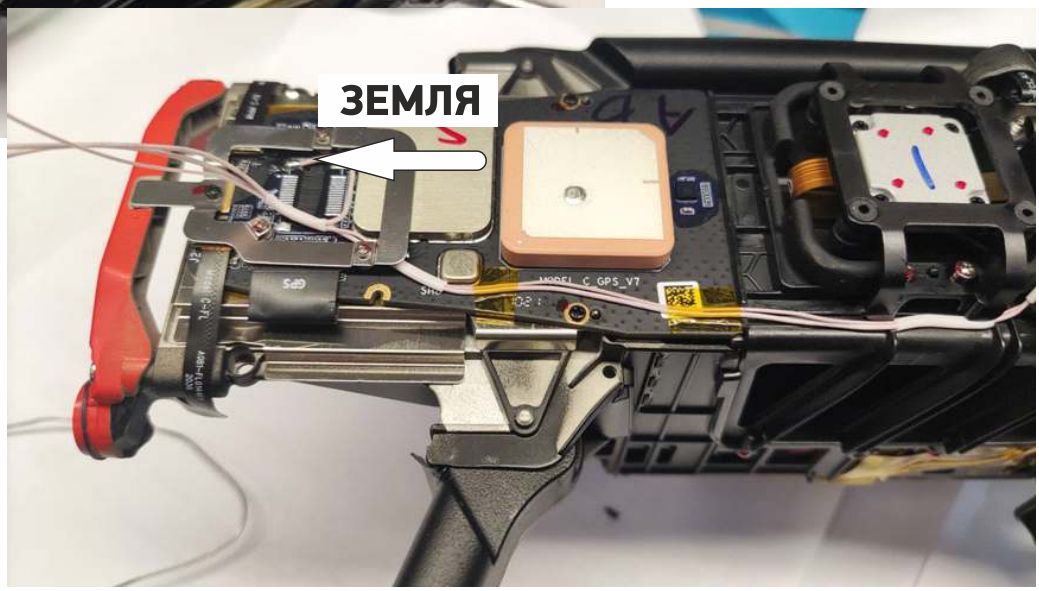


We solder teflon-coated cable 0.12 sq.mm to the 3V8 contact as shown in the pic



- Reset the visors unit to its proper location and fixe it by the its screws
- We lay the cables (see the pic.) hooping them with heat shrink tube





- Solder the wire to the earth contact as shown in pic above. We strongly recommend you to strip this wire ahead of time to distinguish it later
- We gather the wires in a bunch by means a heat shrink tube
- Feed a wires through a bore in body drilled earlier
- Install the top of a body to its proper location and push it until one's clicking position (make sure that the side sensorshave been fitted in their proper jacket's slots)

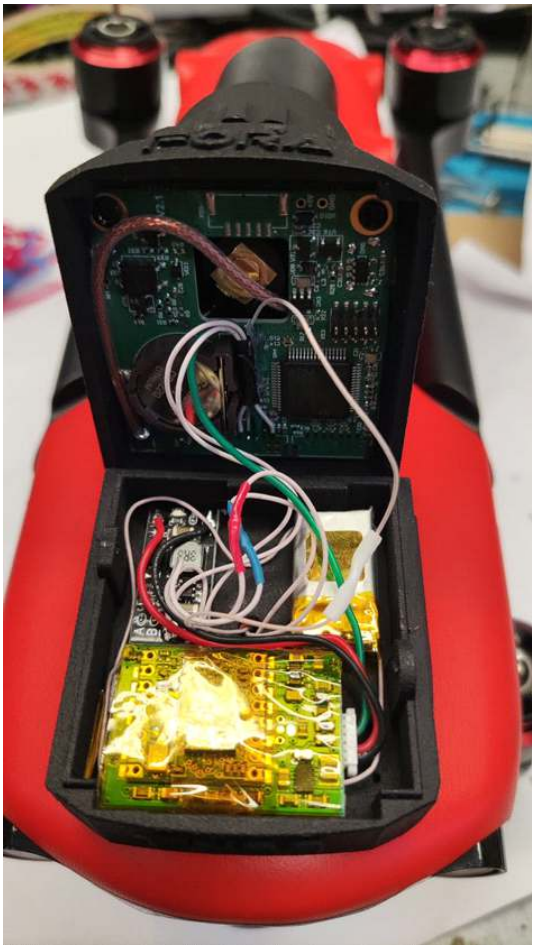


Stage 3

Quadcopter assembly and logger installatio

Tools you will need:

- Torx screwdriver 6T (usable rod's length 50 mm and Ø ≤ 3 mm)
- Torx screwdriver 6T (usable rod's length 70 mm and Ø ≤ 3 mm)
- Hex screwdriver 1.5 mm
- Cross-point screwdriver 00x50
- Sidecutter
- Soldering station
- Heat gun
- Stripper for wires



Expendable material:

- Solder alloy Sn63Pb37
- Solder flux gel (neutral, no-clean)
- Heat shrink tube Ø 1.5 mm

Step by step instruction

1. Assemble the device in reverse sequence
2. We solder the wires to logger according marking (in the pic you can see the version of the data logger with a tracking tag). Note: isolate the soldering end of wire with a heat shrink tube
3. Fix the data logger unit to its underframe with the 1.5 mm hex screwdriver and some self-attack screws

