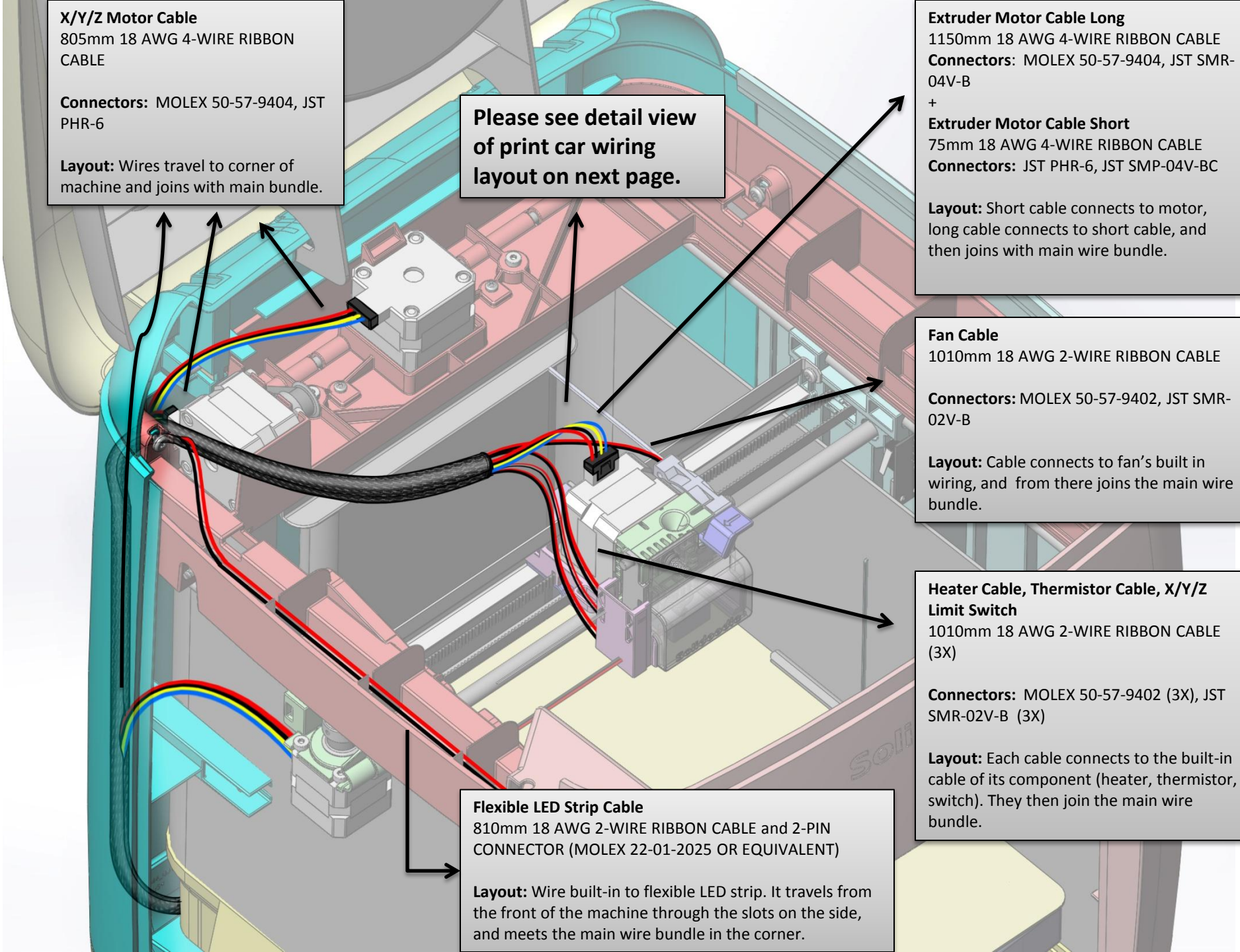
Solidoodle 5 Wiring Breakdown



X/Y/Z Motor Cable
805mm 18 AWG 4-WIRE RIBBON CABLE

Connectors: MOLEX 50-57-9404, JST PHR-6

Layout: Wires travel to corner of machine and joins with main bundle.

Please see detail view of print car wiring layout on next page.

Extruder Motor Cable Long
1150mm 18 AWG 4-WIRE RIBBON CABLE
Connectors: MOLEX 50-57-9404, JST SMR-04V-B
+
Extruder Motor Cable Short
75mm 18 AWG 4-WIRE RIBBON CABLE
Connectors: JST PHR-6, JST SMP-04V-BC

Layout: Short cable connects to motor, long cable connects to short cable, and then joins with main wire bundle.

Fan Cable
1010mm 18 AWG 2-WIRE RIBBON CABLE

Connectors: MOLEX 50-57-9402, JST SMR-02V-B

Layout: Cable connects to fan's built in wiring, and from there joins the main wire bundle.

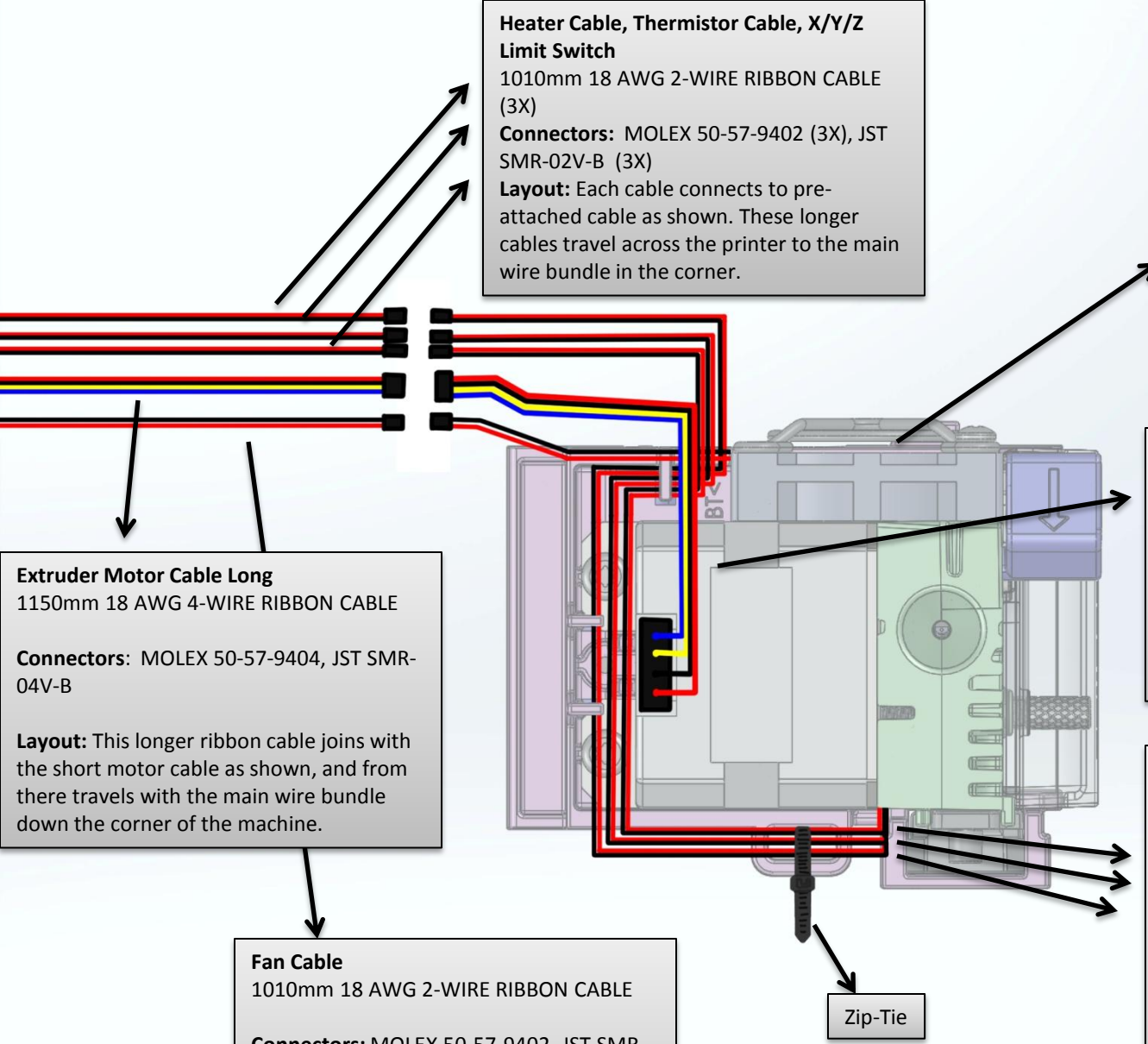
Heater Cable, Thermistor Cable, X/Y/Z Limit Switch
1010mm 18 AWG 2-WIRE RIBBON CABLE (3X)

Connectors: MOLEX 50-57-9402 (3X), JST SMR-02V-B (3X)

Layout: Each cable connects to the built-in cable of its component (heater, thermistor, switch). They then join the main wire bundle.

Flexible LED Strip Cable
810mm 18 AWG 2-WIRE RIBBON CABLE and 2-PIN CONNECTOR (MOLEX 22-01-2025 OR EQUIVALENT)

Layout: Wire built-in to flexible LED strip. It travels from the front of the machine through the slots on the side, and meets the main wire bundle in the corner.



Heater Cable, Thermistor Cable, X/Y/Z Limit Switch
1010mm 18 AWG 2-WIRE RIBBON CABLE (3X)
Connectors: MOLEX 50-57-9402 (3X), JST SMR-02V-B (3X)
Layout: Each cable connects to pre-attached cable as shown. These longer cables travel across the printer to the main wire bundle in the corner.

40MM FAN WITH BUILT-IN 125mm 18 AWG 2-WIRE RIBBON CABLE AND 2-PIN CONNECTOR (JST SMP-02V-BC OR EQUIVALENT)

Layout: Fan has cable already built-in. This cable joins with the other cables as shown.

Extruder Motor Cable Short
75mm 18 AWG 4-WIRE RIBBON CABLE

Connectors: JST PHR-6, JST SMP-04V-BC

Layout: Short cable connects to motor and routes down the right side, joining with the other print car cables near the back corner.

Extruder Motor Cable Long
1150mm 18 AWG 4-WIRE RIBBON CABLE

Connectors: MOLEX 50-57-9404, JST SMR-04V-B

Layout: This longer ribbon cable joins with the short motor cable as shown, and from there travels with the main wire bundle down the corner of the machine.

Heater Cable, Thermistor Cable, Limit Switch
WIRE CUT TO 125mm WITH ATTACHED 2-PIN CONNECTOR (JST SMP-02V-BC OR EQUIVALENT)

Layout: These three cables, which are each pre-attached to the three components, exit the lower area of the print car and are zip tied to the loop shown above. From there, they travel around the motor underneath the hooks on the print car, and end up on the opposite side where they are bundled together with the motor and fan cables.

Fan Cable
1010mm 18 AWG 2-WIRE RIBBON CABLE

Connectors: MOLEX 50-57-9402, JST SMR-02V-B

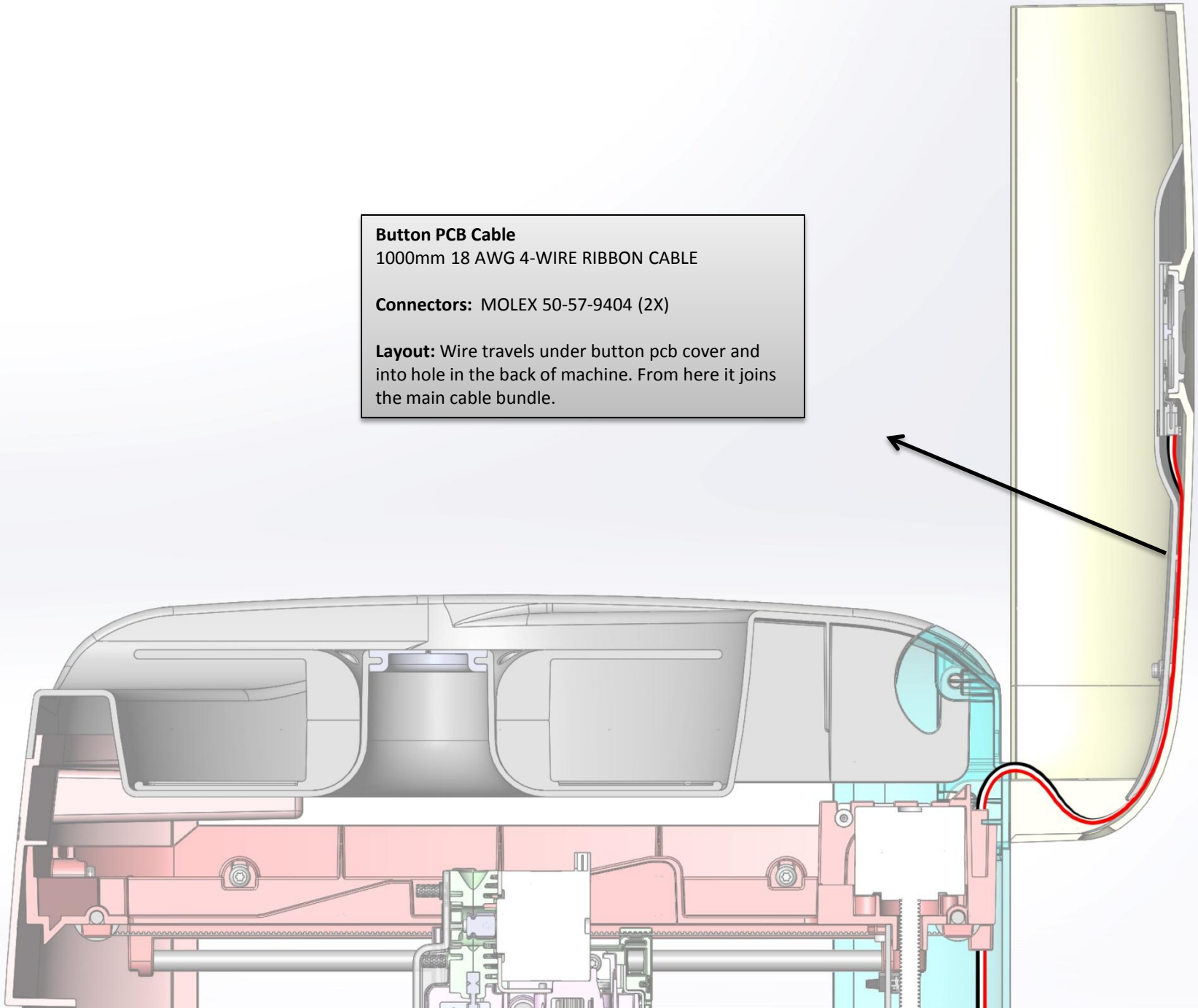
Layout: Cable connects to fan's built in wiring, and from there joins the main wire bundle.

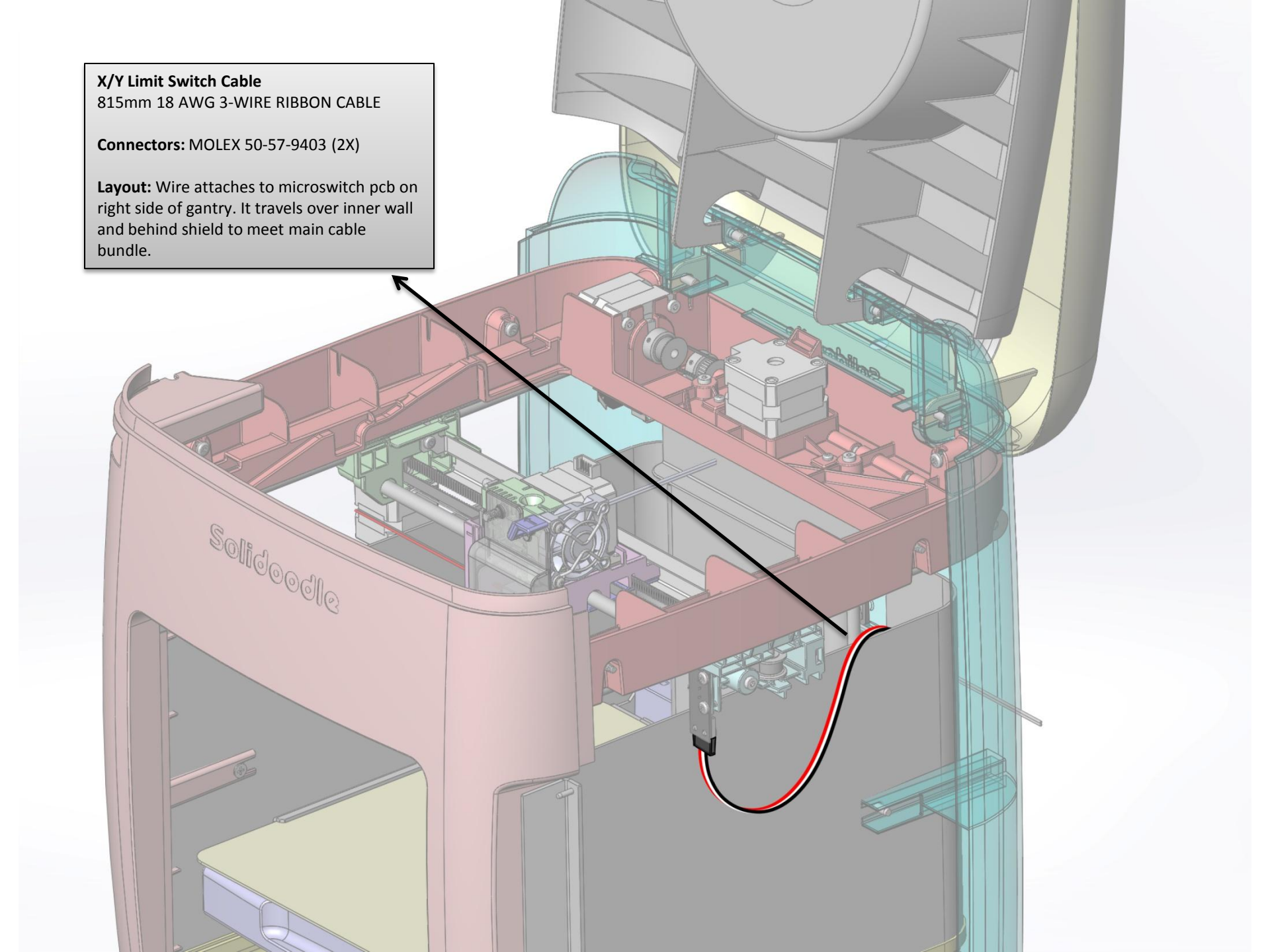
Zip-Tie

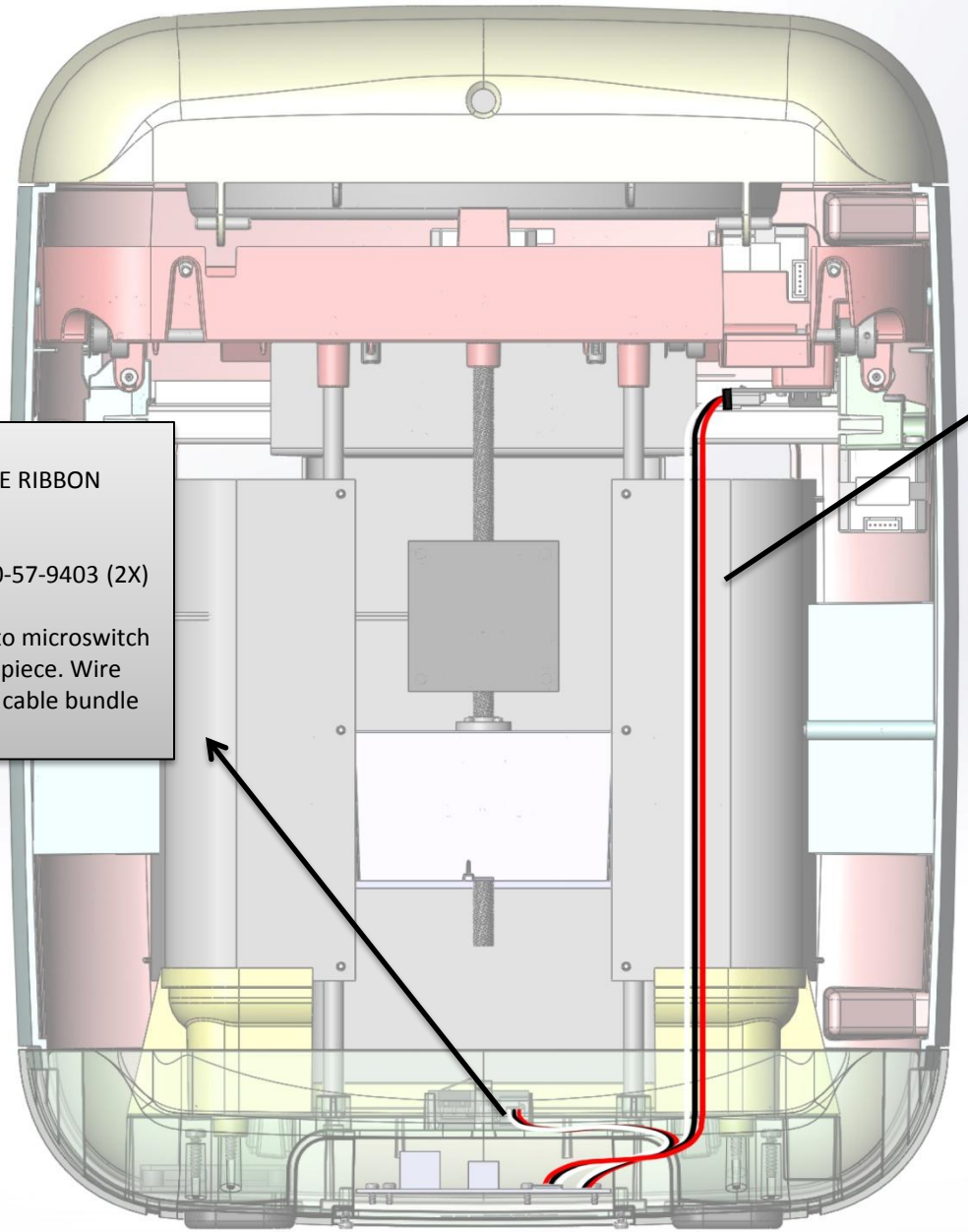
Button PCB Cable
1000mm 18 AWG 4-WIRE RIBBON CABLE

Connectors: MOLEX 50-57-9404 (2X)

Layout: Wire travels under button pcb cover and into hole in the back of machine. From here it joins the main cable bundle.




X/Y Limit Switch Cable
815mm 18 AWG 3-WIRE RIBBON CABLE
Connectors: MOLEX 50-57-9403 (2X)
Layout: Wire attaches to microswitch pcb on right side of gantry. It travels over inner wall and behind shield to meet main cable bundle.
Solidoodle



Z Limit Switch Cable
280mm 18 AWG 3-WIRE RIBBON CABLE

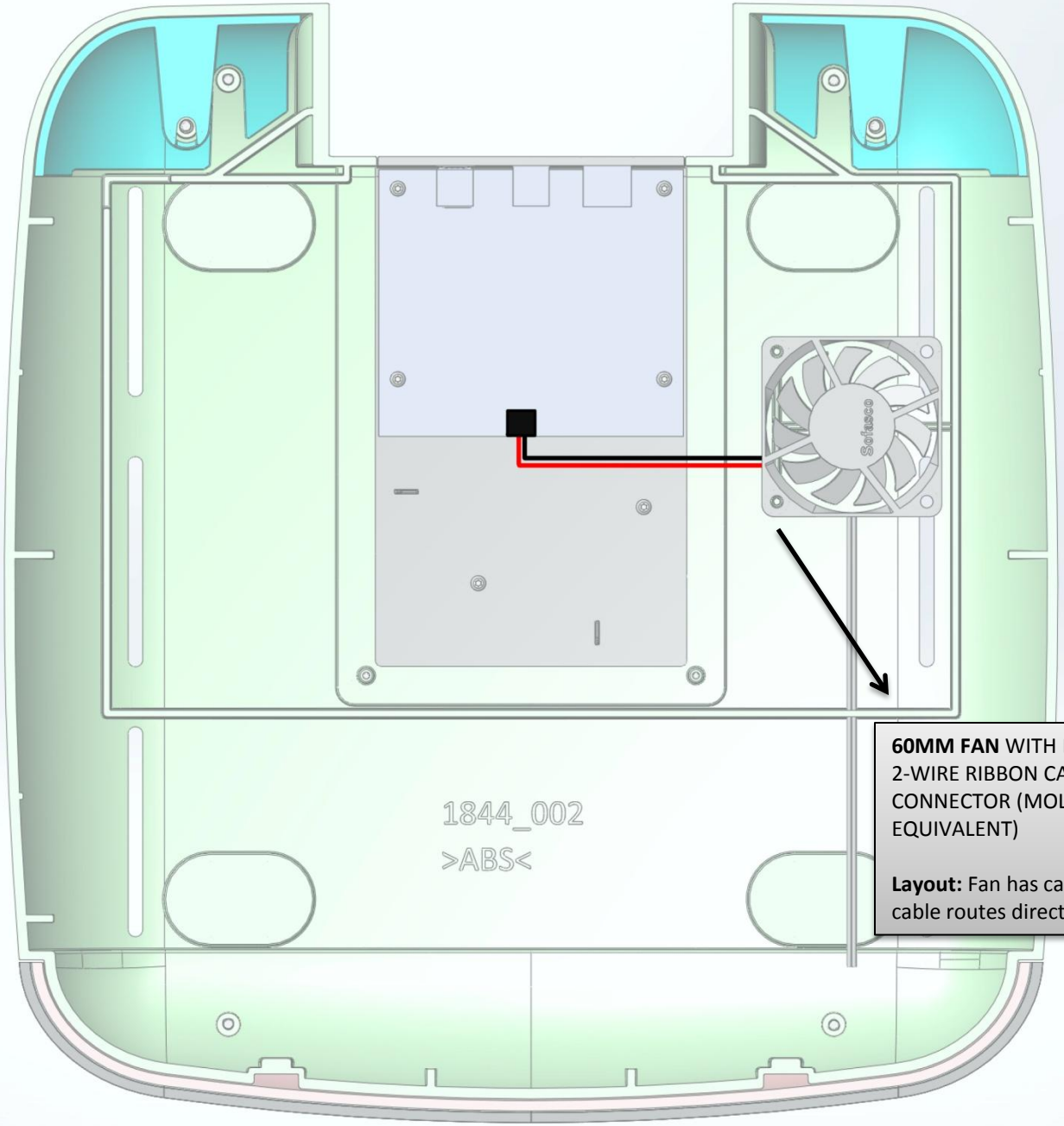
Connectors: MOLEX 50-57-9403 (2X)

Layout: Wire attaches to microswitch pcb located on bottom piece. Wire travels directly to main cable bundle in corner.

X/Y Limit Switch Cable
815mm 18 AWG 3-WIRE RIBBON CABLE

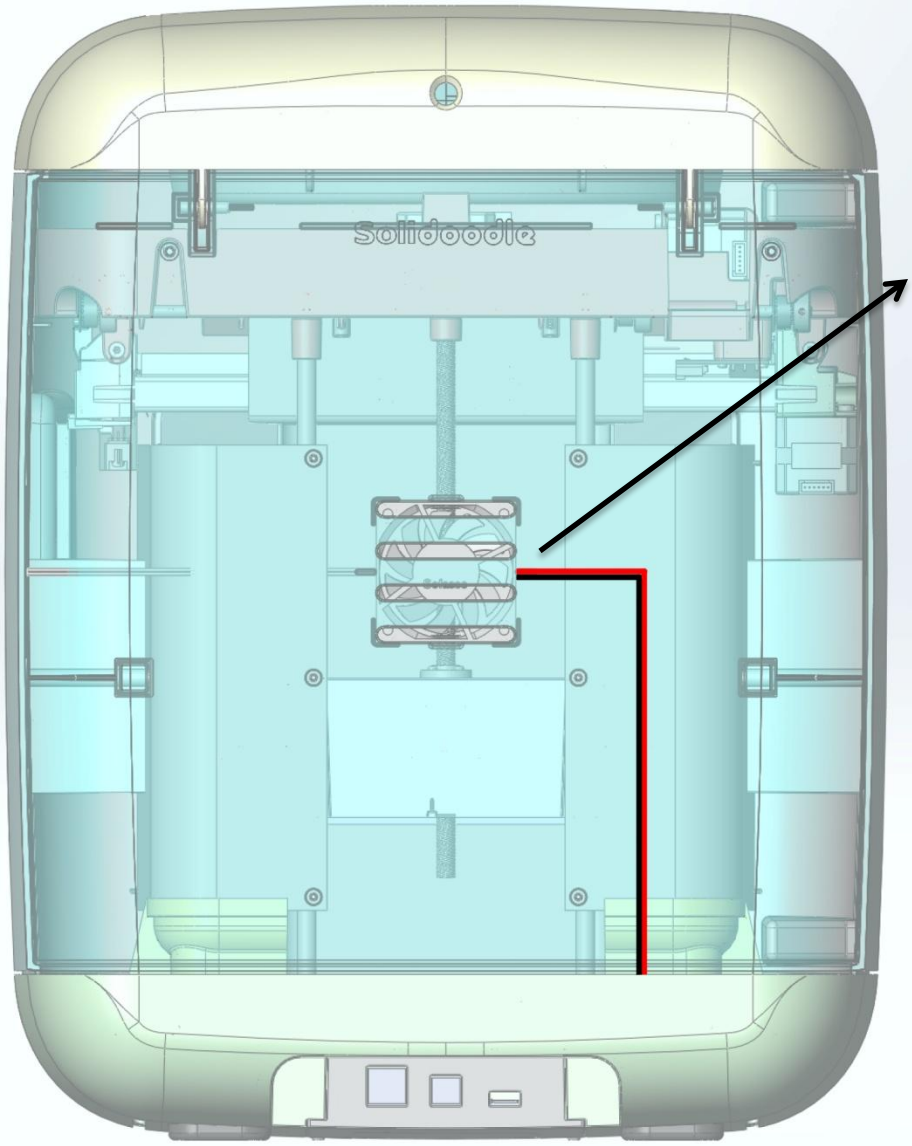
Connectors: MOLEX 50-57-9403 (2X)

Layout: Wire attaches to microswitch pcb on underside of gantry, and travels down behind inner wall into main cable bundle.



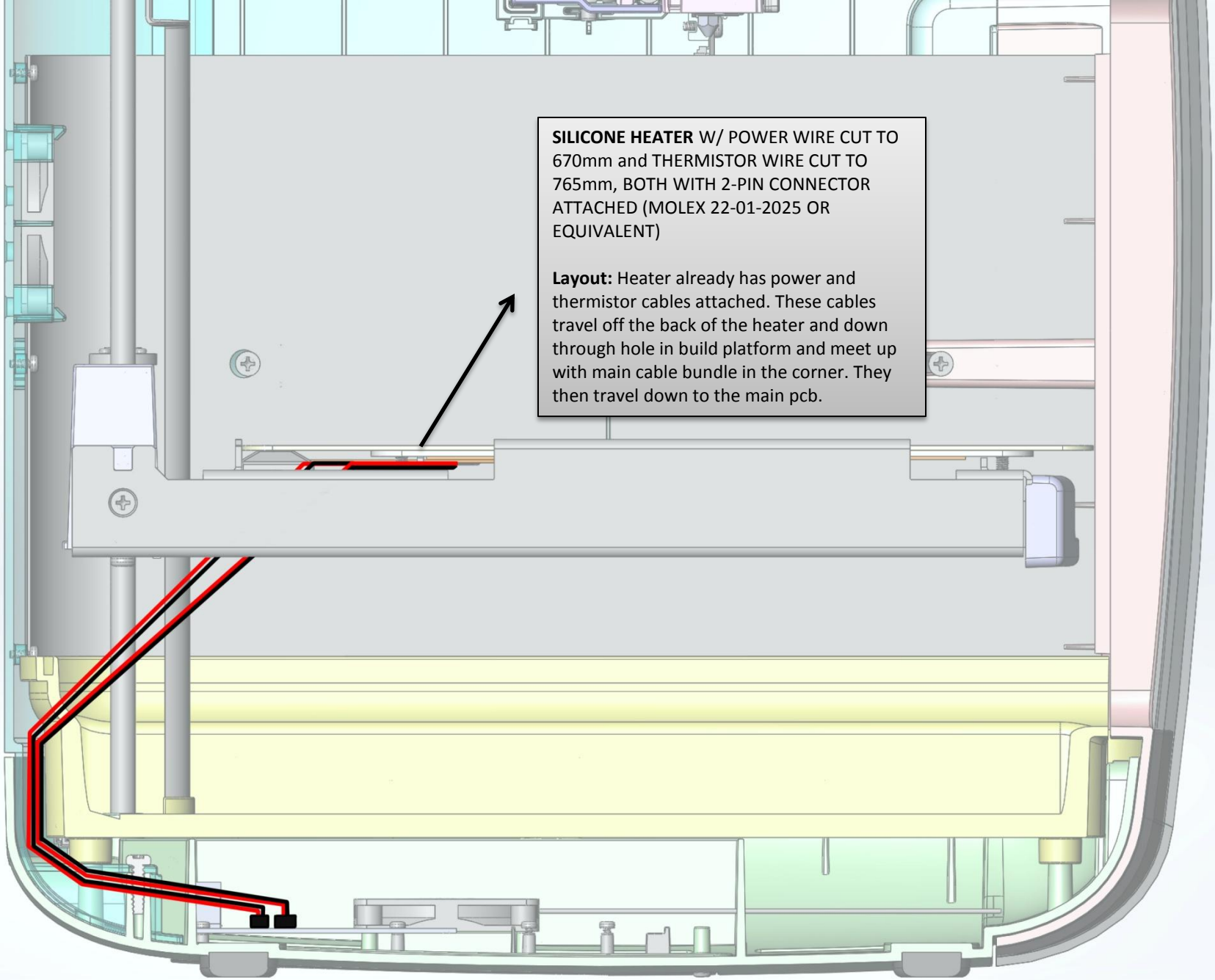
60MM FAN WITH BUILT-IN 150mm 18 AWG 2-WIRE RIBBON CABLE AND 2-PIN CONNECTOR (MOLEX 22-01-2025 OR EQUIVALENT)

Layout: Fan has cable already built-in. This cable routes directly into main PCB.



60MM FAN WITH BUILT-IN 150mm 18 AWG 2-WIRE RIBBON CABLE AND 2-PIN CONNECTOR (MOLEX 22-01-2025 OR EQUIVALENT)

Layout: Fan has cable already built-in. This cable routes to the left of the machine into the main cable bundle, and then travels down to the main pcb.


SILICONE HEATER W/ POWER WIRE CUT TO 670mm and THERMISTOR WIRE CUT TO 765mm, BOTH WITH 2-PIN CONNECTOR ATTACHED (MOLEX 22-01-2025 OR EQUIVALENT)
Layout: Heater already has power and thermistor cables attached. These cables travel off the back of the heater and down through hole in build platform and meet up with main cable bundle in the corner. They then travel down to the main pcb.