Reusing the ROV Control Box

Disassemble the ROV Control Box

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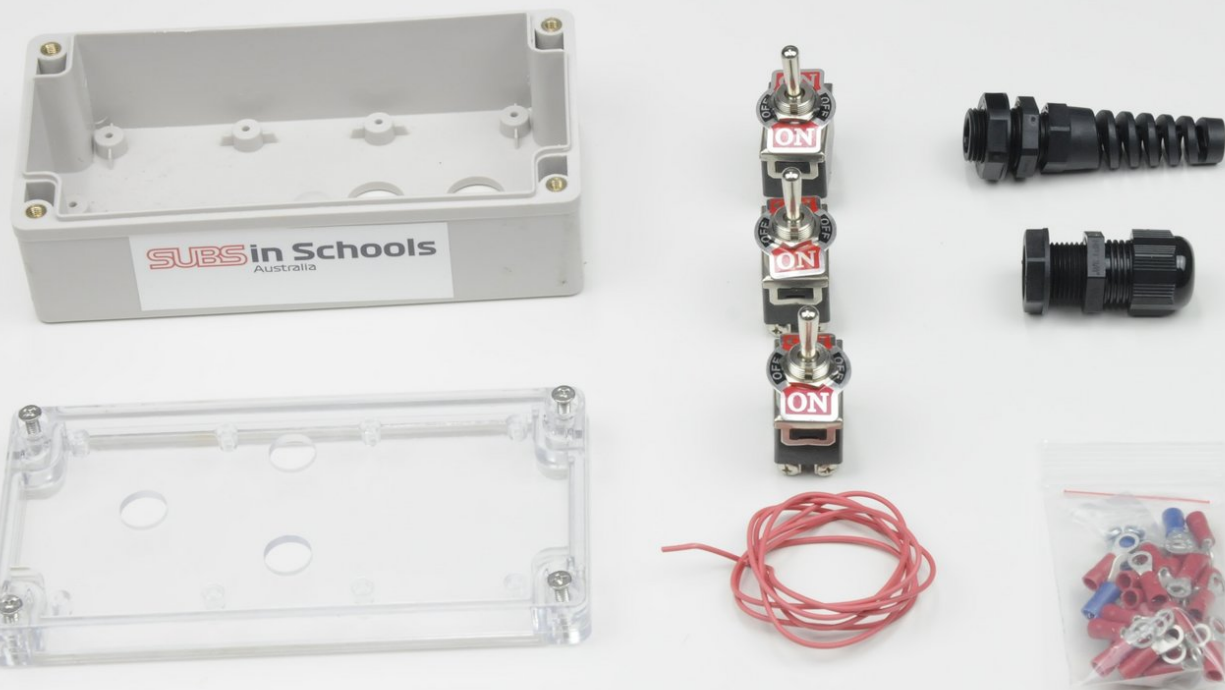
INTRODUCTION

The Development Class kit was designed to be a reusable learning tool year after year. The control box is easy to disassemble to its basic components. Only a few components have to be discarded, the wires and terminal ring connectors on the back of the switches and tether. A Development Class replacement kit replaces the discarded wire and terminal ring connectors, allowing the majority of the kit to be re-used in subsequent semesters or years.
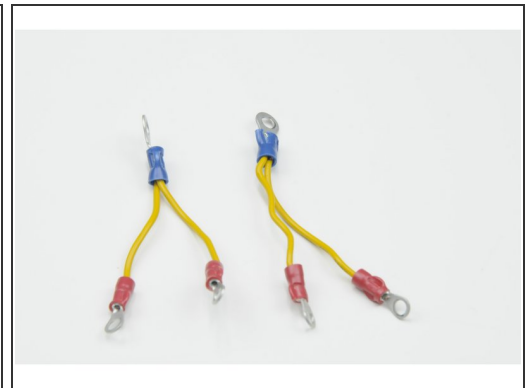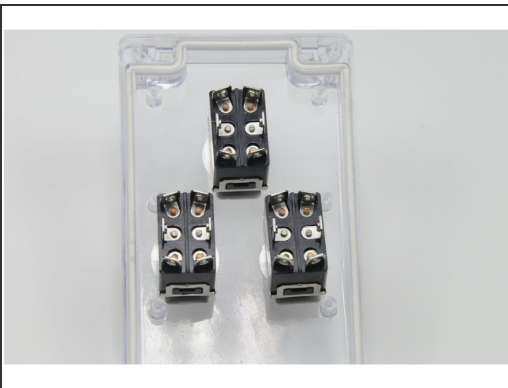
TOOLS:

- Pliers (1)
- Screwdriver (1)

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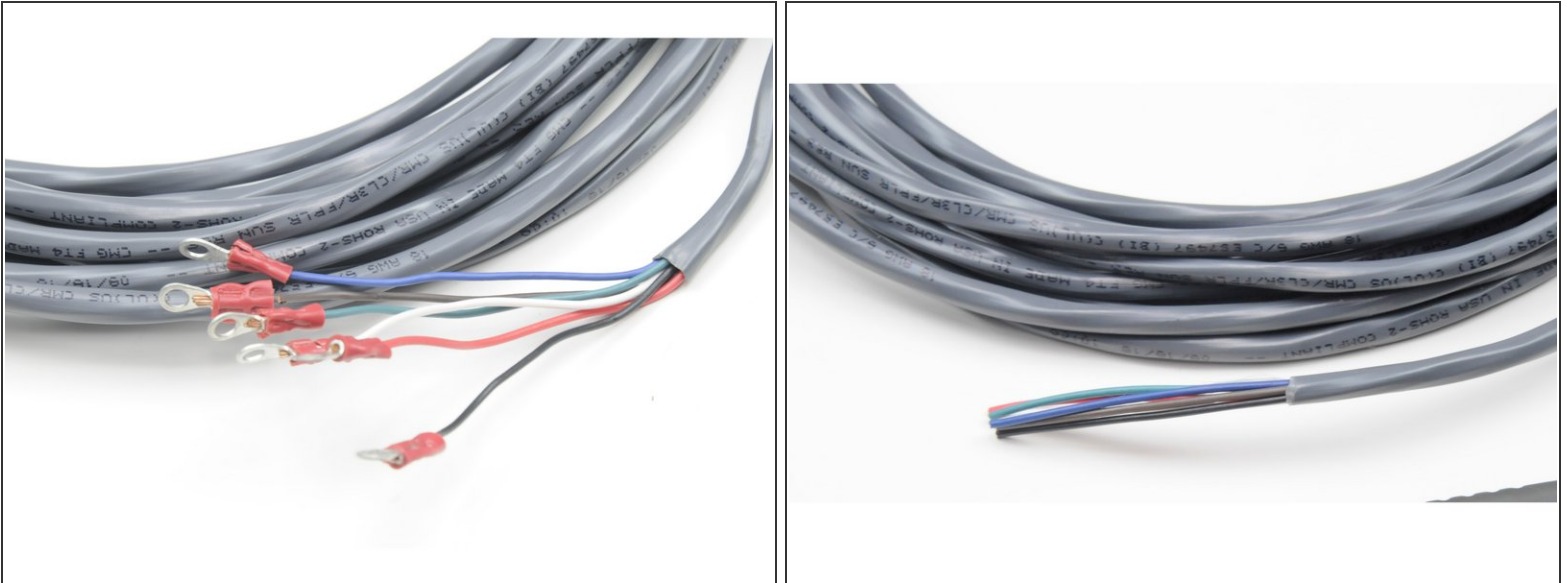
Step 1 — ROV Control Box

- Remove the six screws from the back of each of the three switches (18 screws total). Be very careful not to lose any of these small screws, as they are important.

Step 2

- Remove all the wires from the back of each switch. We recommend saving a few of the wires that make the X on the back of the switch and a few of power jumper wires.

- If too many mistakes are made in crimping the wires, these pre-made X's and jumpers can serve as back up.

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Step 3

- Cut the six terminal ring connectors from the end of the tether. Cut as closely to the terminal ring connector as possible to preserve the length of the tether.

⚠ Note that with careful, close cutting, only 1 cm to 2 cm of tether will be lost with each re-use.

- Discard the cut terminal ends.

Step 4

- Cut the two terminal ring connectors from the end of the power wires. Again, cut as closely to the terminal ring connector as possible to minimize loss of wire.

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Step 5

- The Development Class control box refresh kit includes new 100 cm (40 inches) of 18-gauge wire to construct the X's and power jumpers on the back of each switch, and 34 new terminal ring connectors (28 red, 6 blue) to crimp on the end of the wires.

- These replacement parts can also be purchased at most hardware stores.

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