Shorting Controls When Soldering TIP

**What:** Team damaged their controls by shorting wires while attempting to solder connections with the power still on.

**Who:** Team from TN Regional

**ROV System:** Controls

**Competition Class:** Scout, Navigator, Ranger, and Explorer

**When:** 2018 Competition Season

**Plus:** none

**Minus:** Safety hazard, damaged controls

**MATE Insights:** When soldering wires the power in those circuits should **ALWAYS** be off. In general power should always be turned off to all exposed circuits. This protects the circuits from accidental shorts from tools, wires, solder and body parts. Care, diligence, and awareness are required for trouble shooting live circuits with meters to avoid shorts. Smoke from some burnt electronic components can be harmful and the work areas should be cleared of any smoke before reengaging with the work item.

**References:** None

**Search Words:** N/A

**Fun Facts:** “Letting the smoke out” or “the smoke of shame” are funny phrases describing the smoke that flutters up from shorting circuits and burning up electronic components.

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