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TQS Require Without Diodes

Rewire POTs (FIGURE #1)

Remove the bare cheater wire on the RANGE pot/switch.
Move the Blue/Yellow wires from the left side of the RANGE pot to the left side of the RANGE SwitchMove the brown jumper wire from the left side of the RANGE switch to the left side of the RANGE pot

FIGURE #1 MOVE YELLOW AND BLUE (RED LINES) UP TO PIN
MOVE BROWN (BLUE LINES) DOWN TO PIN
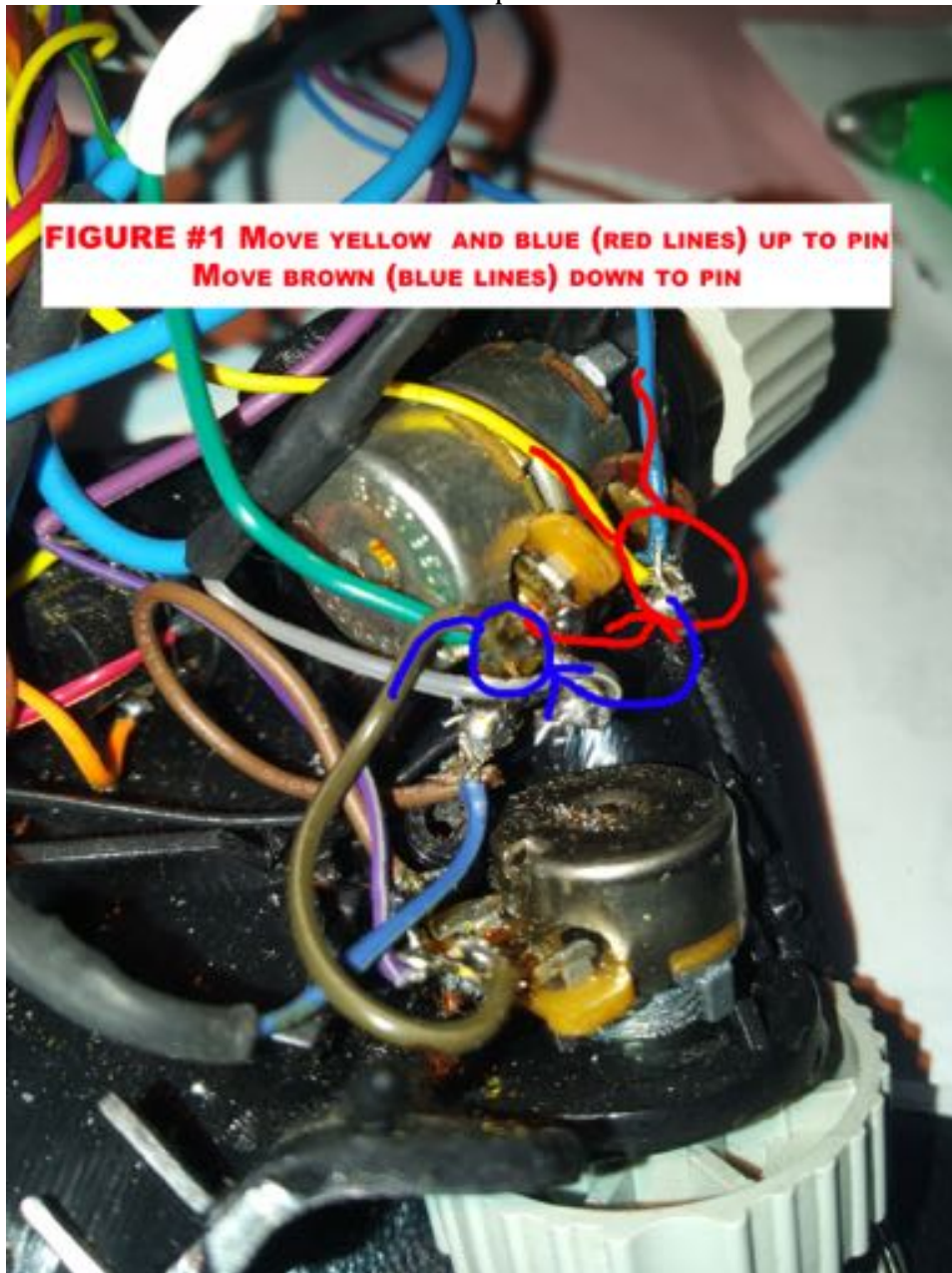
Swap VCC/GND Wiring (FIGURE #2)

Add a single wire from +5V to the left side of the RANGE pot. Blue 6 becomes the Ground (already in place) The Brown wires will then pass +5v and Gnd to the ANT pot.

FIGURE #2 ADD 5V WIRE (TIED TO GREEN) TO SAME PIN AS BROWN
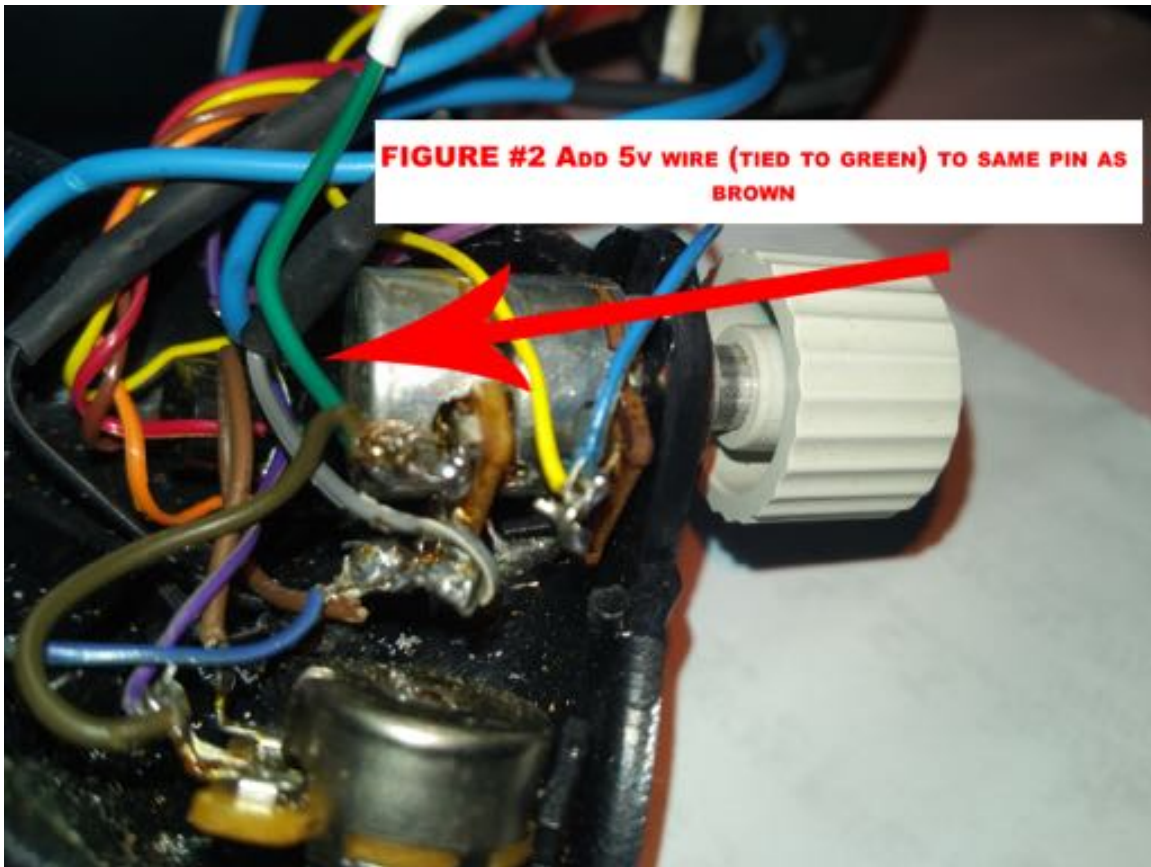
Pinouts for Wires on Harness:

Cable Pin connections before removing end are in this orientation, wire color:
==(REORDERED TO MATCH MY GRAPHIC – ORIENT CABLE SO WHITE/BLACK ON LOWER HALF TO FOLLOW)==

14 Comm Up – Yellow
13 Comm Down - Orange
12 Comm Right - Red
11 Comm Left - Brown
10 Range knob push switch - Black
9 Speedbrake Forward - White
8 RANGE pot wiper (AXIS) - Gray
7 ANT pot wiper (AXIS) – Violet
6 Wire to RANGE pot right side - Blue
5 Nub Switch near Cursor Control - Green
4 Return Line for Switches - Yellow
3 Dogfight Aft - Orange
2 Speedbrake Aft - Red
1 Dogfight Forward - Brown

TQS WIRING

Sparkfun Pro-Micro pinout for MMJoy2:

Pin 4 (YELLOW)
Pin 6 (ORANGE)
Pin 3 (RED)
Pin 9 (BROWN)
Pin 10 (BLACK)
Pin 15 (WHITE)
Pin A2 (GRAY)
Pin A1 (VIOLET)
Pin GND (BLUE)
Pin VCC/+5v (GREEN)
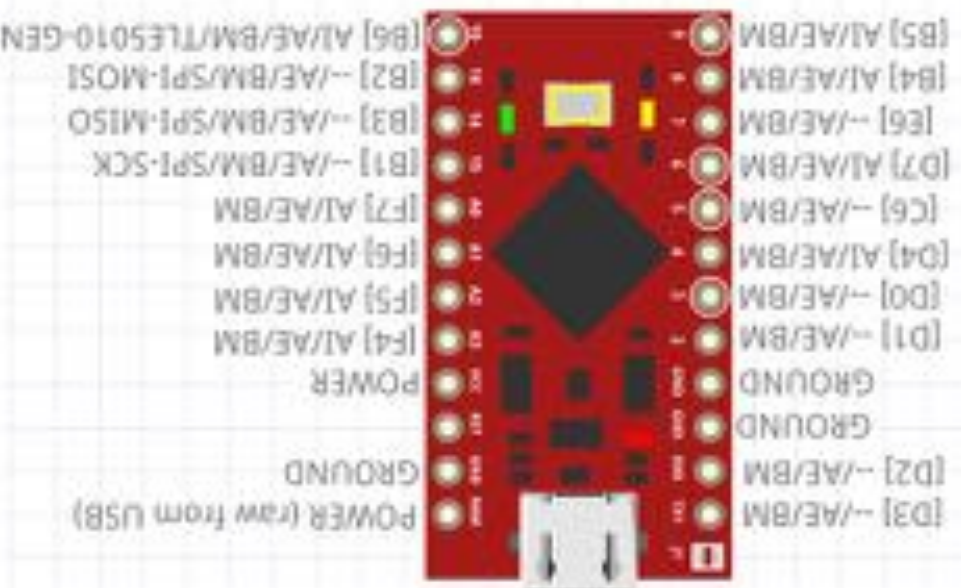Pin 2 (...)
Pin 8 (RED)
Pin 16 (BROWN)

Where 'TXX] AI/AE/BM":
[XX] - MCU ATmega32u4 pin name
AI - available for Axis Internal ADC
AE - available for Axis External ADC (SPI)
BM - available for Button Matrix

[B6] AI/AE/BM/TLE5010-GEN
[B2] --/AE/BM/SPI-MOSI
[B3] --/AE/BM/SPI-MISO
[B1] --/AE/BM/SPI-SCK
[F7] AI/AE/BM
[F6] AI/AE/BM
[F5] AI/AE/BM
[F4] AI/AE/BM
POWER
GROUND
POWER (raw from USB)

[B5] AI/AE/BM
[B4] AI/AE/BM
[E6] --/AE/BM
[D7] AI/AE/BM
[C6] --/AE/BM
[D4] AI/AE/BM
[D0] --/AE/BM
[D1] --/AE/BM
GROUND
GROUND
[D2] --/AE/BM
[D3] --/AE/BM

fritzing

MMJoy2 (c) mega_mozg.

Z-Axis

Purple –
Gray –
White -

Side Notes:

**Prior to doing this – I soldered the TAB on the bottom to 5v because this is a 3.3/5v board.