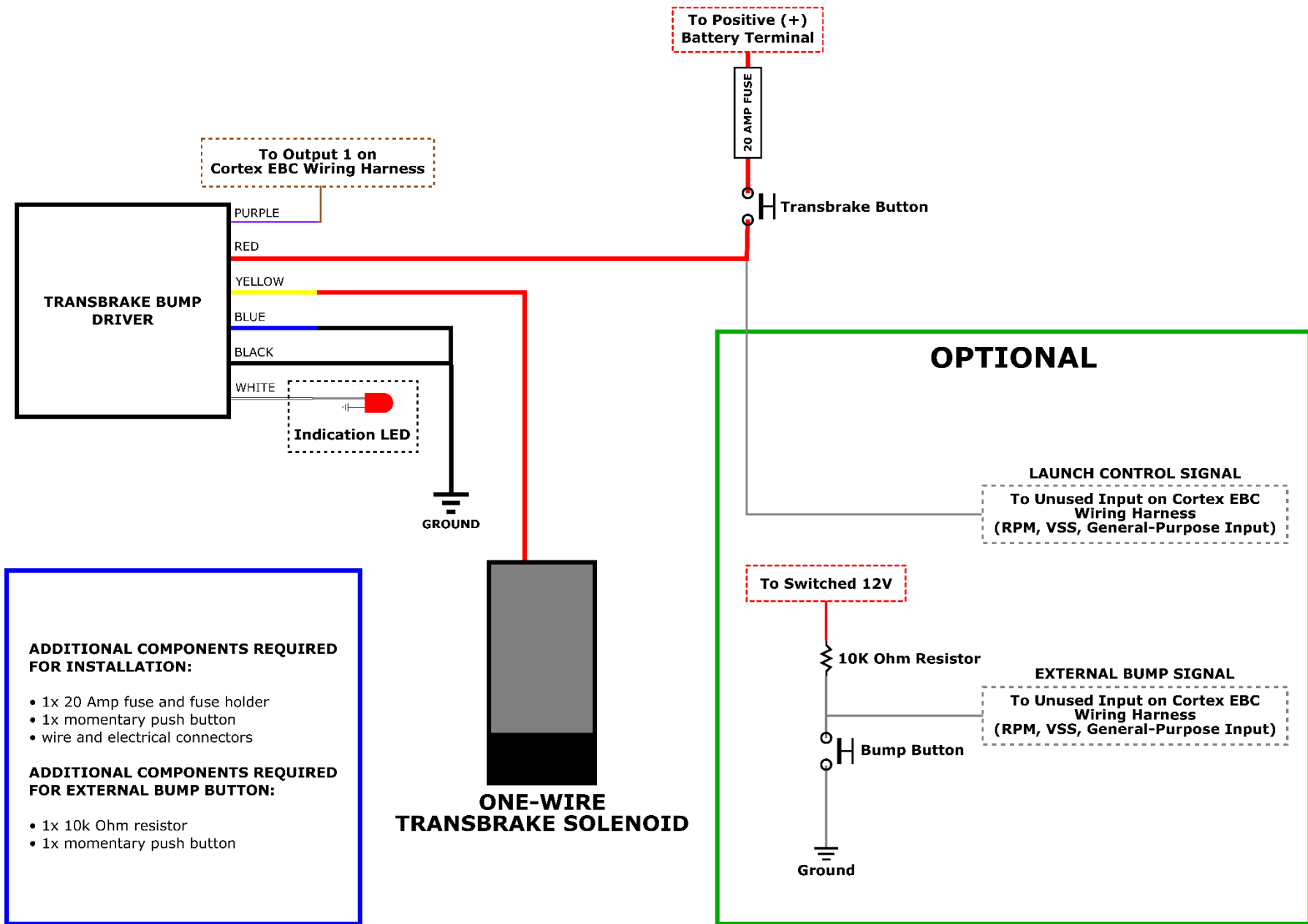# SIRHC LABS

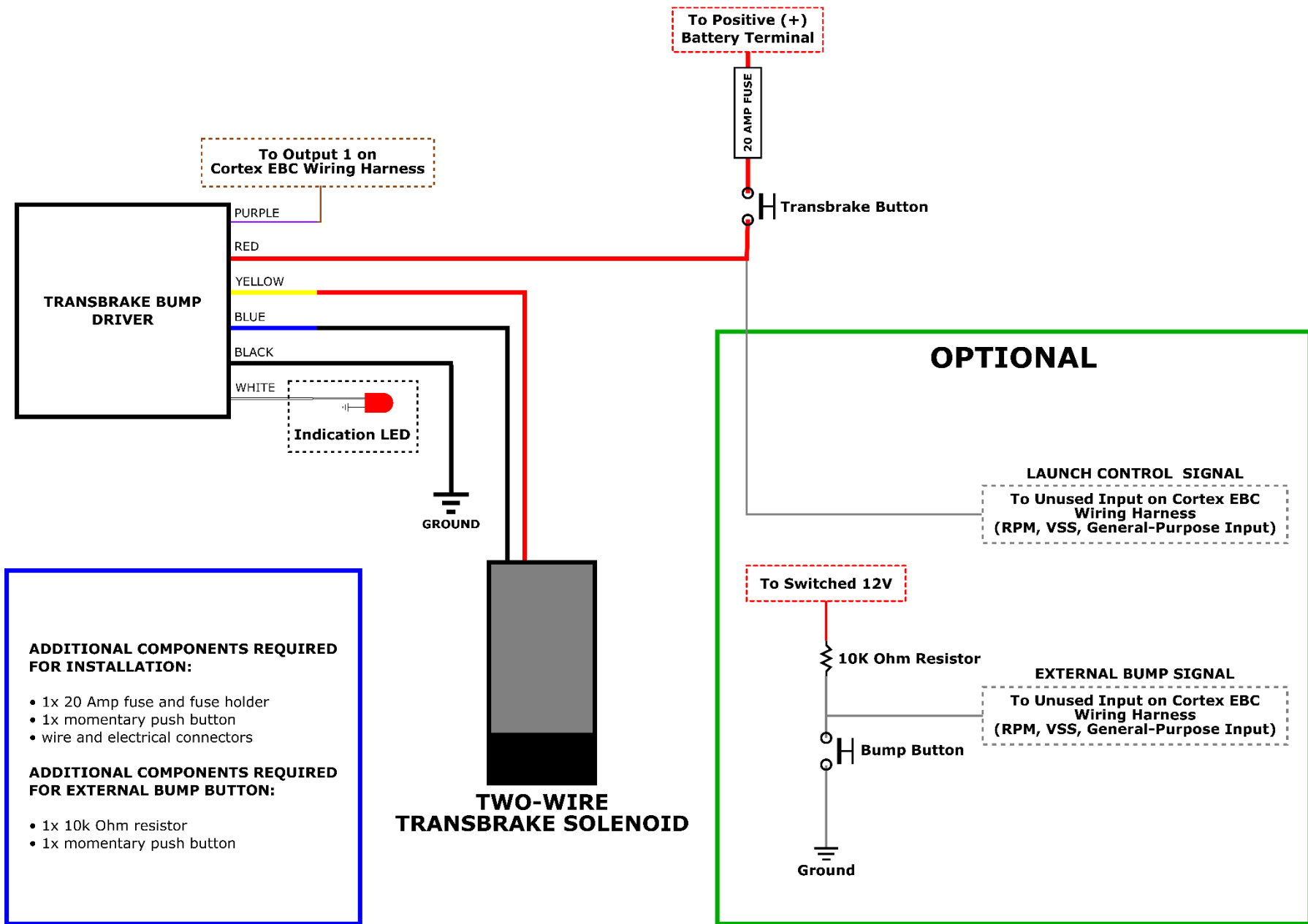## TRANSBRAKE BUMP DRIVER INSTALLATION INSTRUCTIONS
Rev 1.0.0

The Transbrake Bump Driver is required to utilize the Cortex EBC's transbrake bump control functionality. These drivers can be used with any one-wire or two-wire transbrake solenoid that draws 20 Amps or less. The Transbrake Bump Driver is specifically designed for transbrake bump control, and should not be used to provide PWM control for high-speed solenoids.

INCLUDED COMPONENTS
- Transbrake Bump Driver
- 12 V Diffused Indication LED (Red, Green Blue)

CONTROL DEVICE COMPATIBILITY
- Cortex EBC

ACTIVATION METHOD
- The Transbrake Bump Driver is activated by pulling the control input (purple wire) to ground.

CONTROL INPUT PULL-UP RESISTANCE
- 500 Ω pull-up to supply voltage

MAXIMUM CURRENT
- 20 Amps

MAXIMUM PWM FREQUENCY
- N/A

SIZE
- 66.5 mm x 50 mm x 20 mm (2.62 in x 1.97 in x 0.79 in)

ONE-WIRE SOLENOID WIRING DIAGRAM

To Positive (+) Battery Terminal

20 AMP FUSE

Transbrake Button

To Output 1 on Cortex EBC Wiring Harness

PURPLE

RED

YELLOW

BLUE

BLACK

WHITE

TRANSBRAKE BUMP DRIVER

Indication LED

GROUND

OPTIONAL

LAUNCH CONTROL SIGNAL

To Unused Input on Cortex EBC Wiring Harness
(RPM, VSS, General-Purpose Input)

To Switched 12V

10K Ohm Resistor

EXTERNAL BUMP SIGNAL

To Unused Input on Cortex EBC Wiring Harness
(RPM, VSS, General-Purpose Input)

Bump Button

Ground

ONE-WIRE TRANSBRAKE SOLENOID

ADDITIONAL COMPONENTS REQUIRED FOR INSTALLATION:

• 1x 20 Amp fuse and fuse holder
• 1x momentary push button
• wire and electrical connectors

ADDITIONAL COMPONENTS REQUIRED FOR EXTERNAL BUMP BUTTON:

• 1x 10k Ohm resistor
• 1x momentary push button

TWO-WIRE SOLENOID WIRING DIAGRAM

To Positive (+)
Battery Terminal

20 AMP FUSE

Transbrake Button

To Output 1 on
Cortex EBC Wiring Harness

PURPLE

RED

YELLOW

BLUE

BLACK

WHITE

TRANSBRAKE BUMP DRIVER

Indication LED

GROUND

OPTIONAL

LAUNCH CONTROL SIGNAL

To Unused Input on Cortex EBC
Wiring Harness
(RPM, VSS, General-Purpose Input)

To Switched 12V

10K Ohm Resistor

EXTERNAL BUMP SIGNAL

To Unused Input on Cortex EBC
Wiring Harness
(RPM, VSS, General-Purpose Input)

Bump Button

Ground

**TWO-WIRE
TRANSBRAKE SOLENOID**

ADDITIONAL COMPONENTS REQUIRED
FOR INSTALLATION:

• 1x 20 Amp fuse and fuse holder
• 1x momentary push button
• wire and electrical connectors

ADDITIONAL COMPONENTS REQUIRED
FOR EXTERNAL BUMP BUTTON:

• 1x 10k Ohm resistor
• 1x momentary push button

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