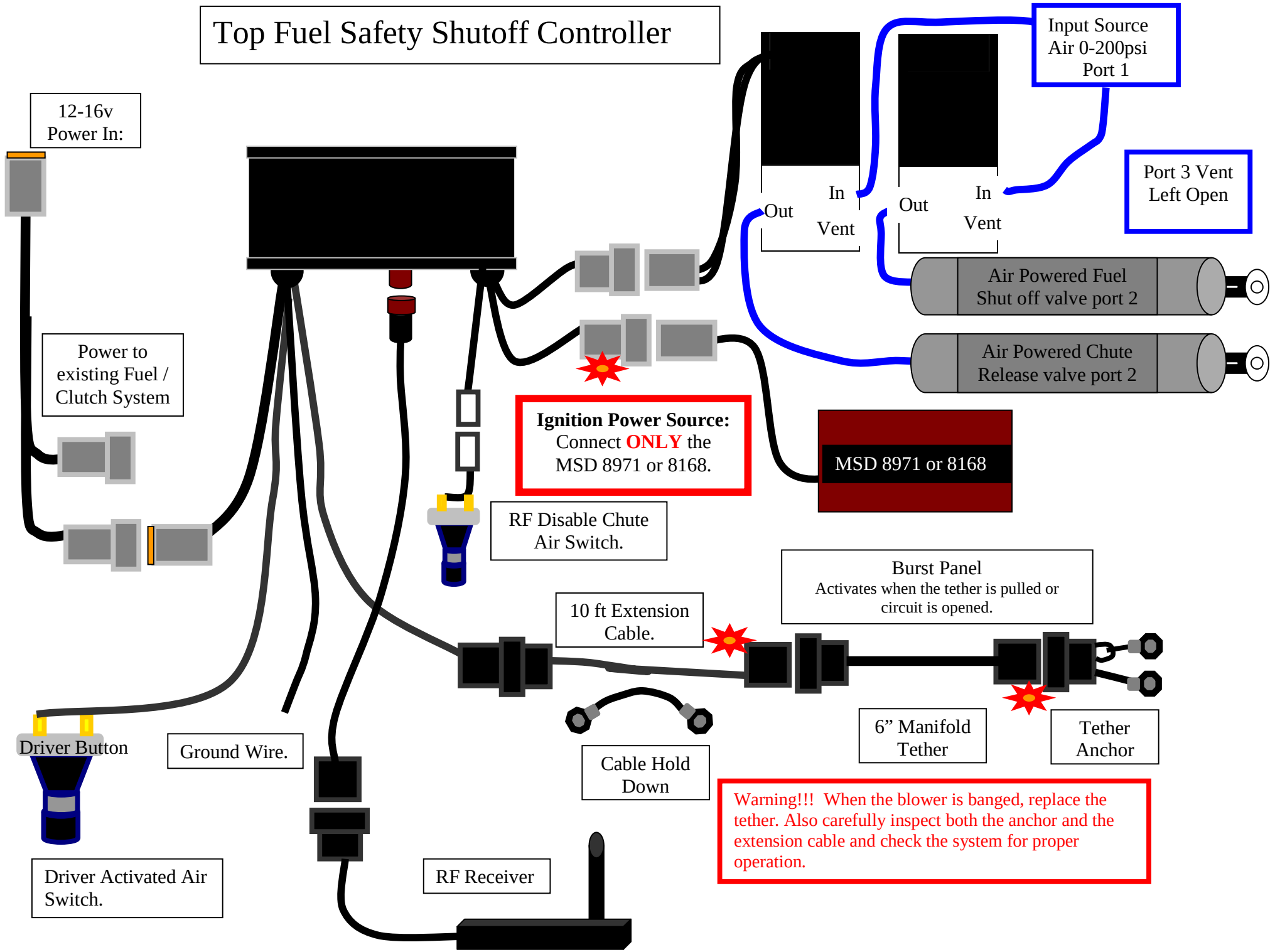
Top Fuel Safety Shutoff Controller



The Electrimotion Safety Shutoff box is designed to shut the car off as a result of a catastrophic event. The box has 3 trigger inputs, which will trigger 3 separate output events. The 3 trigger inputs are a burst panel input, an air activated driver push button trigger input and a wireless shut down input.

For the air activated trigger input, a typical 10lb air pressure switch is supplied. This air pressure switch should be plumbed to an air switch on the steering wheel.

For the burst panel input, a tether is supplied with an extension cable. The tether is to be installed across the manifold burst panels. A typical installation is shown on the following pages. ***The tether must be installed at power up or the ignition output will not turn on!*** This is by design to make sure the tether is connected. If during normal operation the tether connectors are unplugged, the circuit is opened and the controller is triggered.

For the wireless shut down option, a small 3-pin connector is utilized. When the car passes the on track transmitter the Safety Box will trigger. The RF kill switch function can be disabled by the use of an air switch that is to be closed when the chutes are manually deployed. ***The chute air switch must have no air at power up or the ignition output will not turn on!***

The 3 outputs are Ignition Power, fuel shutoff air, and parachute air. The fuel and parachute outputs are hi flow air valves. To mechanically complete the system, 2 air cylinders are required. The suggested air cylinder is 7/8" bore, 3" stroke Fabco PN **F-0875D02-03A** or Clippard PN UDR-14-3 with Rod End RE-1285**.** The air cylinders are available from EM upon request. Typical installations for both fuel shutoff and chute activation are shown on the following pages. The Ignition power output is a 2 pin Deutsch connector. **Only** connect the MSD 8971/8168 to the Ignition power output. **(Max Current 2A)**.

When any of the inputs becomes true, the 3 outputs will immediately trigger.

The controller will receive power from the existing +12-16v battery pack that is already used.
Dimensions of the box are 4.5"W x 2.0H x 1.75"D.

Top Fuel Safety Box Kit PN SB002TF

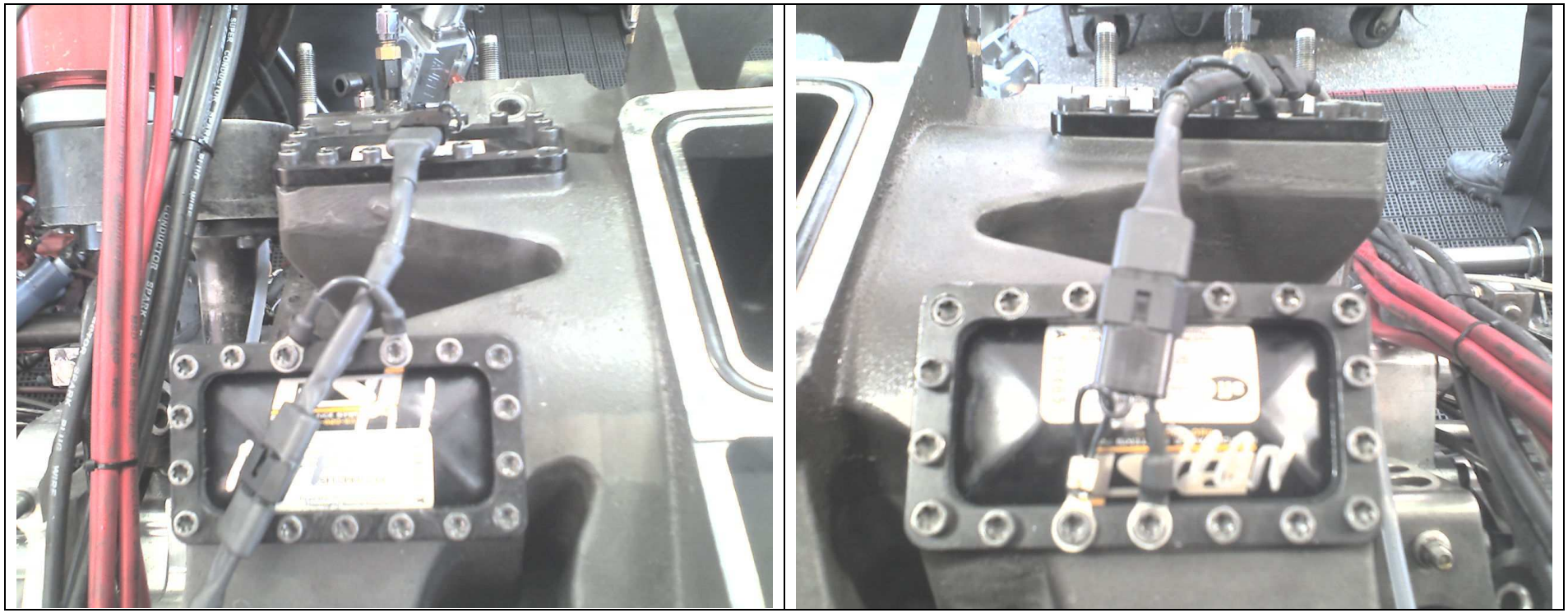
Part	Qty	Part Number
Safety Box	1	SB002
10ft Tether Extension Cable	1	n/a
Optional 12ft Tether Extension Cable	0	n/a
Manifold Tether	1	n/a
Tether Anchor	1	n/a
Cable Hold Down	1	n/a
10lb Air Switch	1	n/a
1 Pole air manifold	1	n/a
High Flow Air Switches	2	n/a
7/8" Bore Air Cylinders	Not Included	Fabco 7/8" F-0875D02-03A
PFA Teflon 1/4" Air Line	Not Included	Mc Master Carr PN 51805K86
PFA Teflon 5/32" Air Line	Not Included	Mc Master Carr PN 5733K52

- Do Not use Polypropylene or Polyurethane air lines

General Warnings:

IT IS THE RESPONSIBILITY OF THE PERSON INSTALLING ANY CONTROL SYSTEM COMPONENT OR KIT TO DETERMINE THE SUITABILITY OF THE COMPONENT OR KIT FOR THAT PARTICULAR APPLICATION. IF YOU ARE NOT SURE HOW TO SAFELY USE THIS COMPONENT OR KIT, YOU SHOULD NOT INSTALL OR USE IT. DO NOT ASSUME ANYTHING. IMPROPERLY INSTALLED OR MAINTAINED CONTROL SYSTEMS ARE DANGEROUS. IF YOU ARE NOT SURE, GET HELP OR RETURN THE PRODUCT. YOU MAY OBTAIN ADDITIONAL INFORMATION AND TECHNICAL SUPPORT BY CALLING ELECTRIMOTION AT (740) 362-0251, OR VISIT OUR WEB SITE AT WWW.ELECTRIMOTION.COM. USE OF ELECTRIMOTION TECHNICAL SUPPORT DOES NOT GUARANTEE PROPER INSTALLATION. YOU, OR THE PERSON WHO DOES THE INSTALLATION, MUST KNOW HOW TO PROPERLY USE THIS PRODUCT. IT IS NOT POSSIBLE OVER THE PHONE TO UNDERSTAND OR FORESEE ALL THE ISSUES THAT MIGHT ARISE IN YOUR INSTALLATION. LIABILITY ON DEFECTIVE MERCHANDISE OR MERCHANDISE NOT CONFORMING TO MANUFACTURER'S SPECIFICATIONS IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE ITEM. RACING EQUIPMENT MUST BE MAINTAINED AND SHOULD BE CHECKED REGULARLY FOR FATIGUE, DAMAGE, AND WEAR. DO NOT OPERATE ANY VEHICLE ON UNTESTED CONTROL SYSTEMS!

Typical Manifold Tether Installation



Typical Mounting of Fuel and Parachute Air Cylinders.