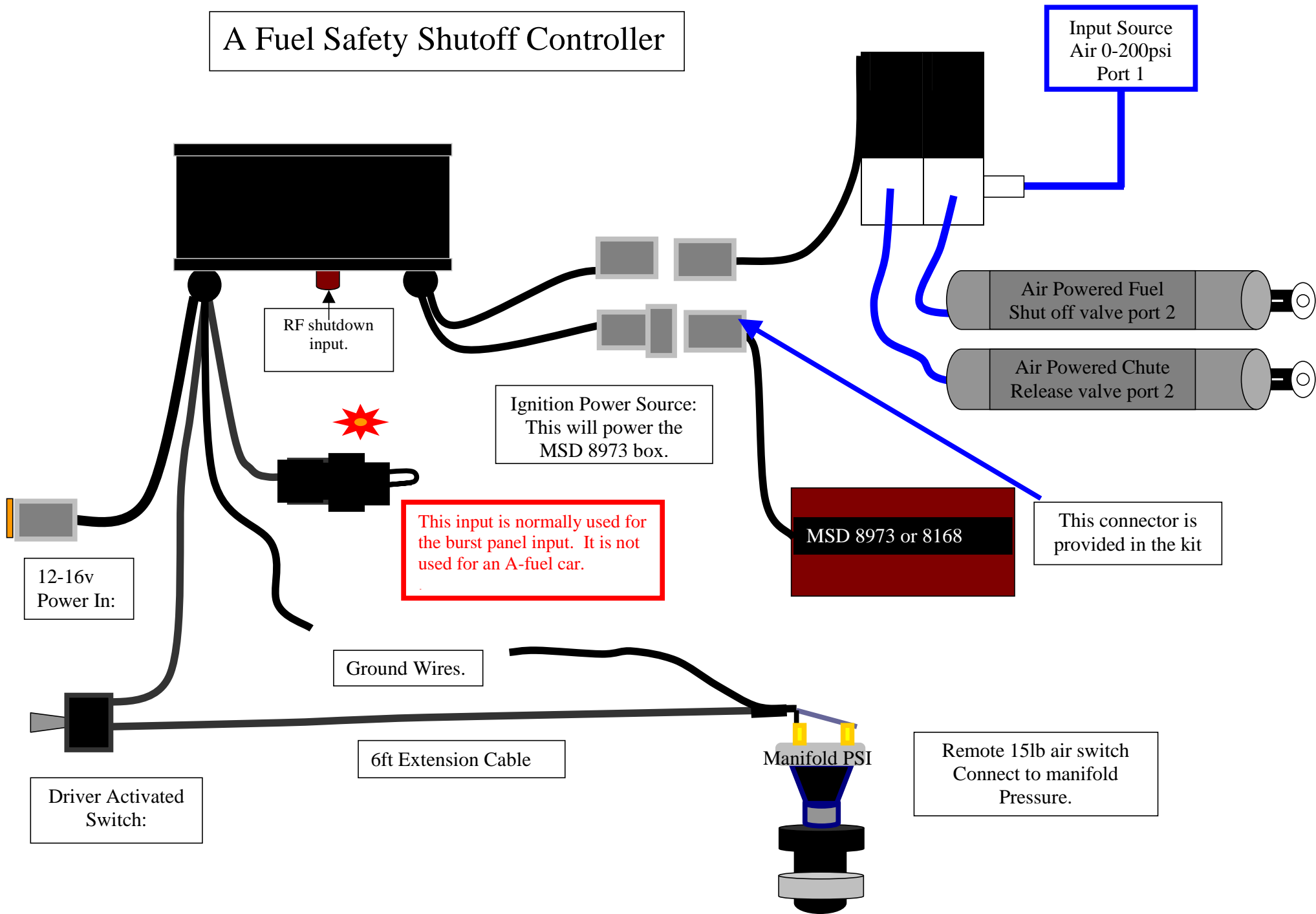


# A Fuel Safety Shutoff Controller



Input Source  
Air 0-200psi  
Port 1

RF shutdown  
input.

Ignition Power Source:  
This will power the  
MSD 8973 box.

This input is normally used for  
the burst panel input. It is not  
used for an A-fuel car.

MSD 8973 or 8168

This connector is  
provided in the kit

Air Powered Fuel  
Shut off valve port 2

Air Powered Chute  
Release valve port 2

12-16v  
Power In:

Ground Wires.

6ft Extension Cable

Driver Activated  
Switch:

Manifold PSI

Remote 15lb air switch  
Connect to manifold  
Pressure.

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 manifold pressure input, a driver activated input and a wireless input.

For the manifold input, an air switch is supplied with an extension cable. The air switch is to be installed on a bracket near the motor but not on the motor. **A ¼” air line no more than 3 foot long is required between the manifold and the Air switch.** The wireless input is triggered by an on track transmitter mounted past the finish line.

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. These are available from Clippard @ [http://www.clippard.com/store/byo\\_cylinder/byo\\_stainless\\_details.asp?sku=UDR-14-3](http://www.clippard.com/store/byo_cylinder/byo_stainless_details.asp?sku=UDR-14-3). 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)**. If no retard system is used, the ignition system must be shut off via the Chute or Fuel shutoff air that is provided. This can be done by using an “Air Kill” device or even the use of another air cylinder to manually press a kill button that you may already have.

When either 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.

Electrimotion  
740-362-0251

## A Fuel Safety Box Kit PN SB001AF

Part	Qty	Part Number
Safety Box	1	SB001
15lb Air Switch (Manifold Pressure)	1	n/a
Toggle Switch (Driver Button)	1	n/a
Ignition Power Connector (if required)	1	n/a
High Flow Air Switches & Hardware	2	n/a
7/8" Bore Air Cylinders	Not Included	Clippard 7/8" UDR-14-3
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](http://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 Mounting of Fuel and Parachute Air Cylinders.

