

Fire Bottle Activated Air Switch: **Nostalgia Funny Car Safety Box Kit** 

Part	Qty	Part Number
Safety Box	1	SB003
6" Manifold Tether Kit *	1	n/a
6ft Tether Extension Cable	1	n/a
10lb Air Switch (Fire Bottles)	1	n/a
High Flow Air Switches & Hardware	1	n/a
3/4" Bore Air Cylinder (Fuel)	Not Included	Fabco PN F-0750D02-03A
7/8" Bore Air Cylinder (Chutes)	Not Included	Fabco PN 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

- \* Tether kit includes 6" tether cable 1 dog bone and the tether anchor.
- 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!

The Electrimotion Safety Shutoff box is designed to shut off the car as a result of a catastrophic event. The system has 2 trigger inputs, which will trigger 3 separate output events. The 2 trigger inputs are a burst panel input and a Fire Bottle trigger input.

For the Fire bottle trigger input, a typical 10lb air pressure switch is supplied. This air pressure switch should be plumbed into the fire bottle line.

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. If during normal operation the tether connectors are unplugged, the circuit is opened and the controller is triggered.

The 3 outputs are fuel shutoff air, parachute air and air Ignition kill. The air output is a hi flow air valve. 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 system must be shut off via the 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 2 outputs will immediately trigger. Both parachutes must be deployed in the event that the safety system is tripped.

The controller will receive power from the existing +12-16v battery pack that is already used.

### Both air valves must be connected to the primary air supply.

Dimensions of the box are 4.5"W x 2.0H x 1.75"D. Electrimotion 740-362-0251

# Typical Mounting of Fuel and Parachute Air Cylinders.



# Typical Mounting of Chute Release Air Cylinders.



# Typical Mounting of Fire Bottle Air Switch.

