

#### Thank You!

First of all

we would like to thank you for purchasing a genuine Firecharger AFFF Fire Suppression System. We hope that you agree

that Firecharger AFFF systems provide the best value for the money in Motorsports Fire Suppression. The Firecharger AFFF system is

unique in several ways. Most importantly users with basic mechanical skills and tools can install and recharge Firecharger systems. Before you begin to install this system it is important to read these step-by-step instructions carefully. The steps are simple and easy to perform, however it is important that the system is setup and recharged exactly as shown. These instructions ensure that the system operates safely as it was designed. These instructions and color photograph s are available at <a href="https://www.augustamotorsports.biz">www.augustamotorsports.biz</a>

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## Tools Required:

SAE Boxed End Wrench Set
SAE Open End Wrench Set
Teflon Tape
37° Flare Tool
Diagonal Cutters or Similar Brill Bit Set Electric/ Battery Powered Drill

# Funnel Measuring Cup

## **Safety Glasses**

As with any mechanical project especially a project involving motor sports vehicle. Please ensure that you have all the right tools you may need to finish the installation prior to starting the installation. We assume that racers have a selection of tools to complete the install readily available. The tools above are the minimum recommended.

#### Hardware:

Please see Diagram page: If any parts are missing please contact us immediately

# Mounting the Cylinder:

- 1. Locate the mounting brackets in a convenient location in the driver's compartment. Be sure to mount the system horizontalit y and secure to vehicle body with minimum of ½" Grade 5 nuts, Bolts and lock Washers. Do not tighten mounting hardware at this time. Figure 1.
- 2. Mount the discharge cable in a location that is secure and easily reached by a driver tightly strapped into his seat. Mount by drilling a 3/8" hole; remove the nut and washer from the pull cable handle assembly. Insert the cable through the mounting hole and reassemble the nut and lock washer. Verify the position of the handle and tighten! The same steps are required when installing an additional pull cable. See Figure 2
- 3. Remove the 'T' Handle and the wire attached from the cable housing and set aside.
- 4. Mount the Cylinder into the brackets, to not tighten yet.
- 5. Please use caution with steps 5 through 11. The pull cable is only 6ft long, ensure the right measurements. Route the pull cable to the bottle location and cut the pull cable to length See figure 3. Cut only the black plastic coating leave the internal wire intact. If necessary 12ft pull cables are available.
- 6. Thread the cable end onto the cable. Figure 4
- 7. Reinstall the T Handle and pull wire into the conduit and install the Safety pin. Figure 5

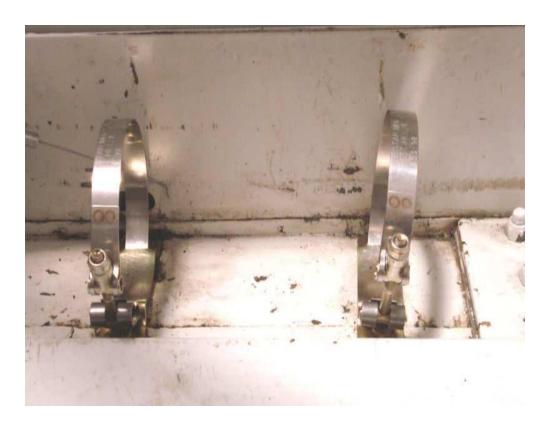


Figure 1.



Figure 2.



Figure 3.



Figure 4.



Figure5.



Figure 6.

8. Thread one jam nut and split Washer to the cable end. Figure 6.

- 1. Slide the pull wire through the slot in the mounting base. Cut the pull wire 1" Past the actuator lever.
- 2. Mark the pull wire directly adjacent from the hole in the actuator arm. Bend a Z in the actuator wire. You may need to remove the pull cable assembly from the mounting base to do so. Figure 7

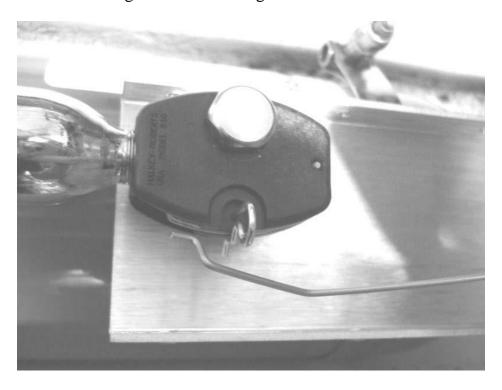


Figure 7

- 1. Slide the second jam nut over the pull wire and hook the pull cable onto the actuator lever. (If the CO2 Cartridge is in place there is +/ 1/4" play before the lever will puncture the Cartridge)
- 2. Install the cable end onto the mounting base. Adjust the cable so that there is a small amount of tension on the cable.
- 3. Operate the pull cable without CO2 cartridge to ensure that the actuator lever moves through its entire range of motion.

Please note: With initial set up it is important to assemble and mount the entire system first. Once the system has been assembled 'dry' Disassemble and recharge with AFFF. This will avoid accidental discharge.

## **Discharge Lines:**

Firecharger 2.3L (5lbs) systems come standard with 2 nozzles. The Firecharger 4.6L (10bs)

kits come standard with three nozzles. (Additional nozzle kits are available) It is recommended that no more than 2 discharge points be plumed to one port. This system comes with ¼" aluminum tubing, Stainless or braided stainless lines are equivalent substitutes. Please ensure that all pipe thread fittings are wrapped in Teflon tape before connecting.

- 1. Install AN Adapters to tank head.
- 2. Run Tubing to each Zone. If you are installing two discharge nozzles in the engine compartment, run one line to the fire wall/ bulk head. Install a bulk head T and run the two lines from there. The bulk head T is available by purchasing an additional nozzle kit. The engine compartment Nozzle's) must be pointed toward the area of greatest fire risk. If installing 2 nozzles in the engine compartment install one on either side of the engine.
- 3. Driver's compartment nozzles should be positioned so that the nozzle will cover the driver's lower torso and feet.
- 4. After positioning the lines, cut the lines to the required length and flare each connection and install the fittings. Follow the instructions included with your flare tool as to how the tubing needs to be flared. Take note to slide the tube sleeve and tube nut onto the aluminum tubing before you flare the end! (Figure 8)
- 5. Using the Adel/ Cushion Clamps supplied in the kit, mount all lines make sure they as supported properly. The clamps can either be riveted or bolted on the chassis or support member where permitted. Certain race groups do not allow drilling/ attaching with fasteners to roll cages. If you intend to attach to a roll bar or roll cage please use an adequate tube clap that does require drilling. (Figure 9).
- 6. Remove Bottle and charge the systems according to the instructions provided in your refill kit.
- 7. Remount cylinder, tighten all clamps, and connect all discharge lines. Check th at all fittings are tight!
- 8. Reattach the pull cable to the actuator lever while the CO2 cartridge is NOT INSTALLED. Readjustment of cable tension may be necessary at this point.
- 9. Please make sure all safety pins are in place and only removed at the track to avoid accidental discharge during maintenance or moving. Please reme

mber that the safety pins need to be removed while the car is on the track in order for the system to operate.

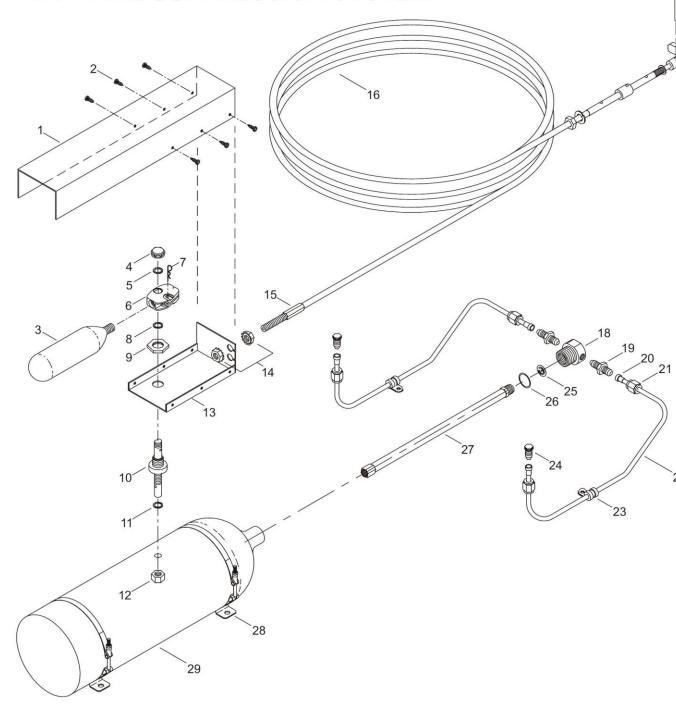


Figure 8.



Figure 9.

# FIRECHARGER 2.3L AFFF FIRE SUPPRESSION SYSTEM



If you have any questions please contact Firecharger visit our website <a href="https://www.Augustamotorsports.biz">www.Augustamotorsports.biz</a> for FAQ's and tips on installation and usage.

Thank you for your purchase and your Firecharger is ready to use.