- Nozzles and Pipes -

Always cut pipes with a rotary pipe cutter and deburr the inside of the tube, this will prepare the pipe for fitting to the connectors which are all push in. Ensure all pipes are fully inserted into the fitting.

Your system is supplied with 6 nozzles, A minimum of 2 must be fitted in the cockpit. A minimum of 3 should be fitted to the engine bay, **ALL 6 NOZZLES SHOULD BE USED**. It is recommended that a vehicle with a turbocharger, 4 nozzles are fitted to the engine bay, 2 on the inlet system and 2 on the Turbocharger. On normally aspirated engines 3 in the cockpit and 3 in the engine bay.

- Maintenance -

Ensure the pressure gauge is in the green. Visual inspection of all components for damage, including nozzles tubes and cylinder, ensure cables are well lubricated with grease.

Every 2 years the system must be returned for service and revalidation, to PD Extinguishers or its service agents. As this system has a stainless steel cylinder this system has a 16 year safe working life.

- Replacement pipe , Fittings and Nozzles

Extra or replacement pipes fittings and nozzles are available from PD Extinguisher's or its authorised agents



PD Extinguishers Fold Revidge Road Blackburn BB1 8DJ +44 (0)1254 681350

info@pdextinguishers.co.uk

www.pdextinguishers.co.uk

PD Extinguishers is a trademark of Production and Design Services Ltd

Revision 1



4.25 Litre AFFF Fire Extinguishing System

Electronic Operation

Installation & Maintenance Instructions



Thank you for purchasing a PD Extinguishers System, this extinguisher is designed to suppress fire in a competition saloon car, giving the occupants of the car time to exit the vehicle to safety. This system complies with its FIA Homologation only when installed in its entirety.



Kit Illustration

Cone Nozzle

Flat Spray Nozzle

System Components -

x Cylinder with Valve
 x Rolls of Pipe
 x Cone Nozzles
 x Flat Spray Nozzles
 x Bracket including Straps
 x Tee Nozzle Fittings

2 x 90° Nozzle Fittings
1 Tee Pipe Fitting
2 x E Stickers
1 x Instruction Manual
1 x Bulkhead Fitting
8 x M6 Bolts Nuts and Washers

Mounting the Cylinder

Your cylinder should be mounted within the cockpit, it is best mounted to allow easy checking of the pressure gauge and service record. Attach the brackets to the vehicle floor with a min of 8 (4 in each bracket) M6 bolts nuts and washers. When securely bolted and the straps are tight, no longitudinal movement will occur however longitudinal support can be added or the unit may be mounted between sill and tunnel or other supporting structures.

Extinguishant and Ingredients -

Contact with the skin: Take off contaminated clothing immediately. Wash the areas of the body that have come into contact using plenty of running water and soap. **Contact with eyes:** Wash immediately and plenty with running water with open eyelids for at least for 10 minutes, then protect your eyes with sterile gauze or clean cloth. Seek medical advice if irritation continues. **Inhalation**: clear the air of the ambient. Remove quickly the subject from the contaminated atmosphere and keep him in ventilated atmosphere. In case of malaise, consult a doctor. **Ingestion:** Not induce vomit. Immediately take medical advice showing this information following.

Ingredients:

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethane-1,2-diol	(CAS-No.) 107-21-1 (EC-No.) 203-473-3 (EC Index-No.) 603-027-00-1 (REACH-no) 01-2119456816-28	1.5 to 3	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
2-(2-Butoxyethoxy)ethanol	(CAS-No.) 112-34-5 (EC-No.) 203-961-6 (EC Index-No.) 603-096-00-8 (REACH-no) 01-2119475104-44	0.24 to 0.6	Eye Irrit. 2, H319
2-methyl-2,4-pentanediol substance with a Community workplace exposure limit	(CAS-No.) 107-41-5 (EC-No.) 203-489-0 (EC Index-No.) 603-053-00-3 (REACH-no) 01-2119539582-35	0.0 03 - 0.006	Skin Irrit. 2, H315 Eye Irrit. 2, H319

Electronic Actuation

Actuation buttons should be mounted as below.

- 1 to be mounted externally below the windscreen
- 1 to be mounted internally in easy reach of both occupants (if applicable)

The control box pictured below must be mounted to give easy access to arm the system or do a system test



Unit operation

On pressing the ARM button, all 3 leds will illuminate for 5 seconds during its self test After 5 seconds, the yellow battery led and red test led will go off unless a fault is detected.

A flashing yellow led indicates the batteries should be replaced

A flashing red led will indicate there is a cable fault, i.e. the extinguisher may not be plugged in.

Immediately on pressing Arm, the external operation button will be active and will cause the extinguisher to discharge if pressed.



Note two different sockets, care should be taken to avoid damage by fitting wrong plug.

Test mode

Pressing the external operation button when the device is not armed will perform a self test. The battery and test leds will illuminate for 5 seconds, and then show any faults found as above.

The device is fitted with three AA batteries. These are designed to last 100 hours whilst armed, or 2 years minimum idle, and should be replaced with good quality high capacity alkaline batteries. To replace the batteries, unscrew the two screws from the box end with the connectors and slide out the PCB, taking care of the cable to the switch assembly.

- Nozzles and Pipes -

Always cut pipes with a rotary pipe cutter and deburr the inside of the tube this will prepare the pipe for fitting to the connectors which are all push in. Ensure all push in fittings are fully inserted into the fitting.

Your system is supplied with 6 nozzles, A minimum of 2 must be fitted in the cockpit. A minimum of 3 should be fitted to the engine bay, **ALL 6 NOZZLES SHOULD BE USED**. It is recommended that a vehicle with a turbocharger, 4 nozzles are fitted to the engine bay 2 on the inlet system and 2 on the Turbocharger. On normally aspirated engines 3 in the cockpit and 3 in the engine bay. Never point the nozzles directly at the face or upper body.

- Maintenance -

Ensure the pressure gauge is in the green. Visual inspection of all components for damage, including nozzles tubes and cylinder, ensure cables are well lubricated with grease.

Every 2 years the system must be returned to for service and revalidation. As this system has a stainless steel cylinder this system has a 16 year safe working life.

- Replacement pipe , Fittings and Nozzles -

Additional or replacement pipes fittings and nozzles are available from PD Extinguisher's or its authorised agents.



PD Extinguishers Revidge Fold Revidge Road Blackburn BB1 8DJ +44 (0)254 681350 <u>info@pdextinguishers.co.uk</u> www.pdextinguishers.co.uk



AFFF Fire Extinguishing System

Mechanical Operation

Installation & Maintenance Instructions



Thank you for purchasing a PD Extinguishers System, this extinguisher is designed to suppress fire in a competition saloon car, giving the occupants of the car time to exit the vehicle to safety. This system complies with its FIA Homologation only when installed in its entirety.



- System Components -

x Cylinder with Valve
 x Rolls of Pipe
 x Nozzles
 x Cockpit Nozzles
 x Bracket including Straps
 x Tee Nozzle Fittings
 x 90° Nozzle Fittings

- 2 x Pull Cables
- 2 x Cable Nipples
- 1 Tee Pipe Fitting
- 2 x E Stickers
- 1 x Instruction Manual
- 1 x Bulkhead Fitting
- 8 x M6 Bolts Nuts and Washers

Mounting the Cylinder -

Your cylinder should be mounted within the cockpit, it is best mounted to allow easy checking of the pressure gauge and service record. Attach the brackets to the vehicle floor with a min of 8 (4 in each bracket) M6 bolts nuts and washers. When securely bolted and the straps are tight, no longitudinal movement will occur however longitudinal support can be added or the unit may be mounted between sill and tunnel or other supporting structures.

Extinguishant and Ingredients

Contact with the skin: Take off contaminated clothing immediately. Wash the areas of the body that have come into contact using plenty of running water and soap. **Contact with eyes:** Wash immediately and plenty with running water with open eyelids for at least for 10 minutes, then protect your eyes with sterile gauze or clean cloth. Seek medical advice if irritation continues. **Inhalation**: clear the air of the ambient. Remove quickly the subject from the contaminated atmosphere and keep them in ventilated atmosphere. In case of malaise, consult a doctor. **Ingestion**: Not induce vomit. Immediately take medical advice showing this information following.

Ingredients:

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethane-1,2-diol	(CAS-No.) 107-21-1 (EC-No.) 203-473-3 (EC Index-No.) 603-027-00-1 (REACH-no) 01-2119456816-28	1.5 to 3	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
2-(2-Butoxyethoxy)ethanol	(CAS-No.) 112-34-5 (EC-No.) 203-961-6 (EC Index-No.) 603-096-00-8 (REACH-no) 01-2119475104-44	0.24 to 0.6	Eye Irrit. 2, H319
2-methyl-2,4-pentanediol substance with a Community workplace exposure limit	(CAS-No.) 107-41-5 (EC-No.) 203-489-0 (EC Index-No.) 603-053-00-3 (REACH-no) 01-2119539582-35	0.0 03 - 0.006	Skin Irrit. 2, H315 Eye Irrit. 2, H319

- Mechanical Cable Actuation

Pull Cables should be mounted to prevent tight bends or kinking of cables. Drill a 12mm hole in the panel where the cable is to be mounted, take care to ensure the panel is sufficiently strong to prevent panel deforming, place reinforcement behind if required.

- 1 to be mounted externally below the windscreen
- 1 to be mounted internally in easy reach of both occupants (if applicable)

Please lubricate cables with grease and check regularly for free operation.

Fit the cable to the valve as indicated in Figure 1, allow 6 to 12mm clearance to the nipple. Fit the Stickers adjacent to the Pull to identify the location.



