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**Thank you for purchasing an SPA 3lb SFI 17.2**

Thank you for purchasing a SPA Extreme system. It is important that you read the following instructions carefully before attempting to install your fire suppression system.

The performance of this system could be affected if it is in anyway modified or tampered with may make void its homologation. Please ensure that should any parts need to be replaced; only genuine SPA Extreme components are used.

Should you require any assistance, please do not hesitate in contacting SPA Design on 01543 434 580or SPA Technique on 317-271-7941.

**IMPORTANT NOTE**

*The purpose of this along with any other vehicle fire suppression system is to provide sufficient time in which to control the fire to enable the occupants to leave the vehicle. In ideal conditions, the fire will be extinguished completely but this can not be guaranteed. The main purpose is to curb the intensity of either an engine or cockpit fire to provide the means for the occupants to leave the vehicle or for outside assistance to be given.*

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## SPAex SYSTEM CONTENTS LIST

*Note; SFI17.2 new for IndyCar in 2019 and in SCCA GCR for 2020*

### SPAex SFI3M

2 x 02-SPAT 112	retaining straps
1 x 02-SP 018	6 foot pull cable
2 x 02-SP 098	engine/SFI nozzles (15 holes, blue)
1 x 02-SP 188	cockpit nozzle with 5/16" fitting (8 holes, green)
2 x 02-SPAsfi 025	T fitting 5/16"
1 x 02-SPAsfi 012	bulkhead fitting 5/16"
10 x 02-SPAsfi 020	5/16" aluminum tubing per foot
1 x 02-SP 017	E sticker (4")

### SPAex SFI3E

2 x 02-SPAT 112	retaining straps
2 x 02-SP 098	engine/SFI nozzles (15 holes, blue)
1 x 02-SP 188	cockpit nozzle with 5/16" fitting (8 holes, green)
2 x 02-SPAsfi 025	T fitting 5/16"
1 x 02-SPAsfi 012	bulkhead fitting 5/16"
10 x 02-SPAsfi 020	5/16" aluminum tubing per foot
2 x 02-SP 005 H	hirschmann plug and lead
1 x 02-SP 007 H	hirschmann plug power pack
1 x 02-SP 011	internal activation button
1 x 02-SP 017	E sticker (4")

### Optional parts

02-SP 019	12 foot pull cable
02-SP 129	E sticker (1")
02-SPAsfi 021	5/16" steel tubing
02-SPAsfi 022	5/16" e-z bend steel tubing

## SPA4f SYSTEM CONTENTS LIST

### **SPA4f SFI3M**

<b>2 x 02-SPAT 112</b>	retaining straps
<b>1 x 02-SP 018</b>	6 foot pull cable
<b>2 x 02-SP 098</b>	engine/SFI nozzles (15 holes, blue)
<b>1 x 02-SP 188</b>	cockpit nozzle with 5/16" fitting (8 holes, green)
<b>2 x 02-SPAsfi 025</b>	T fitting 5/16"
<b>1 x 02-SPAsfi 012</b>	bulkhead fitting 5/16"
<b>10 x 02-SPAsfi 020</b>	5/16" aluminum tubing per foot
<b>1 x 02-SP 017</b>	E sticker (4")

### **Optional parts**

<b>02-SP 019</b>	12 foot pull cable
<b>02-SP 129</b>	E sticker (1")
<b>02-SPAsfi 021</b>	5/16" steel tubing
<b>02-SPAsfi 022</b>	5/16" e-z bend steel tubing

# FITTING INSTRUCTIONS

Unpack all parts and check components against kit list.

Decide the best position for the extinguisher – **IT IS RECOMMENDED THAT THE BOTTLE SHOULD NOT BE MOUNTED WITH ACTIVATION FACING DOWN.**

The extinguisher label, detailing contents, etc and also the pressure gauge should be visible. Mount the plinth securely to the vehicle and put the bottle back into place.

## TUBING

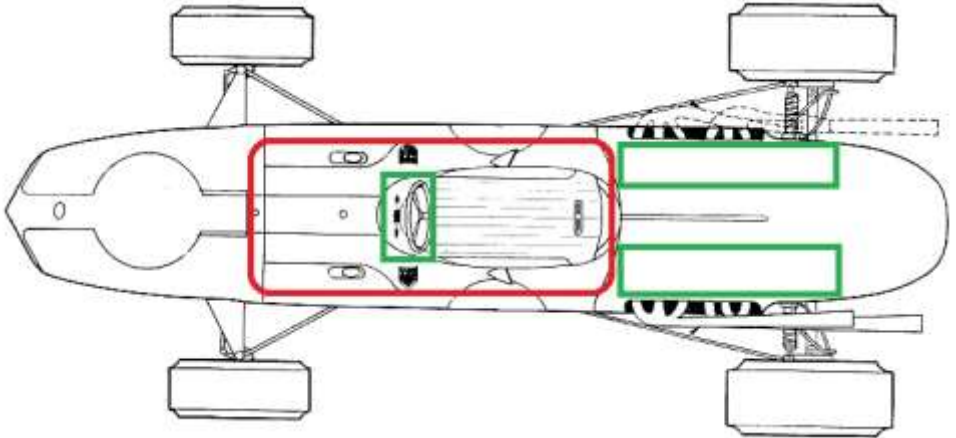
Each SPA Extreme SFI System kit is supplied with 5/16" aluminum tubing. The SPA Extreme system has been designed using this type of tube.

## TUBE CONNECTIONS

All fittings for tube to nozzles and bottle are of the push-in type. Insert the tube into the fitting, push firmly until it clicks. Once in you should not be able to pull it out.

To remove the tubing, push the tube into the fitting and at the same time push the collet back towards the fitting and then pull the tube from the fitting

## Suggestions for Cylinder and Nozzle locations



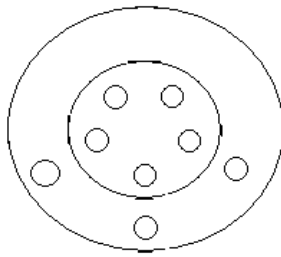
**Red** / rounded box for the cylinder location

**Green** / box for nozzle location, cockpit nozzle (qyt. 1) has smaller and fewer holes than engine nozzle (qyt. 2) for the Extreme system(s)

# Correct nozzle orientation for Extreme System(s)

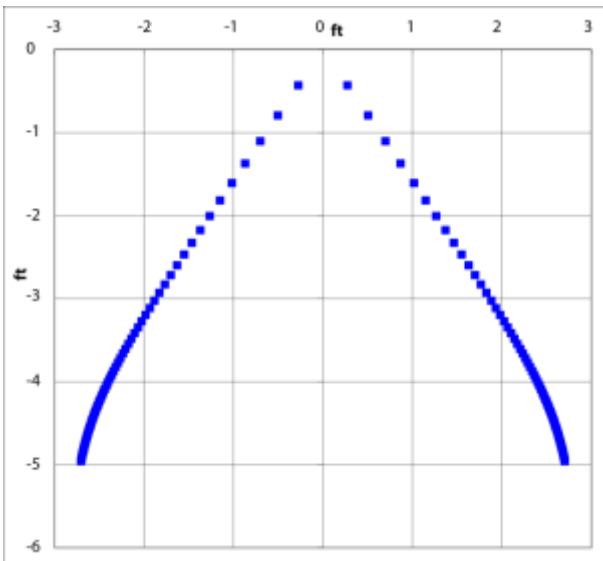
Make sure nozzle is mounted in this orientation to work correctly.  
With the holes on the body of the nozzle facing down.

Top



Bottom

## Approximate nozzle spray pattern for FireSense (FireAde & 4fire)



# MAINTENANCE

To ensure maximum possible performance from your SPA Extreme System, the following checks and maintenance procedures should be carried out.

- Regularly check pressure gauge to ensure they are in the green sector.
- Regularly check nozzles for debris or any obstructions.
- Regularly check the integrity of the pipework and fittings.
- Regularly check the cylinder for damage.
- Your SPA Extreme system **must** be serviced every 2 years.

A service date is written on the content label on the extinguisher. It is up to you to ensure that the servicing is carried out at the correct intervals. Servicing of the system must be carried out by SPA Design or Approved Vendor

If your system has been discharged, you must return it to SPA or dealers for servicing and refilling.

## NOTES

Please ensure that you monitor the following, as you

**MAY NOT** pass scrutineering **IF**: -

- The needle of the gauge is in the red.
- The bottle label is worn, damaged or unreadable.
- The unit is not within the service date.
- The system is in poor condition.



# EXTREME DATA SHEET

**COMPOSITION** Dodecafluoro-2-methylpentan-3-one, (CF<sub>3</sub>CF<sub>2</sub>C(O)CF(CF<sub>3</sub>)<sub>2</sub>)

**ODP** (Ozone Depletion Potential) NONE

**OPERATING TEMPERATURE** - 40 - + 80 °C

**FREEZING POINT** - 108 °C

**CRITICAL TEMPERATURE** 168.7 °C

**PHYSIOLOGICAL PROPERTIES** No Observed Adverse Effect Level and Lowest Observed Adverse Effect Level for cardiac sensitization (halocarbons) and oxygen depletion

(Inert gas).

A copy of the 3M™ Novec™ 1230 Fire Protection Fluid material safety data sheet can be obtained from SPA Design or SPA Technique upon request.

## FireSense + (4fire) DATA SHEET

**COMPOSITION** Proprietary blend, information will be provided to a physician as needed

**ODP** (Ozone Depletion Potential) NONE

**OPERATING TEMPERATURE** -30 - 120°C

**FREEZING POINT** - 30 °C

**PHYSIOLOGICAL PROPERTIES** No observed adverse effect level and lowest observed adverse effect level. This product is pH neutral and contains no toxic components

A copy of the 4fire material safety data sheet can be obtained from SPA Design, SPA Technique or 4fire International upon request.



These tests are performed using a three way switch on the power pack box and should be performed before each usage of the system, since the system is only as good as the battery that powers it and the integrity of the wiring loom and its connectors.

To check the condition of the battery, push up and hold the switch on the power pack box. Every two seconds you will see a YELLOW - light flash. If the light flashes very dimly the battery must be replaced.

**IF IN DOUBT REPLACE THE BATTERY!!!!**

## **SYSTEM CONTINUITY CHECK**

To check the continuity of the wiring, ensure that the switch on the power pack box is in the SYSTEM INACTIVE position to ensure that the extinguisher is not fired.

Press the internal firing button and check that the RED light comes on, press the external firing button, and check that this also makes the RED light come on.

The external button must be positioned close to the exterior master switch.

DO ensure that the wiring does not run next to looms especially if they contain ignition or battery cables

DO ensure that any exposed connections that are likely to get water sprayed are protected.

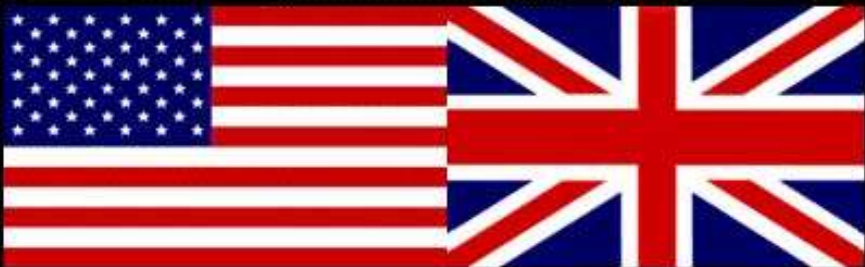
DO NOT allow cables to run through sharp edged apertures without protection

DO NOT fix cables to any surface that is likely to see excessive temperatures



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