



BUILDING BETTER FIREFIGHTERS

THE 5 MINUTE ENGINE CLINIC™

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NOZZLE BASICS; THE COMBINATION FOG NOZZLE

How much do you know about the nozzles carried on your engine? If your using combination fog nozzles I bet you would be surprised just how much you don't know. What type of nozzles are they?

1. Constant flow
2. Automatic
3. Low psi Hi-flow
4. Adjustable GPM
5. Fixed GPM
6. Variable flow

Well what was your answer?

There are several different types and they are not all created equal!



The nozzle pictured above is a constant flow adjustable gallon nozzle

It has a stream range from wide to narrow fog and a compact straight stream.

The GPM settings are 95-125-150-200
When pumped @100psi.



The nozzle pictured above is a low psi high volume automatic fog nozzle

It has a stream range from wide to narrow fog and a compact straight stream.

It flows 200 GPM when pumped at @ 75psi

HOW DOES IT WORK

How do you adjust the GPM settings?



How do you change the stream pattern?



Which way do rotate to go from fog to straight stream?

You need to have detailed knowledge of the nozzles carried on your engine in order to operate safely on the fire ground. If you couldn't answer these questions get out to the engine and find out!

STREAM CAPABILITIES; COMBINATION FOG

All combination fog nozzles produce a broken water stream. The water is broken apart in to small fine droplets as it makes contact with the baffle or disc inside the nozzle. The water droplets have a large amount of exposed surface area for maximum heat absorption. The stream produces a large amount of steam. Steam production can be an asset during extinguishment but if there are people trapped in the fire occupancy the steam produced by a fog stream could seal their fait.

Fog streams are not very effective in high heat conditions because the water droplets are being evaporated at lower levels of the room and are unable to penetrate the thermal layering at the ceiling. But a straight stream from a fog nozzle is very effective in high heat and penetrating the thermal layering.

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