

Water / Alcohol / Methanol Injection Parts List

Here are all of the parts that you'll need to build this system. As you'll see this kit is modular and allows for different pump, nozzle and tank options depending on your needs. Also, I've done my best to make the items on this list affordable and easy to find.

Item	Vendor	Price	Notes
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Water/Alcohol/Methanol Pump Options: All of these pumps are excellent and will perform well for a long time. Choose the one that best suits your needs. For high boost/big engine cars and/or methanol use, go with a pump from one of the vendors who specialize in high performance pumps below.

SHURflo pump #8009-543-236	Northern Tool	\$59.99	60psi 1.0 GPM, Mounts in any position, adjustable demand switch (pressure can be increased to 80-100psi), Viton valves and Santoprene diaphragm to resist corrosion. Compatible with 100% water or 50/50 water and denatured alcohol. This pump is extremely reliable. I have been using them since 1999 with no failures or problems whatsoever.
SHURflo pump #8009-543-236	CoolingMist.com	\$79.99	60psi 1.8 GPM, Mounts in any position, adjustable demand switch (pressure can be increased to 80-100psi), Viton valves and Santoprene diaphragm to resist corrosion. Compatible with 100% water or 50/50 water and denatured alcohol. Similar to the one above, but with a higher GPM rating.
Devil's Own Pump	alcohol-injection.com	\$99.95	150psi, Methanol Compatible.
CoolingMist Pump	CoolingMist.com	\$139.95	200psi, Methanol Compatible. I use this pump in my 500+hp car and it has performed flawlessly for years.

Spray Nozzle Options: There have been many new purpose built spray nozzles available in the last few years. Below are two types that I've had very good results with. The main difference between the two types below is cost and ease of install. The McMaster-Carr nozzles are inexpensive, perform well, but require more fittings to install. The CoolingMist fittings are 6 times the cost of a McMaster-Carr unit, but are easier to install and are great performers. If you're unsure on the best nozzle size for you, start smaller and work your way up.

Small Nozzle: P/N 3178K75	McMaster Carr	\$4.00	3.1gph@40psi, 5.0gph@100psi. Good for small displacement engines in the 150-300hp range.
Medium Nozzle: P/N 3178K76	McMaster Carr	\$4.00	6.32gph@40psi, 10.0gph@100psi. Good for small displacement engines in the 200-450hp range.
Large Nozzle: P/N 3178K77	McMaster Carr	\$4.00	9.49gph@40psi, 15.0gph@100psi. Good for a large displacement engines making more than 400hp.
CoolingMist.com Nozzles (various sizes)	CoolingMist.com	\$23.95	Sized from 1.3-12gph. Great quality with fewer fittings to install than the McMaster-Carr units. Pricy if you are unsure of what nozzle size you need though. Thankfully, they provide detailed flow data for each nozzle on their website.

Electrical

Water Solenoid P/N# 7876K12	McMaster Carr	\$42.50	Route after the pump, before the nozzle. Assures that NO water will be sucked in until the switch activates and opens the solenoid. If you want a less expensive option, you can use a simple checkvalve. They can be found on the McMaster Carr website, from water injection vendors, as well as other sources. I am not including any additional information on checkvalves since I have no personal experience with them.
Hobbs Pressure Switch	Napa Auto Parts	\$28.50	P/N# 701-1575 This switch IS adjustable! Pop off the rubber cap on one end and adjust away! As an alternative, you can use electrical pressure switches. I've only used the hobbs switch above, so make sure you get a good, quality part if going this route.
Automotive 12V 30 Amp Relay	Radio Shack	\$5.00	P/N# 275-226
2 Blade Type Fuse Holders	Radio Shack	\$4.00	P/N# 270-1213
3 pack 20Amp Blade Type Fuses	Radio Shack	\$1.30 (2)	P/N# 270-1083
Lighted (or regular) On/Off Switch	Radio Shack	\$2.70 (2)	P/N# 275-706
Assorted Electrical Connectors	Auto Parts Store	\$5.00	n/a
12 Gauge Wire Black/Red	Auto Parts Store	\$3.00	n/a

Water/alcohol plumbing: These items will be used to connect the supply tank to the pump, the pump to the solenoid and the solenoid to the nozzle.

Brass Fitting	Auto Parts Store	\$3.00	Brass-Tite! #43033, used for nozzle mount assembly
Brass Fitting	Auto Parts Store	\$3.00	Brass-Tite! #43231, used for nozzle mount assembly
(6) 3/8" Brass Fittings	Parts Store	\$12.00	Brass-Tite! #43075, used for pump, water tank, water solenoid and nozzle mount assembly.
3/8 Fuel Injection Hose & Clamps	Auto Parts Store	\$15.00	Use high pressure fuel injection hose only!

Water/alcohol plumbing (cont.): Used to connect the supply tank to the pump, the pump to the solenoid and the solenoid to the nozzle.

Small O-Ring Gasket	Auto Parts Store	\$1.00	To seal any gap between throttle body elbow and nozzle mount. I've used the stock washer fluid reservoir in many cars since it's a decent size and already mounted in the engine bay. Another inexpensive option is the coolant overflow jugs found at most parts stores. Lastly, you can go to your local "U-pull-it" salvage yard and find a nice jug out of an 80's import that will work perfectly. Price? \$5.00-\$15.00 Either way, insert a 3/8" fitting into the tank for free flow to the pump. Don't forget to use silicone on the threads of the fitting.
Water/Alcohol Tank		\$0-\$15.00	

Miscellaneous Parts: Last but not least, here are the remaining items you'll need.

Denatured Alcohol	Home Depot	\$10.00/gallon	Only if you're using a 50/50 alcohol/water mix.
Distilled Water	Grocery Store	\$1.00/gallon	Use only distilled water, no tap water.
Vacuum Tee	Parts Store	\$1.00	Used to tap into a boost/vacuum hose on your engine. After tapping run a vacuum hose from the open end of the vacuum tee to the open end of the pressure switch.