Coolingmist Underhood kits

Stage 1 Kit + Tank

Stage 1 Kit (No Tank)

Stage 1 diesel

Contents

Components.....2:1

Tools Required.....2:2

Tank Installation 2:3

Diagram (Stage 1 + tank and diesel)..... .....3:1

Diagram (solenoid install).....4:1

Boost Switch Installation.....5:1

Fuse Holder Installation.....6:1

Injector Installation.....7:1

Installing the Pump.....7:2

Routing The Hose.....8:1

Maintenance.....9:1

Status Monitor Option 9:2

Disclaimer 9:3

Contact US.....9:4

Warranty.....9:5

DELUXE KIT + TANK

2:1GENERAL Components List:

All Kits:

1 Tank (Some Kits). 2 Quart or 1 gallon
4 1 and ¼ inch sheet metal screws (for pump)
1 150 Max PSI Coolingmist pump
2 3/8th male to ¼ hose (for pump outlet/inlet)
1 Metal Checkvalve ¼ NPT F ports
2 ¼ male to ¼ Hose Quick Connect
2 1/8thNPT male to ¼ Hose Quick connect
1 Black hose (15 feet or 10 feet)
1 3 foot section of black hose (Deluxe Kit only)
1 90 degree injector holder 1/8th F ports
1 Injection Nozzle (Sized)
1 Adjustable boost pressure switch
5 #14 flat head ¾ inch sheet metal screws
1 10 foot 16 gauge red wiring.
1 Relay (Deluxe Kit only)
1 7 to 10 Amp Fuse
1 Fuse holder

Diesel Kits:

2 12.2 GPH nozzles, 2 6 GPH nozzles
1 Tee

2:2 Required Tools:

- Drill (Electric)
- 11/32 drill bit
- 1/8th drill bit
- Wrench (adjustable)
- Wire Cutter
- Phillips Screw driver

2:3 Tank Installation

Step 1: Tap the tank.

Take a 5/16 drill bit and drill the location on the tank you want tapped. Usually the bottom is best. Screw in the fitting. It will not need any sealant. Do not drill the hole to big or the tank will leak.

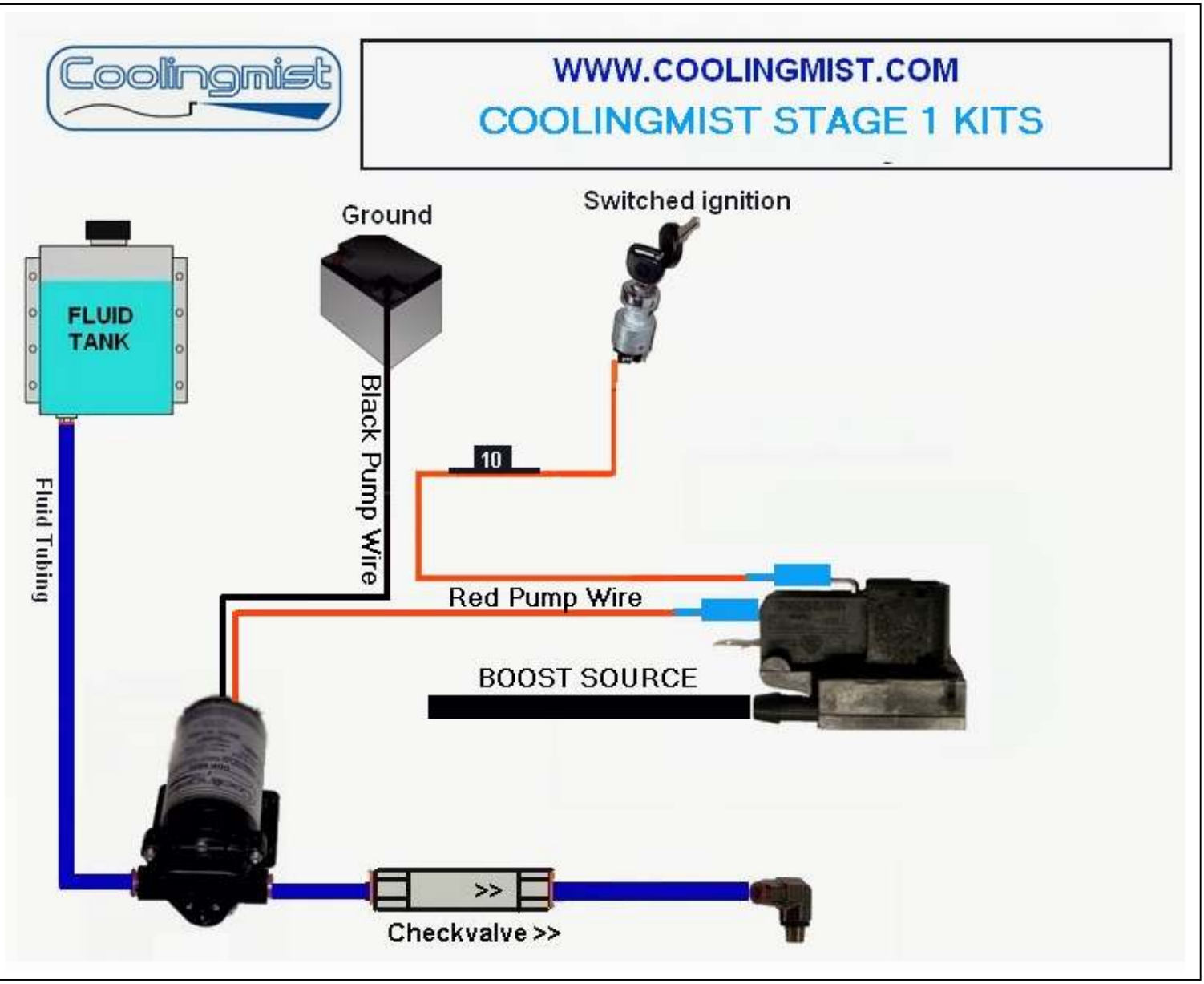
Step 2: Mount the tank

Find the best place under your hood to mount the tank. Both sides of the tank have 2 mounting holes pre-drilled. Use the 4 screws (provided) to mount the tank.

Note: If you upgraded to our 6 Gallon tank, you will have a different tank that shown. The 6 gallon tank is a strap down style tank. Brackets and straps are provided.

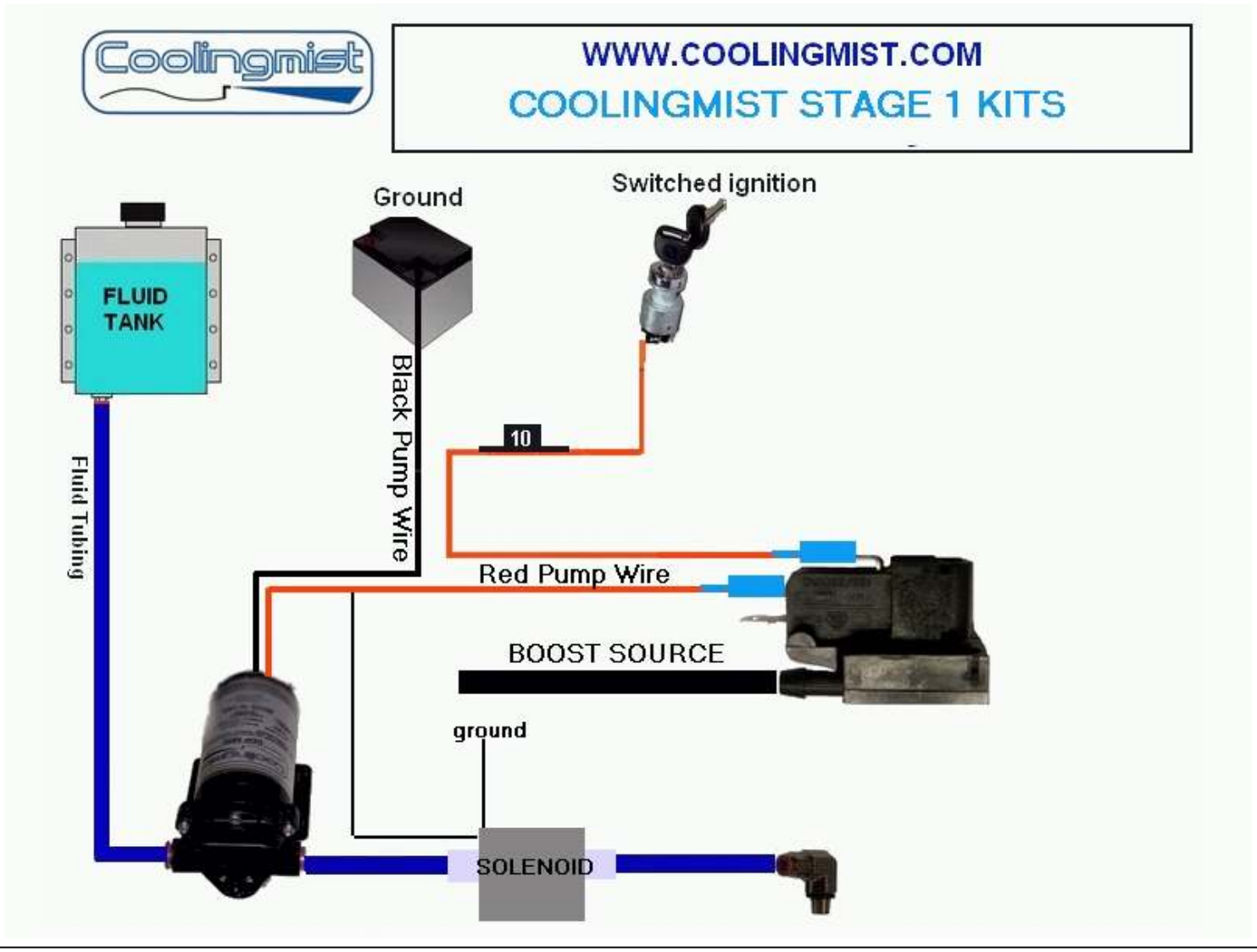
Please read the entire instructions before beginning. This document covers 3 different kits and different options within those kits. Some of the parts listed may not be in your kit if that part does not come in your kit. Contact us if you have any questions about install or content of this document.

3:1 Wiring Diagram Overview Stage 1 + tank, Stage 1 no tank, checkvalve install.



Testing this setup is pretty easy. Remove the nozzle from your vehicle but leave the nozzle connected to the hose. Make sure only water is in your tank. Turn the key to your car on. Take a 16 gauge wire and ground it. Connect the other end of that wire and touch the 85 PIN of the relay OR the wire that goes to the 85 pin of the relay. When you do that the system will inject. This will tell you if your wiring is correct. If this does not work, double check your wiring.

4:1 Wiring overview deluxe kit with solenoid



Testing this setup is pretty easy. Remove the nozzle from your vehicle but leave the nozzle connected to the hose. Make sure only water is in your tank. Turn the key to your car on. Take the wire that is connected to the (NO) port on the boost switch and move it to the (NC) pin. When you do that the system will inject. This will tell you if your wiring is correct. If this does not work, double check your wiring. Once you are done testing move the wire back to the (NO) port.

5:1 INSTALLING THE FUSE

Kits sold after oct 1, 2010 have our new style fuse holder. This fuse holder is the most robust choice. Due to its sturdy construction its not going to come apart or crack or break. Installation is easy. For this kit follow steps 1 to 6. In step 1 we put the metal clips in each side of the fuse holder, step 2 does nothing more than show you how they go together. In step 3 shows you the fuse inserted. In step 4 once you align the glass fuse press the 2 ends together (this takes some strengh). Once they are pressed together, you crimp the wire on each side like in step 5. When done, it will look like step 6. Step 7 is not applicable to this kit. To replace the fuse later, just pull apart. You will not need to re-crimp the wiring.

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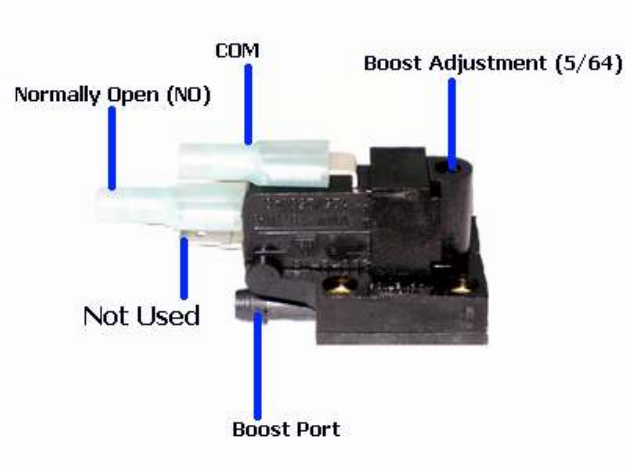
6:1 Boost Switch Installation

The boost pressure switch looks like the picture below. This device is set at 10 PSI from Coolingmist. The adjustment range is 1 to 25 psi. Running more than 25 PSI is fine, but it can only be adjusted up to 25 PSI.. Turn counter clockwise to come on sooner, clockwise to come on later. This switch weighs less than 1 once, so you don't usually need to mount the unit. If you feel necessary, you can Zip Tie this unit to your boost line, you can also take the hard plastic hose and push over the boost port. Instructions on how to connect your boost line to this unit are later on in this document.



NOTE:
The bottom port is not used. That is the NC (Normally Closed). You can however use this port to test your system after you have installed it. Instructions for testing will show up later in this document.

Did you know that all coolingmist kits are upgradeable? You can upgrade this kit to our Vari-Cool controller kit OR cmgs PROGRESSIVE KITS at any time. Contact us at www.coolingmist.com for more information.

7:1 Injector Installation

Stage 1 Coolingmist Stage I kits ship with 1 nozzle, except for Diesel Kits which ship with 2 or 4 nozzles (Depending on model).

The injector is 1/8th NPT. If you have an intercooler we recommend placing between the intercooler and throttling body. Never place prior to the turbo. If you have a roots style supercharger its acceptable to place prior. Drill your intake with 11/32-drill bit and then tap with 1/8th NPT (27 threads per inch). The injector will then screw in. If you run multiple injectors space the injectors a minimum of 6 inches apart for best performance.

The picture above shows the quick connect fitting connected to the injector. You get only 1 quick connect fitting unless you ordered the dual nozzle upgrade. Unless you have dual carbs, dual throttle bodys or more than 1000 HP you should not need multiple nozzles.

NOTE: If you ordered the diesel version of this kit, the **you will receive larger nozzles. Also, instead of a boost tee, you will receive 1 a 1/8th NPT barb fitting that you can tap your manifold to get your boost.**

7:2 Installing The Pump

Find a good spot to mount the pump in your engine bay. The pump should be below the tank if at all possible. If you must install above the tank, you should test the system to make sure it can prime before you make permanent changes.

The pump has quick connect fittings built in. Just push the hose into the fittings. To remove the hose push in on the grey fitting and pull out the hose.

The base of the pump (pictured) has 4 mounting holes, the screws (provided) will mount the pump in that location. Mark the location that you want to install pump (mark all 4 screw locations) and then drill with a small drill bit (1/8th). Using a Phillips screwdriver (power) fasten the pump to your mounting location.

The pump and tank should Be mounted within a few feet of each other for best results.

8:1 Routing The Hose

All stage 1 kits (except trunkmount)

You will need to route your hose from the bottom of the tank to the INPUT side of the pump, then from the output side of the pump to the input side of the checkvalve. Notice the arrows on the pump and checkvalve. The ¼ NPT to ¼ Hose connects to the end of the checkvalve. Like in the picture below. Next, the insert hose from the output side of the checkvalve to the injector. Just and tighten and then ½ turn with a wrench. The fitting has a rubber o-ring that prevents leakage. The hose just pushes into the fittings. Make sure the hose is cut straight. To remove the hose, just push in on the orange clip and then pull the hose at the same time. The pic below shows the checkvalve with the hose inserted. The ARROW MUST POINT TOWARD the injector. If you have dual nozzles Our Diesel Kit the tee goes after the checkvalve and your nozzles both branch off of that.

Route the water hose from the checkvalve to the injector. You can mount the checkvalve any distance from the injector. You will need to route the vacuum hose to your vacuum source as well. You will need a tee to connect to your vacuum hose unless your engine has a free vacuum port, in which case you can put the hose directly over that port.

STAINLESS HOSE OPTION:

Cut the hose as shown in the picture below. Notice the hose is cut very clean and the Teflon hose sticks out about ¼ inch around the stainless.

Next, put the bottom part of the fitting on the hose and the small tapered part over the Teflon. It should look like the picture below

Finally, take the last part and insert the brass tube into the hose. Be careful to make sure the small tapered part is still sealed over the Teflon. Screw the two fittings together, making sure the bottom fitting does not dislodge the small tapered piece. Once you are done it looks like below. Try to pull apart, it should not come apart.

Vacuum Hose….

1 foot of vaccum line and a tee is provided with your kit. Tee the metal tee into your boost source. If you have a boost gauge, tee into the same location for best results.

9:1 System Maintenance

Checking for clogged nozzles and keeping the tank full are the only real maintenance requirements for Coolingmist systems.

9:2 Optional Status Monitor

The Status Monitor is an optional component that can tell you if your jet is clogged (single jet systems only) and tell you if the system is flowing. This system does not come with an LED, but wiring is simple. One end of your LED gets 12V power, the other end goes to the NO port of the status monitor. The COM port gets a ground. When you start spraying the led will light up. If the led is lit up and you are not in boost, you have a clog. The setting on this device should be left at default. If you moved it, move the setting to the 20 mark as close as possible.

9:3 Disclaimer

Coolingmist is not responsible for damage to your vehicle as a result of failed component or improper installation. Always check to make sure your system is operating correctly. Double check all the wiring and installation prior to starting.

9:4 Contact US

On the web: www.coolingmist.com
Phone 888-MORE-HPW

9:5 Warranty

All kits are covered by coolingmist limited 1 year warranty.

Not covered under warranty are:

- abuse
- neglect
- opening electronic enclosures
- Removing original labels
- clogged nozzles
- cracked tanks due to freezing (and not using alcohol)