

## Cleaning Under the Hood

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The last few months we've been discussing how to keep the outside clean, but what about the inside? Or maybe I should say underneath the hood? Having a clean engine compartment sure makes it a more pleasant environment to work in, not to mention it looks nice! It also makes it easier to spot leaks and other problems that might not be as noticeable through the grunge.

When starting the process of cleaning up a used car, you normally start with the engine compartment. That way, it has time to dry while you're working on the rest of the car and there's no sense in splattering dirty water onto a car you just cleaned. If you're cleaning your engine for the first time, don't be surprised if you have to do some light cleaning of the nose or fenders when you're finished, but it's no big deal. 30-60 minutes is about all you need for the typical engine, though you need to add some extra time for the really grungy ones.

As in most things, there are many ways to do this, but here are some things I do that I have found to be safe. Some will say that you shouldn't be spraying water under the hood, or that you'll get water in the electronics. Generally speaking, the Miata's engine compartment is pretty simple and fairly waterproof. It's much less risky if you take a few simple precautions. Here's what works for me, however, your results may vary.

First, we need a few supplies. A hose, bucket, car wash soap, a few washcloths, a towel, some degreaser and a small disposable paint brush is about all you need. A little trim spray to finish it off is nice to have as well. If you have an air-compressor, you're really in luck if the hose can reach the car. For degreaser, I've found that the citrus-based degreasers (Greased Lightning, etc) work very well. Simple Green works too, just be careful to not let it sit on the valve cover very long. For heavy gunk, GUNK makes a foaming degreaser that rocks! A small 1-2 inch paintbrush is perfect for swishing around the degreaser.

Remember those precautions we mentioned? Well, here they are. First, it helps if you can park the car on a slight incline with the nose higher than the rear. It doesn't have to be much, the slope of a typical driveway is sufficient. I do this to help the water drain and not pool in any one place. Next, make sure the plug wires are firmly seated on the plugs and the boots are seated on the valve cover. That'll reduce the amount of water that can get into the spark plug wells. And with the car on an incline, the water will run off the valve cover before it gets a chance to get in the spark plug wells in the first place. Don't spray large amounts of water directly into the alternator or fuse box and you should be fine. If you have an after-market intake system, cover the air filter. If you're squeamish about the water getting into things, use saran wrap or aluminum foil to cover anything you want to protect.

OK so far? Here we go... Start with cleaning the underside of the hood. Lightly spray some water on the hood to rinse it off and use the soapy water and a rag to clean it. For oil and grease, spray some degreaser on it and agitate it lightly with the brush. Use a light spray of water to rinse and you're ready to move on.

Next, spray the degreaser throughout the engine compartment. It helps if the engine is slightly warm, but certainly not hot. DO NOT spray anything onto a hot engine. You can imagine why... use your imagination! Stay away from the alternator and don't spray directly into the fuse box. While the degreaser is wet, lightly agitate it with the brush to get things clean... paint, plastic and metal. You may have to work in sections to keep the degreaser from drying out. Lightly rinse each section as needed. Notice I keep saying "lightly spray" and "lightly rinse"? A fine mist is all that's need to wet something and not much more is needed to rinse. Don't let degreaser stand for more than a minute or two without rinsing.

By now, it should be looking pretty good. Go over anything you missed, use the soapy water and a rag to clean up as needed. If you want to gild the lily, remove the airbox from the air intake and clean

underneath it. Now we're ready to dry. If you have compressed air, it'll make short work of drying everything off. Otherwise, use the towel or the occasional paper towel to dab up the water, especially around the spark plug wires and boots. Once that's done, pull each spark plug wire one at a time and blow out the hole with compressed air. If you don't have compressed air, simply twist up a paper towel and stick it down the hole. If it comes out damp, then use the paper towels to wick the water out. Don't forget to put the plug wires back where they belong! :O)

Now, hop in the car and start it up. It should be just fine. If for some reason it runs funny, shut it off. It probably still has some water in the spark plug holes, or you didn't seat the wires properly. Go pull them one by one, make sure the holes are dry and reseat the plug wires. Return to the beginning of this paragraph and start again...

Once everything's done, you can really make the rubber and plastics look nice with some trim spray. I like Meguiar's *Exterior Trim Detailer* or Stoner's *Trim Shine*. Both are available in the detailing section of most auto parts stores and are aerosol sprays, making quick work of things. Spray lightly and there'll be no need to wipe up the excess. If you can't find trim spray, tire spray can work in a pinch, especially the foaming tire sprays. DO NOT spray anything on the alternator or power steering belts!

Done with some precaution, there's no reason not to keep things clean under the hood. Enjoy your newly cleaned and trimmed engine compartment. You'll find that it cleans up even easier next time! Doing it once a year works pretty well for me. It's pretty grungy in there after the winter driving season!

Enjoy the rest of the summer... don't forget a hat and sunscreen! Oh, and don't forget to wave!

*Disclaimer:* the ideas and instructions stated above are not entirely original and are provided for your information and convenience. Use at your own risk. Your results may vary. Contents may settle during shipment. Not responsible for accidents. Has been shown to cause cancer in laboratory animals. :O)