



## Silicone Coolant Hose Kit



This silicone coolant upgrade for the Slingshot installs in place of the stock rubber coolant lines. The silicone coolant lines provide protection from high underhood heat and also add some color accents.

Installation time of the kit depends on you and your mechanical skills. It is suggested that you read through the directions a few times to familiarize yourself with the components of the kit, and your Slingshot. If you are pretty handy with tools the kit can be installed in under an

hour, however we suggest that you schedule at least a couple of hours for the installation.

Full color instructions are available for download on our website—[www.ddmworks.com](http://www.ddmworks.com)

If you have any questions during the installation you can call us at (864) 907-6004 or

### TOOLS NEEDED

Pliers

13mm wrench or socket

1 gallon of coolant (Dexcool compatible)

Wire cutters

Needle nose pliers

10mm socket or wrench

Funnel

### NOTES

- While installing this kit you will open up the coolant system and coolant will come out. Make sure you have a pan to catch the coolant and some extra towels around.
- Make sure the engine is off and cool to the touch before starting this install. The engine coolant can stay warm for several hours after the engine has been turned off. We highly suggest that you let the Slingshot sit overnight before starting the install.
- Remove the coolant reservoir cap and make sure there is no pressure in the system.



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**Tech Support**

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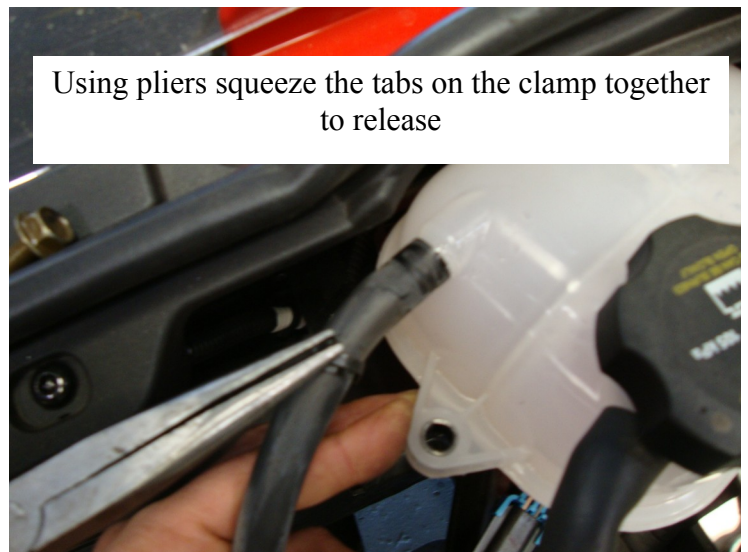
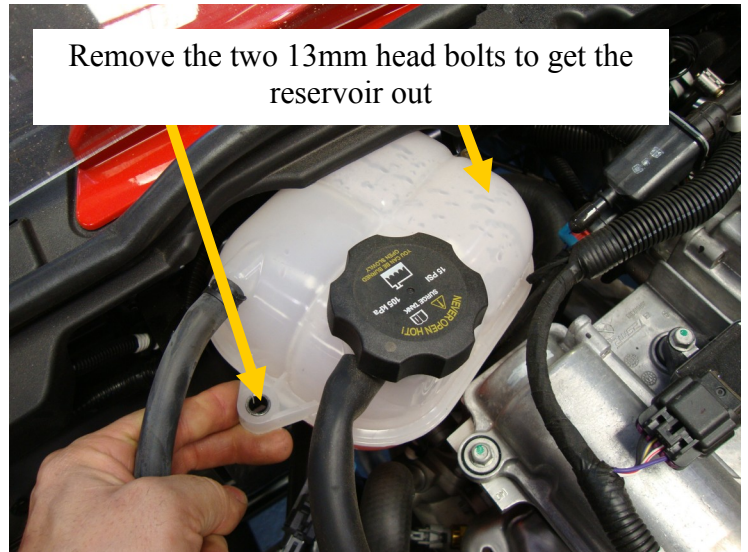
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Rev A 5-4-15 DLM

## Steam line removal and installation

\*\*\* Before starting the installation, please make sure your engine is off and has had time to completely cool down. You will be working with the coolant system and want to make sure the Sling-shot has been sitting with the engine off for at least 4 hours, preferably overnight. \*\*\*

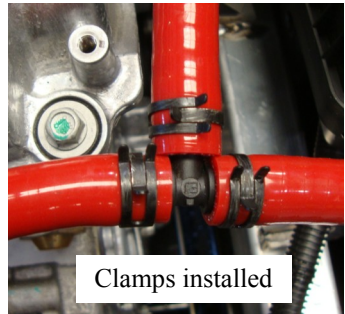
1. Before removing anything, go ahead and match up all of the new silicone tubes to the stock pieces that are on the car so that you know where each piece will go.
2. Start by removing the cap on the coolant reservoir located against the back of the engine bay.
3. The coolant overflow tube will pull directly off of the reservoir without removing any clamps. The other steam line goes into the tank under the cowl, to get to it you will need to remove the two 13mm head bolts holding the reservoir in place.
4. With the 2 bolts removed you will be able to get the reservoir to come out from under the cowl. You will also be able to see the clamp on the end of the hose that is holding the hose onto the reservoir. Use a pair of pliers to squeeze the 2 ends of the clamp together and slide the clamp back from the reservoir. Once the clamp is slid back, you will be able to pull the hose off of the reservoir. Sometimes a twisting motion while pulling will make it easier to pull off the hoses.
5. Next, use a pair of wire cutters to cut the zip ties that are holding the stock rubber lines to the engine. The overflow hose goes up to the fan and is held into a plastic fastener that it will slide out of at the end. We want to reuse that fastener at the end, so do not cut that one.
6. There are clamps holding the steam lines to a "T" fitting near the front of the engine. Remove the stock rubber lines from "T" fitting. Then remove the stock rubber lines from the top of the radiator and the drivers side of the engine.
7. The small hose going across the front of the engine will require you to remove two 10mm head bolts to release the clamps, you will re-use those clamps and bolts.



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## Steam line removal and installation (continued)

6. Now find the 3 thinner silicone tubes that are in the kit. Match them up to the stock pieces that you removed.
7. Before installing them in place, you will want to install the hose clamps onto the ends of the new hoses. Use the pliers to squeeze the clamps and slide them up the new silicone hoses about 1" from the ends.
8. With the hose clamps on the 3 steam lines, install all 3 steam lines in their place and over the "T" fitting.
9. Once all of the steam lines are in place go ahead and squeeze the clamps and slide the clamps down so that they are close to the end like stock. You will want to leave the end of the steam line that connects to the drivers side of the engine off right now, as it will help bleed the system later.

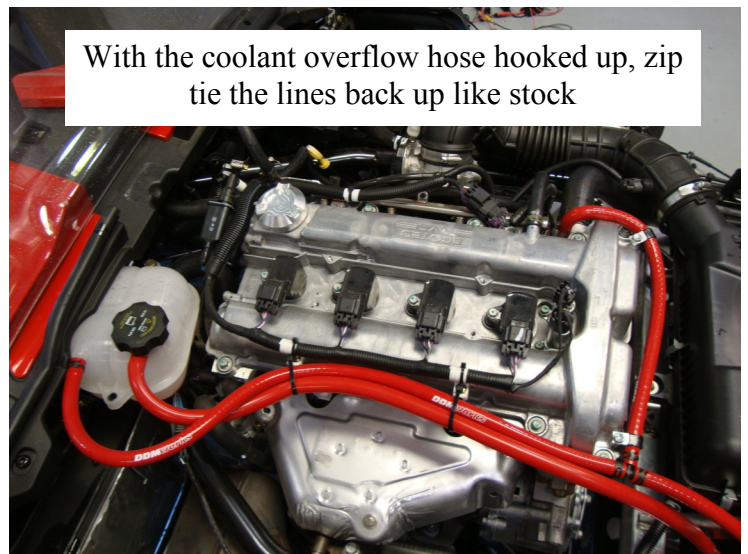


Clamps installed

10. Now find the silicone hose that is the coolant overflow. It goes from the coolant reservoir to the radiator. There is a supplied spring clamp in the kit to make it a little more secure to the coolant reservoir, then slide it into the plastic retainer at the radiator that you removed the stock line from. Next, use the zip ties supplied to hook the lines back up like stock to the valve cover.



Install the new steam lines in place of the stock rubber hoses



With the coolant overflow hose hooked up, zip tie the lines back up like stock

## Intake tube silicone

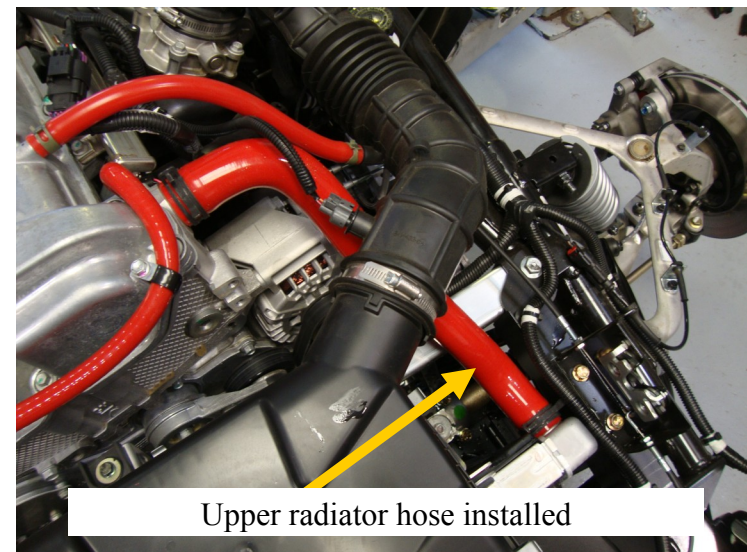
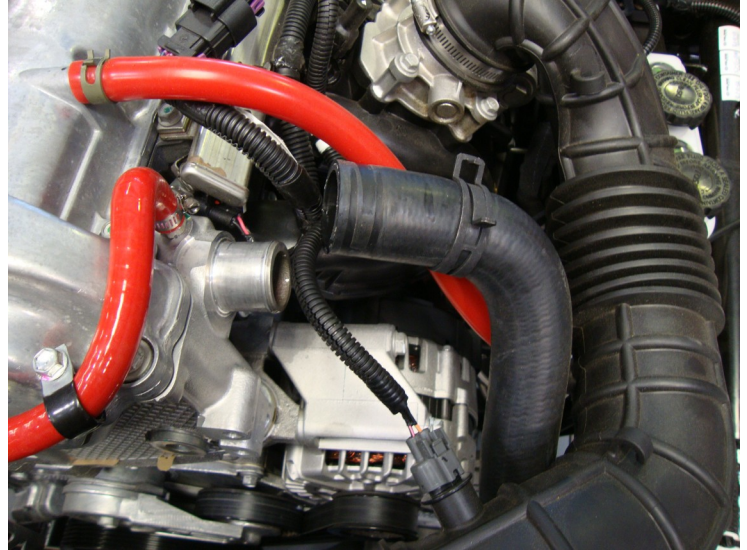
1. There is a short silicone hose that is used to replace the rubber breather tube from the valve cover to the intake. Installation is pretty straightforward, start by squeezing the clamps on both ends of the stock rubber hose.
2. Once the clamps are released, pull the stock rubber hose off the valve cover and pull the other end off the intake tube.
3. Slide the clamps over the new silicone and push the new hose over the valve cover and the other end over the intake nipple.
4. Last, squeeze the clamps and slide them up to lock the new silicone hose in place.



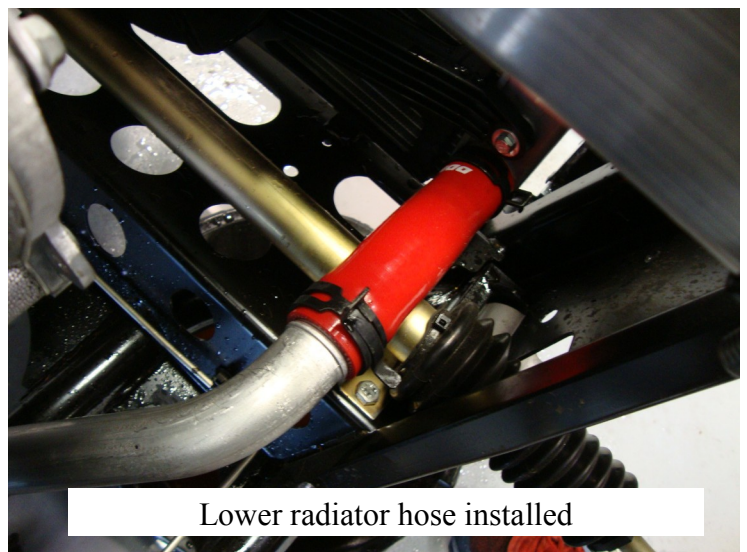
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## Main Coolant line removal and installation

1. Start with the upper side of the main coolant hose that hooks to the drivers side of the engine at the top. You will use a larger pair of pliers or channel locks to be able to get around these larger clamps and get them to squeeze enough to remove. When you pull off the top of this first hose, expect some coolant to come out.
2. Once you have the top of the hose done, more down to where it connects to the radiator. Remove that hose clamp and start to slide the hose off slowly, it will start to leak coolant. As it starts to leak, make sure you have something to catch it under the Slingshot. It is helpful to just let the hose come off partially so the stream of coolant coming out is a small stream.
3. Once the coolant has stopped coming out, remove the hose completely from the engine bay. Remove the clamps from the old rubber hose and slide them over the ends of the new hose. Pay attention to the orientation of the hose clamps to make sure you are going to be able to tighten them once they are installed.
4. With the hose clamps in a good place, install the new silicone hose onto the radiator only. Squeeze the clamp going to the radiator and slide it up into position. Leave the end going to the engine off for right now.
5. The last hose to replace is going to be the lower radiator hose. It comes off the bottom of the radiator on the passenger side of the engine. Reach in and squeeze the clamps and slide them back to remove the hose from the engine bay.
6. While removing the hose expect a lot of coolant to come out and make sure to have something to catch it.
7. Remove the clamps from the old rubber hoses and slide them over the new silicone hoses and install the new hoses in place.
8. Squeeze the clamps and slide the clamps into place securing the hose in place.



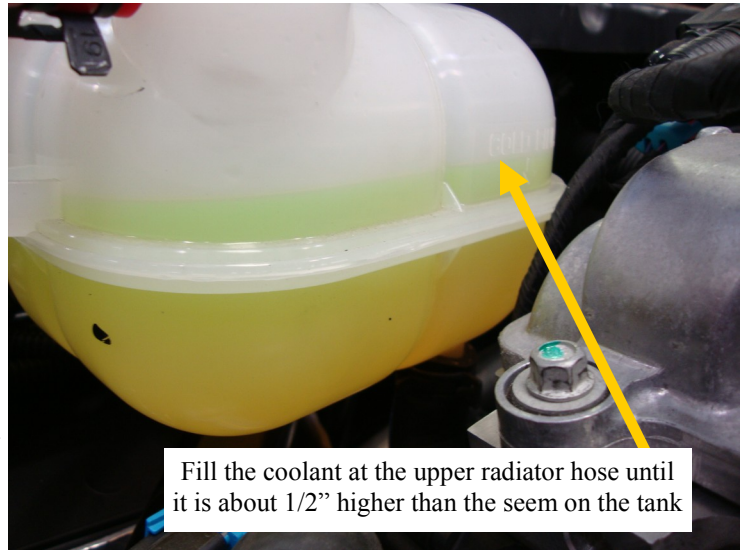
Upper radiator hose installed



Lower radiator hose installed

## Final Clean up and Coolant Bleeding

1. With all of the hoses installed and secured in place, the last thing to do is bleed the system. Before starting make sure that the cap is still off of the coolant reservoir.
2. Fill the coolant reservoir up with a 50/50 mix of coolant until you get to the center seem on the tank. There is a mark that shows the level that it should be at cold.
3. Next, hold the end of the new upper radiator hose straight up and use the funnel to start pouring coolant into the top of upper radiator hose. You want to keep pouring until the coolant comes up to the top of the coolant hose.
4. As it comes up to the top of the radiator hose, it should start to also start to fill up the coolant reservoir a little bit. Keep pouring coolant slowly into the upper radiator hose until the coolant in the reservoir gets about 1/2" above the mark for cold level on the tank.
5. Now go ahead and install the upper radiator hose onto the engine and secure it with the clamp. The small steam line next to it should still be left off.
6. Make sure all tools are removed from the engine bay and go ahead and start the engine at this time. Immediately look for any leaks and take care of them if you see any.
7. While the car is idling, watch the nipple that the small steam line goes to on the drivers side of the engine. After 5-10 minutes you will start to see coolant slowly start coming out of that nipple. At that time, go ahead and shut off the engine, install the steam line over the nipple and secure it with a clamp.
8. Start the engine again and let it idle. If you are using a green colored coolant you will start to see the color in the reservoir tank slowly start to change from green to an orange color while the engine is idling. Once you start to see the color change, carefully touch all of the silicone lines that you replaced. They should start to be warm at this point.
9. Once the color starts to change, go ahead and rev the engine a couple times up to around 2500RPM, this will sometimes pull a little more coolant into the system and drop the level a little bit. You should end up with the coolant level right at the seem. Make sure to add fluid or remove some if necessary.
10. You can put the cap back on the coolant reservoir now and take the Slingshot for a short drive. There is a over temperature light on the Speedometer. If that lights up then you will need to pull over and let the engine cool down and repeat the bleed procedure. Also make sure to check the coolant level after the first couple times you drive. It is natural to have to add a little coolant after the engine goes through a couple heat cycles.



**Congratulations!** You have finished the install. All of us here at DDMWorks thank you for your purchase and hope you enjoy your new silicone coolant hoses!

**If you have any questions feel free to give us a call or text us at 864-907-6004. You can also email us at [Tech@ddmworks.com](mailto:Tech@ddmworks.com).**

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