

COOL IT!

Introducing Daystar's New JK Hood Cowl & Side Hood Vents

By: Mike Duval

Photography: Mike Duval / Eric Trujillo

If you know anything about the 2007 - current Jeep JK, you know they can get extremely hot under the hood. This can take a serious toll on aftermarket wiring or under hood accessories such as on-board compressors. I've personally seen unprotected wiring harnesses melted after pulling a long incline in a JK at high RPM's.

So what do you do? While there are several options out there, the techies at Daystar have done their homework and come up with an affordable solution that will reduce temperature (just for clarification, under-hood temp, not engine operating).

Rather than just cut some holes in the hood and add vents, the crew at Daystar utilized under hood temperature information directly from Mopar as well as from V-8 conversion specialists to come up with the optimum positioning for the vents.

The results speak for themselves. Testing showed the following under hood temperature reductions with various combinations; 24% with the Hood Cowl & Side Vents, 17% with the Center Vent & Side Vents, 14% with the Side Vents only, 12% with the Hood Cowl alone and 7% with only the Center Vent.

We opted for the Hood Cowl & Side Vents and installed them on a 2007 JK in about 3 hours. The kits are complete, the instructions straightforward, and the supplied templates are right on the money.



The finished product definitely adds some "Attitude"!

We started our project by thoroughly reading the instructions for the cowl and side vents prior to commencing work just to be sure we had all the necessary tools for the job. Nothing's more aggravating than having to stop in the middle of a project to track down something you need. One thing we did notice during our preparation was the Emissions Information Decal under the hood was in the area to be cut for the side vent installation. This is an important decal! I'd recommend you carefully remove it and re-install it afterwards with some high quality spray adhesive.

Our JK did not have the factory insulation blanket. The Daystar parts will work with or without the insulation. The blanket is for noise reduction and to keep heat from adversely affecting the paint. On a side note, I've owned 4 JK's and none of them had this blanket (my choice). I prefer the clean look and haven't experienced any paint issues...nuff said.

1 - We removed the factory washer nozzle, footman loop and windshield bumpers (photos 1-3). These items will not be re-used.



Photo 1



Photo 2



Photo 3

2- Next, after carefully cutting out the footman loop & bumper holes on the template, we positioned the template on the hood placing the footman loop and bumpers in place to hold it in position (photo 4).



Photo 4

3- A layer of painter's tape was applied below the areas to be cut and the template edges were then taped down (photos 5 & 6).

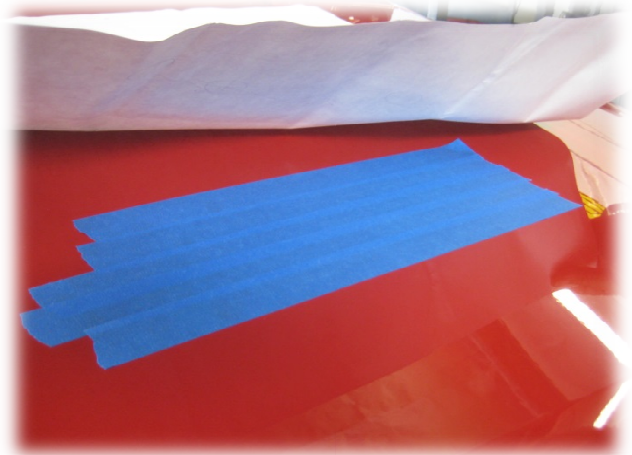


Photo 5

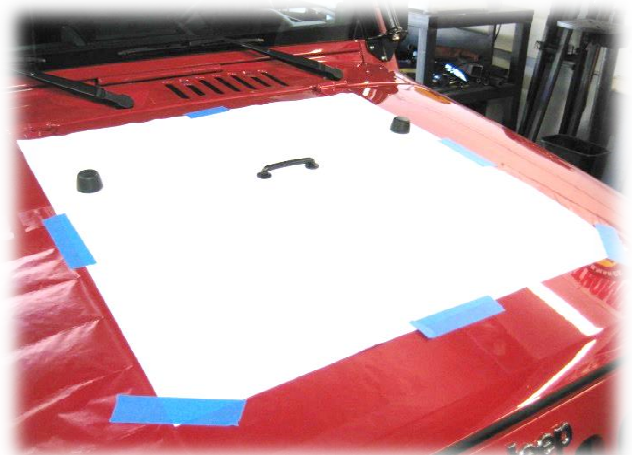


Photo 6

4- To minimize the mess and clean up, we placed a drop cloth under the hood on top of the engine. All holes were center punched and drilled to 1/16". Then, all but the 1-1/4" holes were opened to 5/16" (photos 7 & 8).

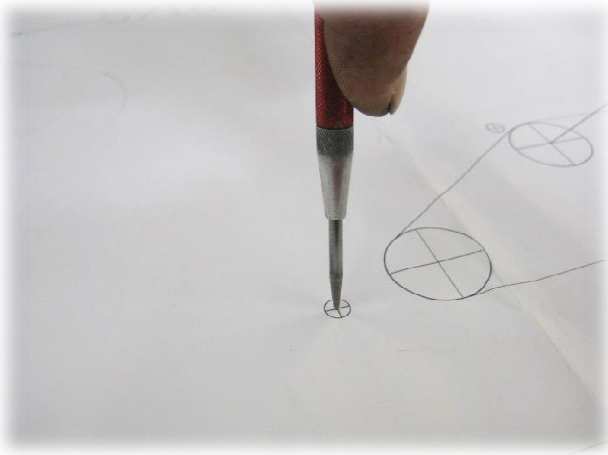


Photo 7

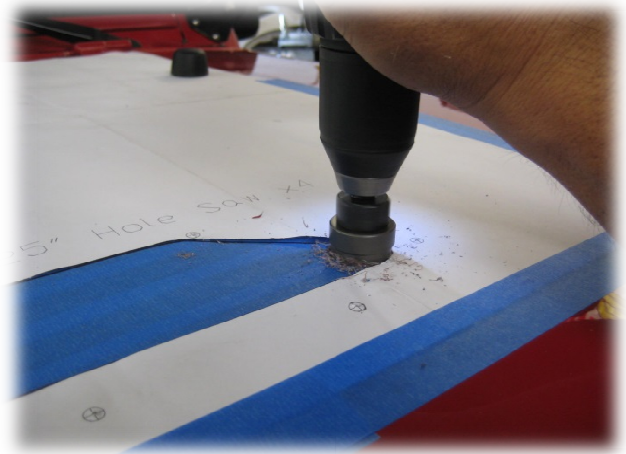


Photo 10

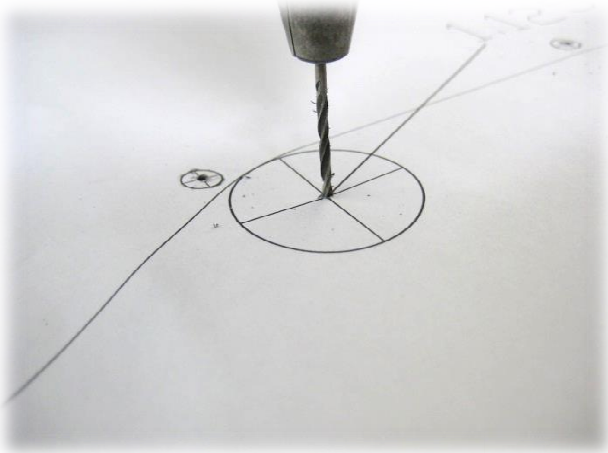


Photo 8



Photo 11

5- Cut out the vent profile from the template and mark the cut line with a marker (photo 9). Then remove the template.



Photo 9

6- Open the 1-14" holes with a hole saw, then cut the vent opening with a saw, cutoff wheel, or air nibbler (photos 10 & 11).

7- Grind the edges smooth to match the cut line. If you're using a hood blanket, there are steps to mark & match cut the blanket at this time. Since we weren't using one, we moved on to opening the inside of the 3 rearmost holes to $\frac{3}{4}$ " with a hole saw for attachment hardware access (photo12).



Photo 12

8- Next, we applied paint to the exposed cut metal edges and prepped the cowl for installation by installing the new washer nozzles and side vent covers (photos 13 - 15). The cowl and side vents need to be painted to protect them from UV damage, which we will do at a later time. We also final fit checked the cowl and then removed it to allow for the side vent install procedure, which utilizes a similar template that rests on the hood where the cowl will be installed.



Photo 13



Photo 14



Photo 15

9- The side vent template is located in the same manner as the cowl was in steps # 2 & 3 (photo 16). Be sure it is centered!



Photo 16

10- The drilling / cutting procedure is also identical to steps #4 - 7 (photos 17 - 19).

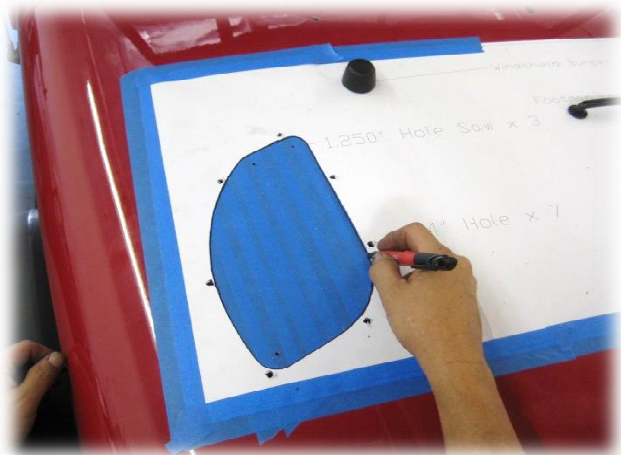


Photo 17



Photo 18



Photo 19

11- Once again, if you're using a hood blanket, there are steps to mark & match cut the blanket for the side vents at this time. Since we weren't using one, we prepared to do the final install of the cowl & side vents.

12- After pre-fitting the side vents and double checking the mounting holes, we attached the side vents from the inside with the provided hardware and supplied poly backup ring. For a cleaner fit, we reversed the poly ring since we weren't using the hood blanket. We also found that if you have a small amount of raised "flashing" on the backup ring leftover from the poly molding process, lightly grinding it off makes the installation easier (photos 20-22).



Photo 20



Photo 21



Photo 22

13- Photo 23 is for reference only and shows the optional Daystar Center Vent for those who do not wish to install a cowl. It utilizes the same cutout as the cowl system.



Photo 23

14- We then installed our cowl using the supplied nuts and flat washers. Once again, we reversed the poly backup ring as in step #12 (photos 24 & 25).



Photo 24



Photo 25

We can't wait to get out and try the vents. They look absolutely awesome *(And we haven't even painted them yet)*. We're confident they'll work as advertised. We can already see the waves of heat escaping from the vents at idle!

SOURCES:

Hood Cowl & Side Vents-

Daystar Products International

841 South 71st Avenue

Phoenix, AZ, 85043

www.daystarweb.com

Installation-

Off Road Toyz / SXS Unlimited

185 East Easy St, Unit "B"

Simi Valley, CA, 93065

805-585-5160

www.sxsunlimited.com