## Your Next Flat Tire, "When, Not If"!

Most people go thru their driving lifetime thinking they will never have a flat tire. Are you one of them? Or have you ever had a flat and were not prepared? The NA and NB owners do have a spare tire. But when did you last check the air pressure in it? Us NC owners (2006 and newer) do not have a spare tire, but we do have an air compressor and a bottle of "ooey-gooey" tire sealant. I do not like this sealant, as it gums up the inside of the tire badly. It also makes a real mess for a service man to work with when replacing or permanently repairing the tire. I prefer using a "Tire Plug" kit, which is easy and not as messy for sure. I had a flat this summer and used the plug kit to make a quick repair. Here is what I did. I like to remove the wheel from the car to do this, but it can be done right on the car too. The tire stays mounted on the wheel.



Take a look at above picture. This includes the basic parts of a tire plug kit. The top tool is a pointy round file. After you remove whatever punctured your tire, use this tool to clean out the hole and roughen it a little. DO NOT over do this or you can make the hole to big. The items in the middle are the plugs themselves. They are like a 3" long heavy felt cord impregnated with a sticky gummy substance. The bottom T-handled tool is the insert tool. You can see the front of it is split open to hold the plug. The bottom item is (of course) a tire pressure gage.



In the picture above the top part shows a piece of red yarn inserted in the front of the insert tool as if it was a plug, You want the plug centered in the insert tool with an even amount on each side. The bottom picture part shows the plug insert tool held in place as if ready to push into a hole. This kit didn't come with rubber cement, but I like to use this by spreading some on the plug before I insert it into the tire. This helps insure that there will not be any air leaking out around the plug. I have plugged several tires this way with great success. The rubber cement dries quickly, so first put the plug in the tool, then spread rubber cement on the plug. As soon as you apply the cement, firmly push the insert tool and plug into the hole. Make sure you push it in far enough that it is thru the hole, but also be sure to keep enough plug material sticking out of the tire to hold while trimming it. As soon as you push the plug into place, quickly pull the insert tool back out. If you do not pull the tool out right away, you might not get it out! The plug will stay in place and the rubber cement will help seal everything tight. Note leaving some air in the tire will help when you push the plug in the hole.

I like to give the plug and rubber cement a couple minutes to set up in place before I pump the tire up to pressure. Give it a couple minutes to set while you put some of the tools away you were using. Next inflate the tire to the pressure you like to carry in the tire. Last you can trim the plug and install the wheel back on the car. I like to trim the plug flush with the tire, but as you drive whatever you do not trim will wear off. As a safety precaution, every time you fix a flat with either the "Goo", or a Tire Plug, take the car to a tire shop as soon as you can and have them put a patch on the INSIDE of the tire. They will trim off the plug on the inside and put a patch inside to make sure the tire does not ever leak air. This is very important.



Take a look at the next picture. The top part of the picture shows the loop of the tire plug that is inside the tire. It sticks in a little over a ½ inch. Now take a look at the bottom part of the picture. This is what caused me to have to buy a new tire. As the air leaked out of the tire, the inside bead of the tire rubbed on the inside of the tire tread area and wore off a layer of rubber. I was told this weakened the tire to the point to where it was unsafe to be patched and reused. Upsetting for sure, so as soon as you know you have a flat, pull over and fix it right away.



The last picture top section has a pile of rubber that came out from inside my tire. The pile was bigger around and taller than the clothespin lying in front of it. A surprising amount as I only drove about 100 yards after I picked up the large screw. The bottom part of this picture shows the outside of the tire where I trimmed the plug. It is a gummy mess to trim, so you can't make it perfect. But if I would have driven on it a while, it would have worn smooth.

One thing to note is that if the hole or damage to the tire is in the sidewall, it is not repairable long term. If it is a small hole you might be able to plug it just to get home, but it will not be safe long term. So plan on buying a new tire as soon as you can.

Lets all hope none of us ever have another flat tire, but if you keep air in your spare, or carry a plug kit in the NC, you will be able to resolve the problem and quickly be on your way.

Zoom-Zoom! Bill Latsha