

## C6 Wiper Blades:

Funny how the only real time you think about the need to replace your windshield wipers, especially in Arizona, is when all of a sudden a Monsoon hits. You can see evidence of this in front of just about any O'Reilly's or Auto Zone as there usually a garbage can filled of discarded wiper blades either during or just after a Monsoon. While age has a degree of impact of a wiper blades performance, cleaning and conditioning also play a part.

To keep your blades lasting as long as possible, it is necessary to keep them clean and conditioned. Cleaning is as simple as just wiping them down (actually lifting them off the windshield and running your damp rag along the blade edge a couple of times) on a one to two week basis. The idea here is to keep the blade free from dust, bugs, and any other contaminant that likes to attach itself to the rubber. Keeping the rubber conditioned can be done many ways, but recently Steve, of Steve's Detailing, explained his method of using glycerin to keep the blade conditioned (also works well with exterior rubber products).

When it does come time to replace wiper blades, I'm sure Bruce will be happy to help you get a new set for your car. Just this past week I replaced the blades on my '08 for the first time. I guess having covered parking while at work and keeping the blades clean really helped extend their useful life (or are they just that good?). I decided to replace just the blades, as there was nothing wrong with the holders, and the driver side is special in that it has a wind deflector built into it (making a replacement holder/blade all that more expensive). GM actually has different numbers for left and right blades (fits all '05-'13), which are 12335960 (L) and 12335961 (R). They both looked the same to me, however.



The easiest way to start is to remove the holder from the arm. To do this (with or without hood open), you simply push up on the retainer tab and slide the holder back (see picture at left). To replace the blade, simply grab the blade on the sides at the bottom edge (this would be the edge on the right as looking at the blade in its parked position), and pull. You have to give a good tug, and will slide right out. As you pull the blade out, it may come apart (i.e., the two metal runners



separate from the rubber blade). To install the wiper refill, insert it from the bottom and feed it through all the retainers until you get past the top one, and which time you'll have to push firmly on the bottom to get it to seat/lock in place.



The picture at left shows the old blade removed (top) and the new blade (middle), with the holder at the bottom.

## C1/C2 Drum Brakes:

Ever do a drum brake job and find that your stopping power is less than it was before you started? Or you have problems with the car pulling left/right and you can't adjust it out? A commonly overlooked element of doing a brake job on a drum brake car is the relationship between the shoe and the drum. New brake shoes are designed such that the arch of the shoe matches the diameter of a brand new drum, one that has not been worn down through use or cut as part of the brake job. As the drum wears (or gets cut), the inside diameter gets larger, thus the arch changes. What ends up happening is that the new shoe(s) no longer matches the arch of the drum, and the two don't "fit" together. Essentially less of the shoe contacts the drum, and stopping power is diminished (and/or you can't adjust the shoes properly and braking is uneven to the point of the car pulling left or right).



The way to resolve this issue is to have the shoes “arched” to match the drum. This is best done by a qualified brake shop that has the equipment to do the work. Likely they can end up both cutting the drums and arching the shoes in one shot. A good shop, however, will not re-arch shoes if the drum is worn/cut larger than the maximum allowable diameter. This happened to me on my '60, which still had its original drums. In that case, I replaced both the drums and shoes, and they all matched up perfectly.

At left is one type of machine that is used to arch a shoe. The place that I was going to have re-arch the shoe was Arizona Brake and Clutch in Phoenix. I'm not sure they still do it, but it might be a good place to call and ask.

Once the shoes are arched properly and everything is back together, adjusting the brakes is necessary to provide maximum and even stopping power. The best method I have found to set the brakes is to have each wheel in the air (on a lift is preferred – such as the one at Corvette Arizona that is available to all Preferred Customers), and adjust the shoes to the point where the wheel will no longer turn with a moderate amount of force. Then back off the adjustment by three to five clicks. The wheel should not spin freely, but rather have some resistance and require that you apply a small amount of force to keep the wheel turning. If the force required to spin the wheel varies as it goes through a full rotation (especially if there is a point at which there is no resistance), then you need to go back and make sure you re-assembled the brake HW properly (e.g., check springs and ensure the shoes are not hanging up on the backing plate). It may also be necessary to check the drum, bearings, and spindle. The brake friction should be fairly uniform as you rotate the tire – so if it is not then something is not quite right. A road test (at shower speeds) is always a good way to initially test overall operation (stopping force, and checking for any pulls left or right). It is also good to re-adjust the brakes after a couple hundred miles and then at a regular interval as specified for your model year.

So the next time you're in talking to Bruce about parts for your drum brake project – don't forget to look into re-arching the shoes if your drum is worn.