## **Instructions for Converting a Used Paper Filter to Foam**

The foam filter conversion uses an old (and probably dirty) stock Cavalcade air filter. You want to leave the filter basically intact but just remove the paper that's in between the top and bottom plates. You want to leave the epoxy and corner supports in place.

1) Using a fine tooth hacksaw blade (32 teeth or so) cut the filter paper flush with the top and bottom metal plates. Be careful at the corners as you want the corner supports to stay put. You may have to use a sharp knife to cut the paper at the corners and where it's crimped into one of the corner supports.

2) Brush off any loose bits of paper but don't worry about getting it squeaky-clean. Fit the foam filter over the filter frame so that it sits where the paper did. There are 2 glue joints in the foam and it might be best if those were on the back of the filter since they will end up right next to the corners.

3) Using silicone (clear will show the least but color doesn't matter), lift the edge of the foam away from the frame and run a bead of silicone onto the old paper (or onto the epoxy) and then release the foam and let it mush down into the bead of silicone. Don't be stingy with the silicone but also don't put on a massive amount.

4) Working an inch or two at a time, work all the way around the top and bottom of the frame making sure that the foam is set into a bead of silicone all the way around both plates.

5) Sit aside and let it dry for at least a full day. Not overnight, a FULL DAY.

6) After the filter has cured for at least a full day, using either motor oil, spray filter foam oil, bottled filter foam oil or 90W, oil the filter. You don't want the filter dripping with oil as that will cause it to block air. Run some beads of oil about 1/2" apart and then work the filter between your fingers to distribute it. It doesn't have to be perfect but you want some oil all over. DO NOT USE THE FILTER WITHOUT OILING IT.

7) When it comes time to clean it, use Dawn hand dishwashing liquid in warm water. Mix the Dawn and water in a bucket or pan and let the filter sit in it for a few minutes. Rinse the oil and dirt out by flowing water from the inside to the outside. Use some care as the filter material gets a little fragile when it wet.

8) Sling the water off the filter and let it sit until completely dry (some compressed air can speed up the process but be careful.

9) Check the joint between the foam and frame and repair as needed. Re-oil and reinstall

10) Foam filters will eventually deteriorate (takes many years) but if starts to show signs of that simply replace it as you did.