THE PREVENTATIVE MAINTENANCE SERIES

Last month's article dealt with brake problems; this month covers brake replacement and or maintenance. Remember you get what you pay for with the "\$69.95 Brake Special"

Anytime the brake shoes are replaced you should also do the following:

- Drums and shoes: have the drums turned any year Corvair can have them turned up to 0.060 oversize, but most shops will not accept them for turning if they are already over 0.050. When you use oversize drums two problems occur. The missing metal reduces the ability of the drum to accept heat and the new inside diameter of the drum will only contact a small area in the center of the new shoes. This causes a significant increase in pedal effort when stopping. I have found that the shoes sold by O'reilly are actually thicker than stock, so turning your drums within specifications should work. One additional note: Some aftermarket shoes (including O'reilly's) may not allow you to install the drum without grinding out some of the anchor pin and star wheel mount area. Some of the parking brake lever pin holes may need to be drilled out and the new shoe material can cause pulling.
- 2. Wheel cylinders need to be replaced or rebuilt any time you change shoes. The thicker shoes will force the seals back in to the area of the cylinder where they have not been working which causes premature leaking. In most cases you can hone out wheel cylinders and install new seals. The center of the cylinder will have rusted areas but generally the seals will not work that far in. It is an individual judgment call. Early model cars through most of '64 used aluminum pistons which corrode easily. Late models use a special iron piston which is much less likely to be a problem. You might consider an up grade if you do not put many miles on your early model. Also consider the hoses they all are getting old and if you cut one open they have a very thick wall and very small bore. If the clenched fittings rust they can swell up and pinch the hole shut.
- 3. Hardware items need to be cleaned inspected and the pivot areas lubricated. I have found all kinds of weird springs on Corvair brakes along with items left out so check your parts from side to side, against the book or check with another owner if there is any doubt. Digital cameras and e-mail are great for that! Watch for relaxed spring coils, bad rust on the nails, frozen adjusters, adjusters on the wrong sides of the car, shoes on backwards and groves worn in backing plates. Also check the rear parking brake operation if it is out of adjustment or starting to freeze up, you will not be able to get the drums on or if you do, the life of the brakes will be quite short.
- 4. Flush and bleed the system. My favorite is the one man bleeder cup. It allows you to attach a hose into a cup with a small amount of fluid. You can stroke the pedal with a stick while you watch the bubbles come down the clear hose. The end of the hose is in the fluid which prohibits air from going back up the hose when you let up on the pedal. Caution: brake fluid will etch paint.
- 5. Miscellaneous: Brake fluid is soluble in water. Clean your parts with soap and water and dry immediately. Hose off the brakes before starting to eliminate dust. Use Brakleen to do a finish cleanup. Be sure to lube the rubbing points on the backing plate you can grind the pads slightly if they have grooves. New shoes do not have asbestos and take more pedal effort. Most old car sources agree that it is wise to avoid silicone brake fluid unless the system is designed for it.