

Brake Workshop Held In Millersville Garage On Saturday April 11

By Bill Wurzell, Editor

Being car enthusiasts, Chesapeake Region members have most likely been involved with doing a 'brake job' at one time or another. Whether it's on a General Motors, Ford, independent make or foreign vehicle, none can be more of a challenge than the 'Lockheed' designed braking system on Chrysler products.

Why is that? Good question. Chrysler Corporation used the Lockheed brake system for decades ending in 1957 when they went to a brake system very similar to GM and Ford. One exception to this is the 1951 Crown Imperial which sported 'disc brakes' on the front axle; although it had the Lockheed setup on the rear.

Chrysler claimed the brakes on their cars and trucks stopped the vehicle quicker, in a straight line, with less pedal pressure than their competitors. I'm sure their competitors would emphatically disagree.

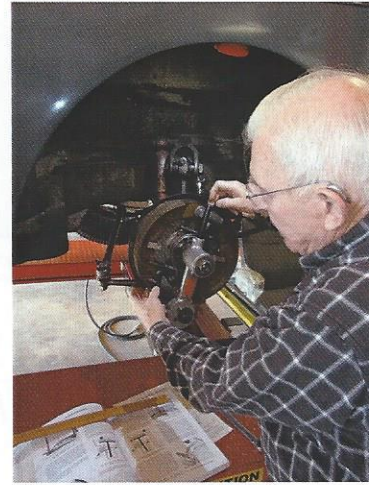
Performing a brake overhaul on a Chrysler product isn't a whole lot different than any other car, *but* getting the brakes properly adjusted certainly is. I can personally recall the summer of 1959 between my sophomore and junior years in high school in Southwestern Pennsylvania. In those days, Pennsylvania motorists were required to have their vehicles safety inspected TWICE a year. Yeah, they weren't too happy about it either. Nevertheless, the cars on Pennsylvania roads were probably safer than any car on the roads of other states. The state inspection was rigorous, addressing every system on the car, especially brakes.

During the summer of '59 I got a job at a local garage/body shop/gas station. I was to be the 'helper' and I had almost no experience. I just received my driver's license in April of '59. The business was owned by two brothers, Jake and Dave. Jake was the mechanic and a very good one. Dave was the bodyman and a very good one. Dave helped out on the garage side when he was slow, which was rare. Jake taught me how to reline brakes and rebuild wheel cylinders. I don't ever remember *REPLACING* a wheel cylinder, they were always 'honed' out and a 'Moog' wheel cylinder kit with new springs, cups and pistons installed.

I was a quick learner in those days and in a couple weeks I was able to do a nearly complete brake job on most vehicles. When I did a Plymouth, Dodge, Desoto or Chrysler, Jake would check it out and point out anything wrong and then he would 'adjust' the lining. He tried to show me how to do it, but I never quite caught on. It was a matter of 'feel' and experience as much as anything. We had all kinds of brake tools to complete any brake job...except adjusting Lockheed brakes. That's why I was amazed last month when Willis Terret showed me an Aamco brake adjusting tool just for Chrysler products. Will told me that the DeSoto Club was planning a workshop regarding 'how to use the brake adjusting tool'. The workshop was planned for April 11 at 10 am.

Saturday, April 11 was a nice spring day, a little cool in the morning but low 60's by noon. The workshop was held at Will's good friend, Murray Cole's garage in Millersville, MD, not far from Will's residence. In addition to Murray and Will, Tom Kenney, Jim Turner and I were on hand for the workshop. There was hot coffee and fresh donuts, compliments of Murray and Will.

Murray Cole's garage is a car guy's dream! Six bays, two huge bays for firetrucks, yes, Murray restores *FIRETRUCKS!* He is also a Packard fanatic and owns a 1947, 1951, 1955 and 1956 Packards.



In the picture on the left, the brake tool is applied to the spindle with settings obtained from the brake drum. In the picture on the right, Willis rotates the brake tool to see how well the lining will contact the drum. Major and minor adjustments are made to each shoe for minimal wear and maximum stopping power. The brake adjusting tool came with a brake lathe manufactured by Aamco.

Murray's '55 Caribbean convertible is a number one.

In order to demonstrate the brake adjusting tool, Willis used his 'rescued' 1949 DeSoto Custom sedan as a guinea pig. The car was in the center garage over the lift. The front end was 'jacked up' slightly and the right front wheel was removed as well as the brake drum. The brake tool was applied to the inside of the brake drum and settings taken. The tool was then attached to the spindle and rotated over the brake lining. If the settings were made correctly, its easy to see how well the brake lining will interface with the brake drum and which shoe should be adjusted and how much. The object is to have as much brake lining surface in contact with the brake drum as possible for maximum stopping power. The Lockheed brakes have major and minor adjustments on both brake shoes, each brake shoe is referred to as front and rear or left and right as opposed to primary and secondary, common in other systems. There are *two* wheel cylinders on each backing plate, one at the top at 1 o'clock and one on the bottom at 7 o'clock.

Thinking back to my days in 1959 working at the local garage, it would have been great to have such a tool when adjusting those Chrysler product brakes. We used to get Chrysler products in with brakes that had one shoe completely worn out and the other like new. This condition is just due to faulty adjusting. I remember a 1956 Plymouth Savoy that had only 8,000 miles on the odometer; one shoe was as 'thick as cigarette paper' and the other like new. The brake drum was 'gouged' to the point it needed replacement because it was too far gone to machine. New brake drums were needed on both sides. The brake lining was original equipment and hadn't been replaced. The owner could not remember anyone adjusting the brakes, although it could have been done at the dealer prior to his purchasing the Plymouth. Jake serviced that Plymouth for years and he didn't need to replace the brake lining again until it had over 40,000 miles.

Workshop day was wonderful! So much so, Jim, Tom and I took Murray and Willis for a sumptuous luncheon at a nearby Greek restaurant. We rode to the restaurant in Murray's 1951 Packard 200 sedan; it really doesn't get any better than that.