

# Brake Dancing

For drag racers, it doesn't get much better than installing parts that will have multiple positive effects, and one such part that regularly improves performance on multiple levels is aftermarket brakes. Switching from stock to aftermarket binders will often reduce weight and improve stopping power.

Because we crave hard acceleration, often the first modifications we make are to the engine. Once we've increased the horsepower and torque, we then turn to the drivetrain. A performance transmission as well as a clutch and/or converter is usually next, along with a beefed rear with a lower gear set. That will get you going in a hurry, but, ultimately, you'll need to stop, and as speed increases, stock brakes can be taxed.

In many cases, stock brakes can do the job — many racers still use them — but a quality aftermarket upgrade is almost always a better choice. One company who designs and builds them is Aerospace Components in St. Petersburg, Fla.

Dave Young, technical editor of *Mopar Muscle* magazine, wanted to improve braking and acceleration on his '67 Plymouth Barracuda, so he decided Aerospace brakes were the answer.

"Our car is a '67 Barracuda fastback with a 440 stroked to 499 inches. It also has Indy heads, a 727 with brake, 4.30 gears, CalTracs rear mono-leaf with CalTracs bars, and Strange double-adjustable rear shocks," said Young. "It runs on Hoosier D06 compound 28x10.5 slicks and has a CAP Auto tubular K-member and control arms, torsion bars, and Calvert Racing 90/10 front shocks. The best e.t. prior to installing the brakes was a 9.68 (clicked off at 1,200 feet because the fuel pump



wasn't keeping up), and a best eighth-mile time of 6.15 at 114 mph."

Young decided to improve the Plymouth's weight bias by lightening the front end, and he chose to add new rear brakes at the same time. In addition to getting weight off the nose, other

benefits would come from reduced rolling mass and better braking.

Because Aerospace is close to my new home in Tampa, Fla., Young and I took a drive over to check out the facility and to pick up the binders for his Mopar. Aerospace builds its brakes (along with its other

components) in-house. With parts in hand, we headed to Inline Performance Specialists in Bushnell, Fla., for the install. Young's buddies Todd and son Garret Struck handled the work while we took care of the photos.

"The weight of the stock front brakes was 79.26 pounds total whereas the Aerospace front brakes tipped in at 28.8 pounds total," said Young. "The weight of the stock rear brakes was 60.9 pounds total compared to 24.8 for the Aerospace rear brakes. The total weight savings was 86.56 pounds, and a good portion is rotating weight." One stock front rotor weighed as much as the entire Aerospace front kit.

The installation was straightforward, and after a few hours, the Mopar was wearing the sweet billet calipers and lightweight rotors on all four corners.

While the brakes looked good, the real test would come from drag testing the new parts. Young primarily runs eighth-mile, so he headed to his home track in Lakeland, Fla., to make some laps, and right off the bat, he knew the Mopar would be flying high.

"Despite not having the best track conditions on the first pass, we still bettered our previous-best launch with a 1.36 60-footer," stated Young. "Before that, the quickest was a 1.37."

On the next pass, he recorded a 1.33 60-foot time, and he feels there is much more left in the car. Time restraints prevented more testing, but Young feels confident that the 'Cuda will be averaging 1.33 to 1.34 60-footers. This equated to an improvement of a tenth in eighth-mile time and should equal a larger drop in quarter-mile e.t. He also noted that the Mopar was stopping straight, true, and quicker than with the stock brakes. **ND**

*Evan J. Smith is the editor of Muscle Mustangs & Fast Fords and the senior editor of Super Chevy magazines.*



The Aerospace Components brake kit comes with all of the hardware, including billet calipers that are built in-house.



Total weight for the entire kit was 28.8 pounds.



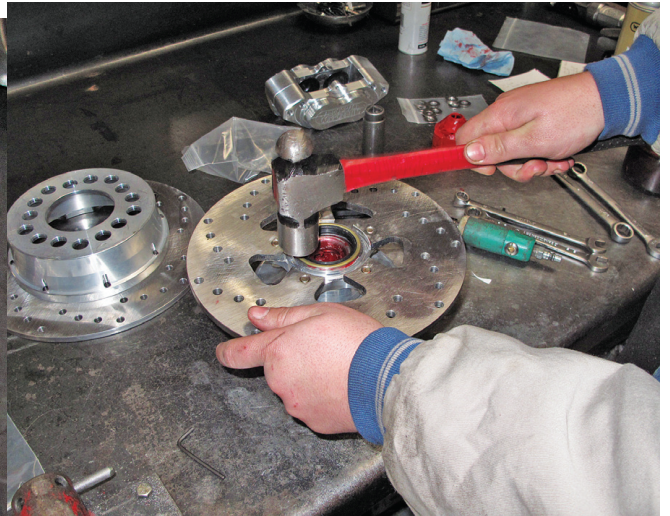
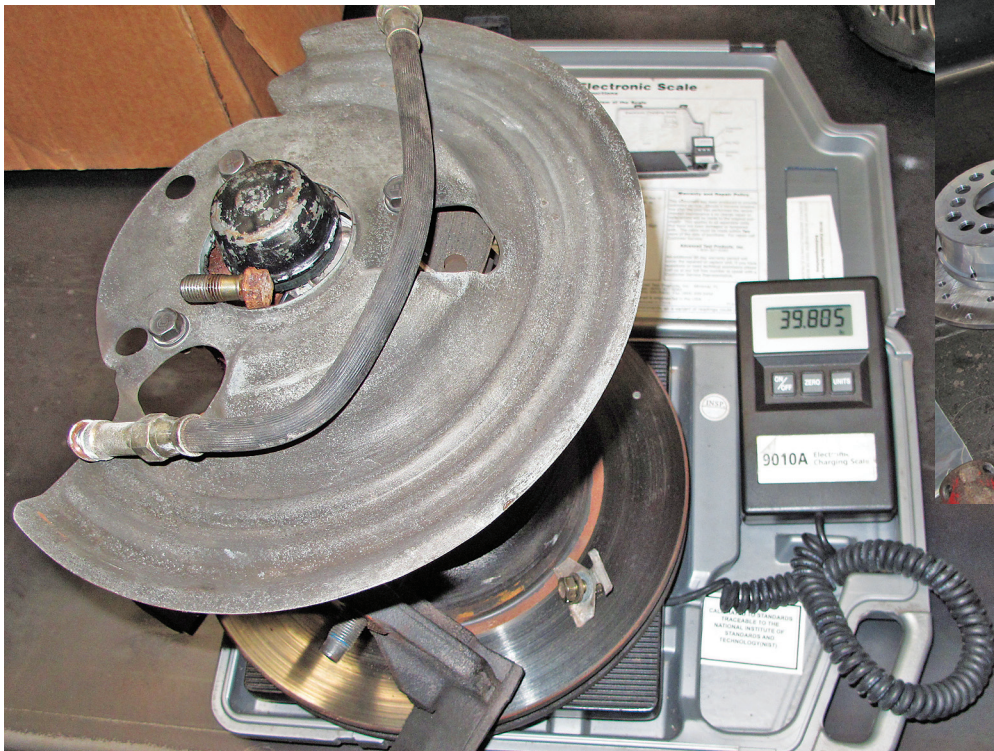
After lifting the Plymouth, Garret Struck removed the stock disc brakes.

## Sources

**Aerospace Components**  
2625 75th St. N.  
St. Petersburg, FL 33710  
727-347-9915  
AerospaceComponents.com

**Inline Performance Specialists**  
Bushnell, FL  
352-568-7591

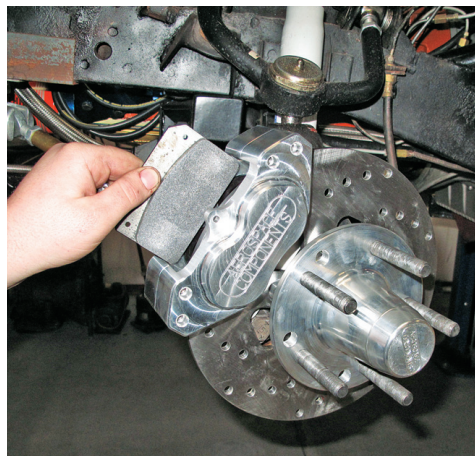
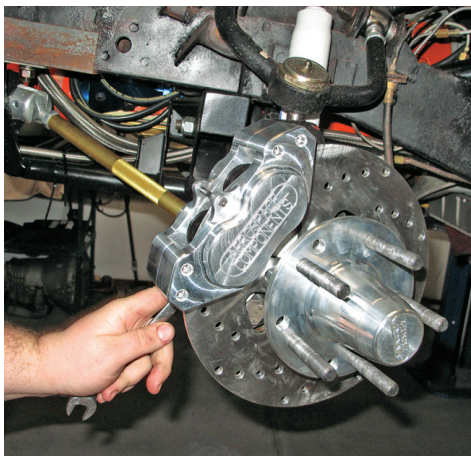




(Above) One side of the factory front brakes weighed more than 39 pounds. (Left) Struck assembled the front rotors and hubs, which included new bearings and seals.



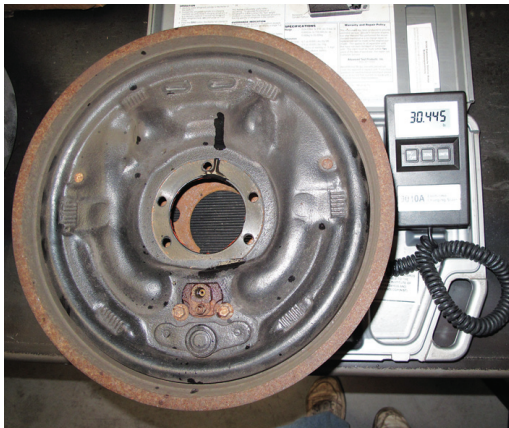
Next, he attached the front caliper brackets (above), and then the rotor was slipped on (left).



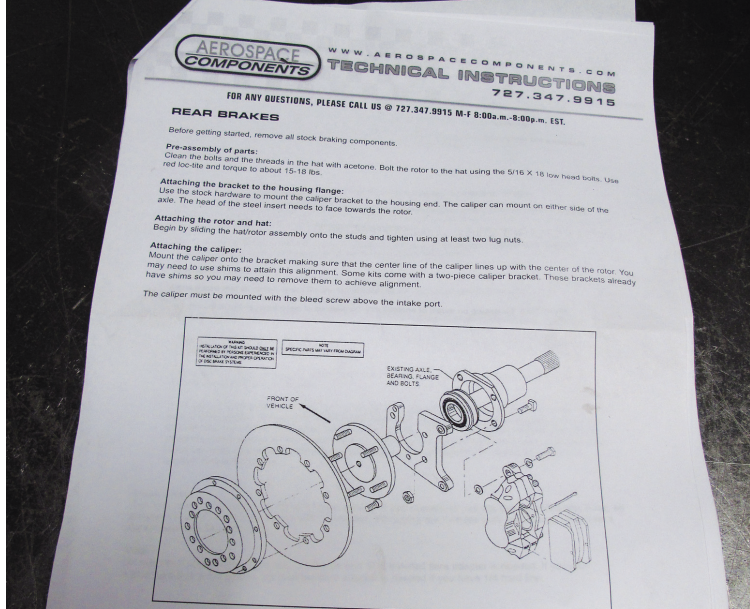
Todd Struck attacked the rear, first removing the axles and then the rear brakes.

With the rotor in place, the caliper was bolted up, and the brake pads were installed.





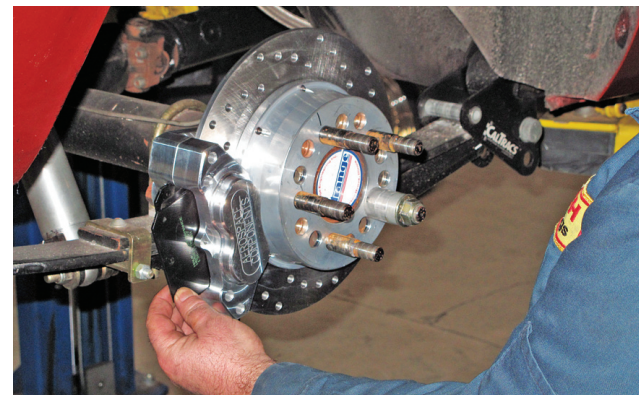
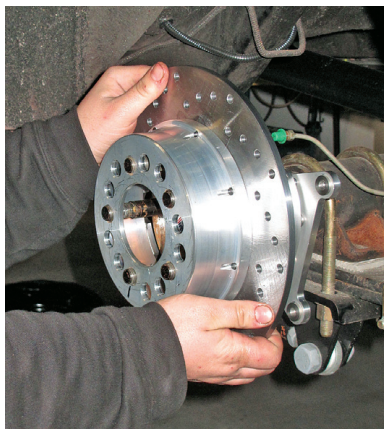
As you can imagine, we put the rear drums on the scale. The weight was a little more than 30 pounds per side.



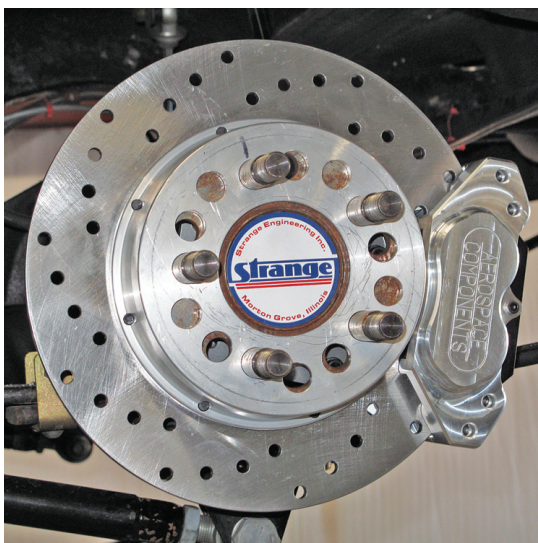
As with any aftermarket part, reading the instructions is key to a smooth installation.



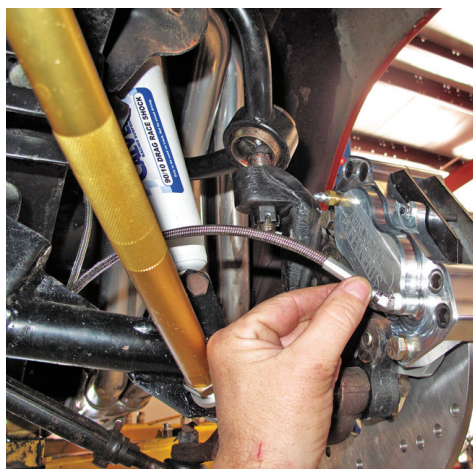
This is the rear caliper bracket, which also retains the axle. The spacers are used to center the rotor in the caliper.



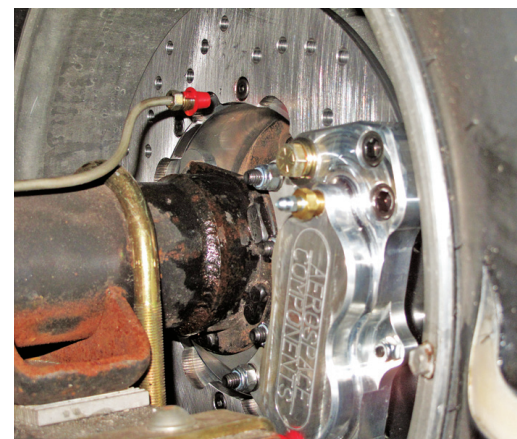
Here, the rotor and then the caliper go into place.



The Aerospace brake kit saved a total of 86.56 pounds from the Plymouth, which equaled a nice gain in on-track performance.



Next, the brake lines were holed up and the brakes were bled.



Whenever you install new brakes, install your wheels to ensure that you don't have a clearance issue.

Where inconsistent launches was once the norm, Dave Young's '67 Plymouth now lifts the wheels and can clip off 1.33 60-foot times. The 'Cuda runs mid-9s on the quarter. Best of all, he built the whole car for a little more than \$10,000.

