

# Twice As Nice: The Benefits of Using a Dual-Caliper Kit

photos by Tommy Lee Byrd

In any drag car, stopping in a controlled fashion is paramount. In addition, proper braking power is just as important on the starting line. But why? The reason is because staging accurately and consistently leads to consistency in reaction times and 60-foot times (as well as quarter-mile or eighth-mile times). For this reason, some racers have turned to dual-caliper rear brakes.

In any footbrake car, you hold the brake pedal with a lot of brake pressure as you ease up on the revs to obtain the desired launch rpm. With drum rear brakes, you generally have a lot of holding power, but this can lead to drag, thus slowing your car down. Plus, drum brakes can be heavy, another downer for drag racers. With standard single-caliper disc brakes, you reduce weight, but this can lead to reduced holding power in a footbraker. This can also be a problem for high-powered turbo and supercharged cars that stage under boost.

Aerospace Components produces a dual-caliper rear-brake kit, and it's a good option for a variety of drag cars, from turbocharged Outlaw machines to bracket brawlers, both of which can roll through the beams when the revs are brought up during staging. The Aerospace kit is complete and includes aluminum hats, lightweight rotors, and four billet-aluminum calipers, all of which weighs less than most popular factory rear brake setups. Kits are available for most applications, all of the necessary mounting brackets are included, and you get a set of Hawk racing pads, which work great.

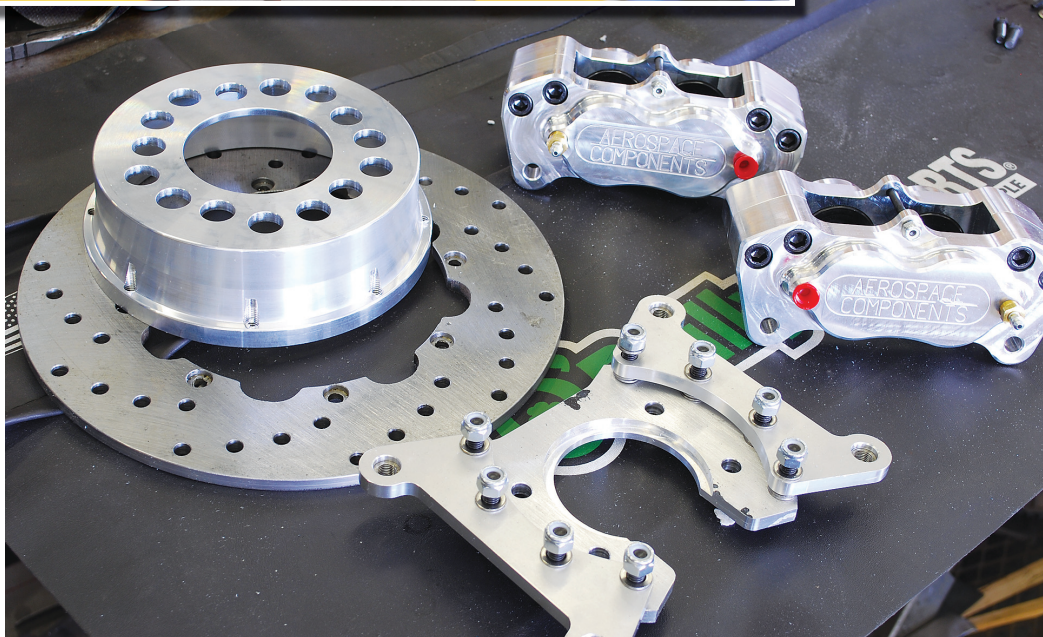
The major benefit is increased braking power, both for staging and stopping after the run. It may be necessary to install a proportioning valve to dial in the desired brake pressure in order to provide the best balance for stopping at speed. I also recommend using a brake-pressure gauge so you dial in the performance of your braking system and build consistency into your routine. **ND**

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

**When this Mustang entered the chassis shop, it already had a highly modified Ford 8.8, including a spool and Strange axles.**



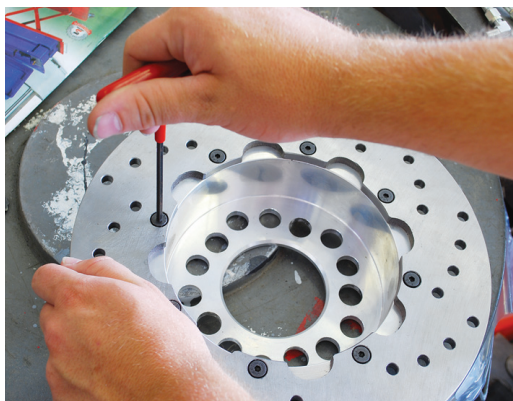
**Aerospace Components' dual-caliper rear-brake system will hold your car on the line better than factory brakes, and it should help on the top end as well. A setup like this can help improve staging consistency and elapsed times.**



**Aerospace Components' products are made in the U.S. The kit's billet-aluminum design can drastically reduce the weight of your race car.**

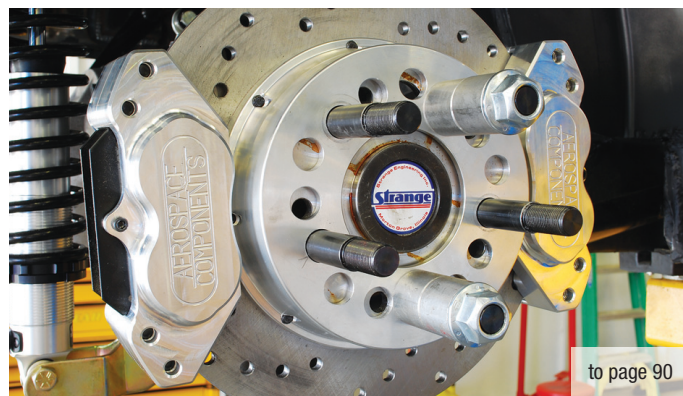


Before installation, the aluminum hats and lightweight rotors must be bolted together. The supplied bolts are given a coat of anti-seize compound before being locked down.



With all three brackets in place, the brake rotors are installed. Two spacers and lug nuts will be threaded onto the studs to keep the rotor snug against the axle flanges. Aerospace brake hats are universal and use three-bolt patterns.

Three aluminum brackets are provided for each side. One bracket bolts to the housing end, and the other two bolt to it and mount the calipers horizontally from each other. Allen-head bolts and lock nuts are used to attach the brackets.



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## SEPTEMBER 17-19, 2010



### EVENT SCHEDULE

**THURSDAY, SEPTEMBER 16**

Track Open ..... 10 a.m.  
 NHRA Tech ..... noon-6 p.m.  
 Test & Tune ..... noon-6 p.m.

Track operated Test & Tune.  
 NHRA staff not on site for Test & Tune.

Parking & Credentials ..... Until Dark  
 Rigs arriving late will be stacked at facility.

**FRIDAY SEPTEMBER 17**

Gates Open ..... 8 a.m.  
 Time Trials ..... 9 a.m.  
 Top Dragster, Comp & Top Sportsman... noon & 4 p.m.  
 Top Alcohol Funny Car & Dragster ..... 6 p.m.  
 Secure Track ..... 8 p.m.  
 Parking ..... Until Dark

Rigs arriving late will be stacked at facility.

**SATURDAY SEPTEMBER 18**

Gates Open ..... 8 a.m.  
 Time Trials ..... 9 a.m.  
 Top Dragster, Comp & Top Sportsman... noon & 5 p.m.  
 Top Alcohol Dragster & Funny Car... 1:30 & 6:30 p.m.  
 Secure Track ..... 8 p.m.

**SUNDAY SEPTEMBER 19**

Gates Open ..... 8 a.m.  
 Eliminations ..... 9 a.m.  
 Top Alcohol Dragster & Funny Car - Round 1 ..... 11 a.m.

**RUN ORDER:** Super Street, Stock, Sportsman MC, Super Comp, Super Stock, Super Gas.

**ENTRY FEES**

Test & Tune ..... \$75  
 Car & Driver ..... \$160  
 3-Day Crew ..... \$55  
 4-Day Crew ..... \$60

**TICKET INFORMATION**

Fri./Sat./Sun. .... \$20 each day  
 2-Day Pass ..... \$35  
 3-Day Pass ..... \$55  
 4-Day Pass ..... \$60

**HOTEL INFORMATION**

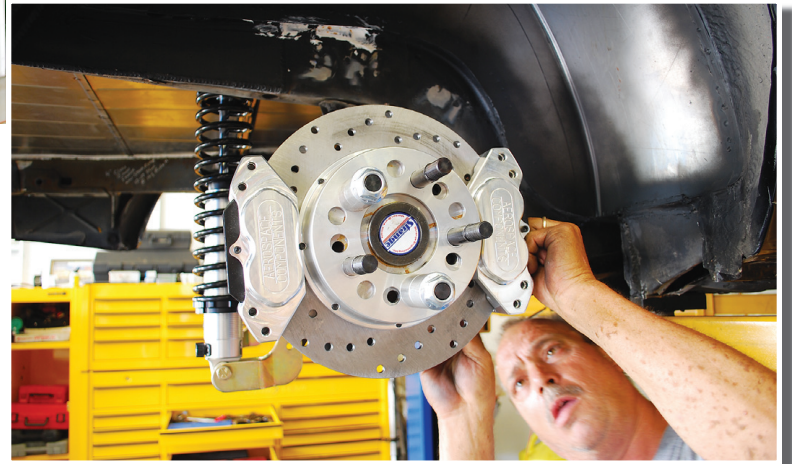
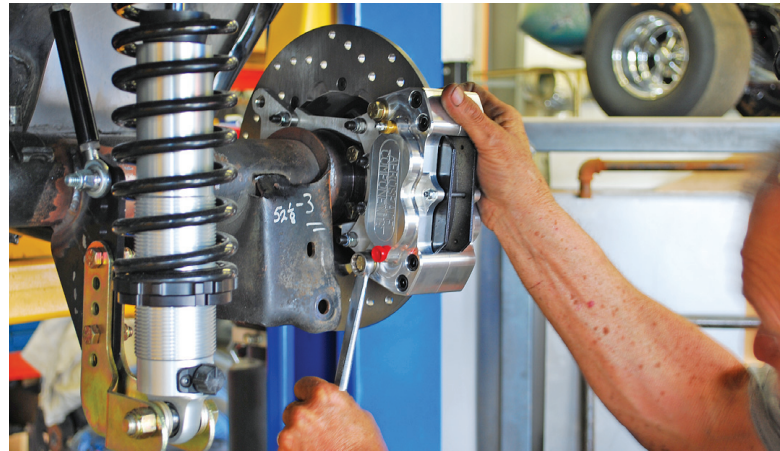
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(Right) Now it's time to slide the calipers and pads into place and see how everything lines up. It may be necessary to use shims between the mounting brackets to obtain the correct pad-to-rotor spacing. (Below) With the appropriate shims in place, the bolts can be tightened. The rotor should spin freely, so it's important to check it out before moving on to the second caliper.



Take the time to line up the second caliper, or pad wear could be inconsistent and drag could result, which will slow you down and increase pad wear. With both calipers mounted, the 90-degree fittings can be installed. Then, the stainless-steel flex lines can be threaded onto the fittings and tightened before joining both lines with a tee fitting.

## Sources

### Aerospace Components

2525 75th St.  
St. Petersburg, FL 33710  
727-347-9915  
www.aerospacecomponents.com

### Smoky Mountain Chassis

2444 State Highway 58  
Georgetown, TN 37336  
423-479-6521

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ND