or the past several issues we’ve brought “Buck” into the 21st Century, fitting it with some of the best driveline and suspension items available on the market. All of what we’ve covered so far will help the ’66 Buick go faster, but what about slowing it down?

For that chore we lassoed the gang at SSBC (Stainless Steel Brakes Corporation), getting their input on what we needed to enhance the stopping power, while also having curb appeal.

Since this car will be seeing street and strip duty, as well as an occasional trip around a road course, it made sense to go big. And we did utilizing SSBC’s latest Big Bite 14-inch cross-drilled rotors and Force 10 Tri-Power calipers on the front and 12-inch rotors with the Tri-Power calipers out back. We also are going to press into service SSBC’s new combo billet aluminum master cylinder with a built-in

The kit from SSBC came complete, taking the guess work out of the install. Had editor Sparrow done all his homework, the job would have taken only a couple of hours to complete.
Installing the front brakes was a simple install.

adjustable proportioning valve, distribution block and wiring pigtail for rear brake light switch. We’ll be installing the master cylinder later in the project, once we are ready to plumb the car. But getting the brakes on at this point was job one to check for firewall and floorpan clearance as the body was recently reattached to the frame (with the driveline attached). We knew there would be a few issues to resolve with both the wall and the pan due to the new bell-housing and big G-Force T56. Once those issues are addressed, the body comes back off the frame so bodywork and prep can finally begin.

Prepping for the brake install on the Buick, we laid out all of the parts in kit form and took a look at what was there and how they will be assembled.

Installing the front brakes was simple and did not take over an hour. This is definitely something that can be easily done at home. With the bare spindle staring us in the face, the first step was to install the caliper brackets. Although a direct bolt-on, we did have to make a couple of spacers for the front brackets when we discovered the bolts that came with the kit were about 1/4-inch too long for our funky application, thus locking up the rotor. Resolving this was really quite simple, and we had a couple of options. We could have put a few washers on, but we opted to make up a set of 1/4-inch spacers for the quick fix. And with that, the problem was solved.

After this was done and everything was installed, with a bit of Loctite and torqued to specs—pretty simple stuff. The setup was now ready for the hub/rotor combination. The kit came with everything needed to install, except the grease for the wheel hub/rotor combination. The kit came with everything needed to install, except the grease for the wheel hub/rotor combination.

A Few Words With SSBC
Since we’re utilizing some new products from Stainless Steel Brakes Corporation we thought we’d give a call to Mark Christensen, Marketing Manager at SSBC, and get the lowdown on what we’re using to stop the Buick starting with the calipers. “The Force 10 Tri-Power calipers are built from lightweight aluminum, which helps reduce the unsprung weight leading to improved ride quality. They also feature stainless steel pistons and bleeder screws, which greatly increases durability. The calipers can also be powder coated for added visual impact. The rotors feature our Xtra Life plating, which helps prevent rust and corrosion on the non-swept areas,” said Christensen. “The pads are a unique Ferro-Carbon formula developed for street performance using severe-duty friction technology. They have a higher coefficient of friction compared to stock pads and can provide up to 20- to 40-percent more stopping power and higher resistance to brake fade than most standard replacement pads. Plus, they are low dust and virtually noise free,” he added.

And what are the advantages to multiple piston brakes? “The main advantage is the multiple piston design will decrease pad deflection. When you have just one large piston, the end of the pads usually do not come in contact with the piston, and when the brakes are applied, the ends of the pads can be pushed—or deflected away—from the rotor due to heat and gas buildup, which reduces the amount of braking force and stopping ability. With our multi-piston design, the pistons are spread out to come in more direct contact with the pad, thus reducing the amount of pad deflection and increasing the braking force,” Christensen explained.

The new combo billet is probably the trickiest part we’re adding to this project. With its great looks, it will really compliment the braking system and under-the-hood looks. “It combines the beauty of our polished billet aluminum master cylinder with the functionality of a built-in adjustable proportioning valve, distribution block and wiring pigtail for the rear brake light switch. It is a dual bowl design for safety, and the piston bore and fluid bores are hard-coated to prevent wear and leaks. It also includes two straight lines to connect it to your existing brake plumbing,” Christensen concluded.

“The main advantage is the multiple piston design will decrease pad deflection.”
—Mark Christensen, SSBC
As with the front, before we began the rear install we laid out all the components to get a feel for what we had, and then read the supplied installation instructions. As expected, everything was very straightforward. After a quick check for fit we discovered that the “hat”/rotor would not go over the axle flange. Understandably, the kit was intended to fit a standard Ford 9-inch axle flange, but we neglected to tell the folks at Moser what specific brakes we were going to use, so they (Moser) used their standard flange, which wasn’t the same size as the SSBC kit. In other words, we messed up. You can avoid the same problem when ordering axles or brakes by simply communicating what you have to the manufacturer—something we neglected to do.

There was however, a simple fix. Since the SSBC hat/rotor was only 1/8-inch off from the axle flange, we took everything to Wayne Calvert’s machine shop in Denton, Texas, where they milled a bit off of the flange and hub of the axles and we were back in business.

On the rear, we mounted the calipers on the backside of the rotor, which will give us easier access to the lines and bleeders.

In other words, we messed up.

bears. With the bearings packed and in the hub, we installed the seal and slipped the hub on the spindle. Using the parts supplied with the kit, including the washer, nut and cotter pin, the rotor was installed and the hub cover put in place.

Next we snapped the brake pads into the caliper and bolted it on. At this point some care must be taken to center the caliper over the rotor, and the kit had a few shims just for this. In this install only one shim was required on each side. All hardware was again installed with Loctite and torqued to spec. And with that, we now had one sweet front brake setup hanging on Buck. The SSBC kit supplied all new stainless steel braided hoses for the front, along with all new banjo fittings, adapters and clips. We did not install the hoses yet and will finish plumbing the car when the body comes back off.

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The Beef
The girth of these babies gave us no doubt that “Buck” will have plenty of stopping power.

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The kit came supplied with an assortment of split rings that go behind the axle retainer/mounting bracket for the calipers. One of these was all that was necessary to get the right setup and they were bolted on and torqued down. The rear brakes can be mounted in either direction. We opted for them to hang on the more traditional backside of the disc, which will give us better accessibility to all bleeders and hose routing.

Both the front and rear caliper mounts were plenty beefy for these larger than life brakes and were bolted on to the axle retention bracket. We slipped on the hat/rotor and held it in place with one lug nut, and then placed the brake pads into the calipers and bolted them on. With the supplied shims, we were able to locate the caliper correctly in relation with the rotor. As in the front, we did not install the brake hoses since we will run all of the necessary plumbing, the emergency brake cables and master cylinder/booster combo later when the body is back off the frame.

With everything bolted on, ole Buck looks like it will definitely stop on a dime, and give plenty of change.

The 411
Once we fixed our flange problem in the rear, we simply bolted on the mounting hardware and mounted the components.

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