

10-SECOND 3rd-GEN STREET MACHINE



CAMARO

PERFORMERS

Musclecars • Street Machines • Classics

➤ **REPAIRING METAL
WITH METAL!**



SUPER RARE

1-OF-4 HARRELL COPO

- AIR RIDE'S AIR BAR SUSPENSION PACKAGE - PART 1
- 1ST-GEN TECH: REAR DISC BRAKE AND SUSPENSION UPGRADE

**BUYING A CAMARO ONLINE?
READ THIS FIRST!**

OUTSTANDING '68 L78 RS/SS

DECEMBER 2007

\$4.99 • \$5.99 in Canada

FROM THE EDITORS OF
CHEVY
SUPER
PERFORMANCE



1969 CAMARO REAR SUSPENSION AND BRAKE UPGRADE

COMPETITION SPECIALTIES' '69 RS REBUILD WITH A TWIST HITS THE REAR.

by Chuck Vranas • photographs by the author

When undertaking a project on your Camaro it's always a solid idea to map out what you would like to achieve once everything is completed. Whether you're thinking of adding a supercharger, doing a full-body restoration, or upgrading various components, there are plenty of great parts sources out there that make available just about anything to get the job done right the first time. One thing to consider is maintaining a proper balance when laying out your plans. When the team at Competition Specialties in Walpole, Massachusetts, began work on Coco McDonough's '69 RS, they knew just what they were looking to get done even before the car's completion.

If you recall the two past articles in *Camaro Performers* where the subframe was removed and restored with a twist, you'll know that there was another whole chapter waiting out back between the rear wheels that was still bone stock and in desperate need of attention.

Since being discovered, the "ex-left

for dead" garage project has come a long way in just a few short months. Having received new front-end sheetmetal, including doors, leaves only the replacement of the rear quarter-panels before it heads off to the paint booth. Once you're ready to get started it's always important to remember that regardless if you're doing work in your driveway, or if you have access to a lift in a shop, be sure to properly suspend the vehicle for safety while work is in progress.

That said, once the rearend and suspension were removed, it was time to tidy things up a bit. This included cleaning up and repainting the rear floor and trunk area as well as the rearend.

All the new Master Power parts were laid out and reviewed. Thanks to the informative, well-written instructions included in the kit, the new components were installed in a flash, leaving plenty of time to focus on the next step.

While addressing the rear suspension choices available for the RS, there was

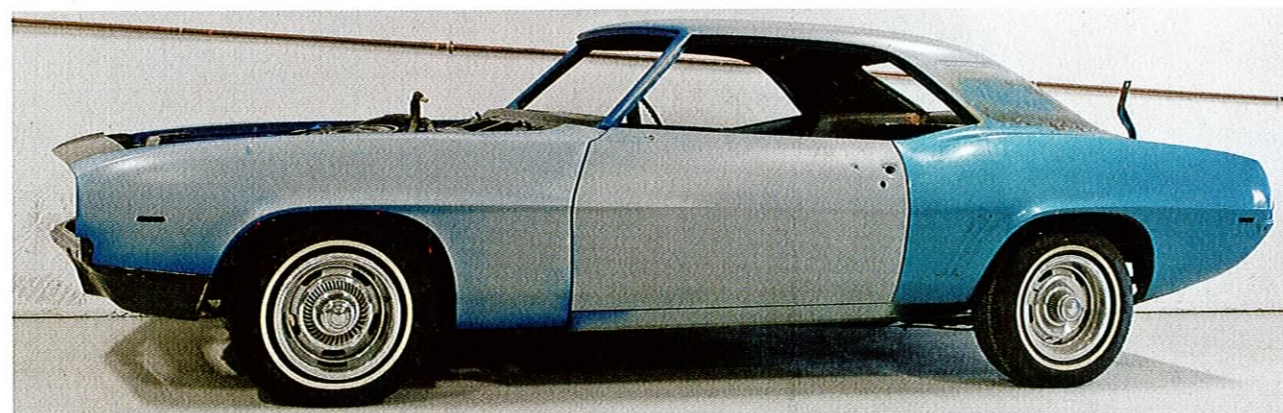
no question that Hotchkis' suspension components would supply plenty of road-handling capabilities for the car with their TVS (total vehicle system). The TVS components used in the installation are also available separately for the rear in the Sport Leaf Kit # 2407C, Sport Sway Bar [R] Kit # 2207R, and HPS 1000 rear shocks # 71010012.

With the front subframe already upgraded with Hotchkis components, it was only natural to install the complete system out back.

Hotchkis has made setup a snap, requiring only a few updates to existing parts in order to complete the installation. When the final bolt was secured and the car was taken off the lift, the change in attitude was dramatic and the stance we envisioned had been achieved.

Thanks to Hotchkis and Master Power, the upgrades will give the car a whole new personality once it hits the street.

We'll keep you updated as the car comes around the bend towards completion. ■



The '69 has come quite a way since you saw it last. With its restored and upgraded subframe installed, fresh front sheetmetal and doors, all that's left is the replacement of the rear quarter-panels and an upgrade to the rear suspension. You can see just how nicely the car sits up front with its new Hotchkis suspension, which will soon even out the rear once the rear components from Hotchkis are installed.



For killer handling, it doesn't get any better than installing a full Hotchkis rear suspension. To make sure the rear of the '69 will keep planted to the ground, the team from Competition Specialties ordered up a complete front and rear TVS small-block suspension system along with a set of HPS 1000 shocks. You can also just order up the rear Sport Leaf Spring Package complemented by the Sport Sway Bar Package and a pair of HPS 1000 rear shocks if you choose. Hotchkis kits are available in any combination, and they always include complete mounting hardware and instructions.



To be sure that the Camaro will be able to stop on a dime, the team decided on Master Power's kit # DB1792BPHR, which is their disc brake conversion setup for 68-'72 Camaros. The kit includes a pair of beefy 11-1/8-inch vented cross-drilled/slotted multi-pattern rotors, callipers with parking brake and brake pads loaded, caliper brackets, brake hoses, parking brake cables, and all related hardware and installation instructions.

Competition Specialties team member Paul Thetonia took a second to measure the car's rear height from the ground to the top of the rear wheel opening before the Hotchkis suspension was installed. It came in at 26 3/8 inches.



With the gas tank removed you can see it's a bit crusty, but overall it's really in nice shape for spending almost 40 years on the East Coast open road.



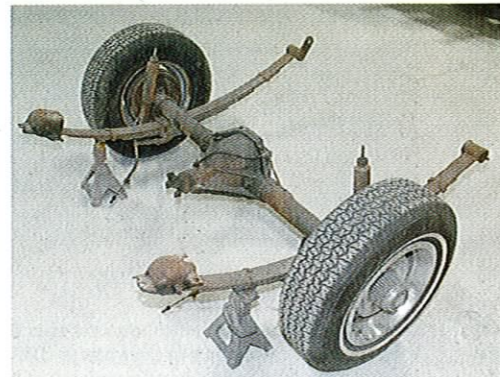
Paul first removed the front section of the emergency brake cable line and then followed up with removal of the rear section. The new installation kit from Master Power includes a complete emergency brake cable package.



After using some rust penetrating oil and a ratchet, Paul was able to loosen the spring perch bolts without a problem. Note that since a lift is being used, all hardware is only being loosened at this time for final removal once the car is lowered to the ground.



With the car lowered and the rear wheels on a pair of milk crates (you could also use jack stands), Paul removed all of the loosened hardware and the car was lifted up slowly while the entire rear suspension was removed. Let the fun begin!



It's a pretty simple setup once you get it removed from the car. It won't be long until it's ready for reinstallation.



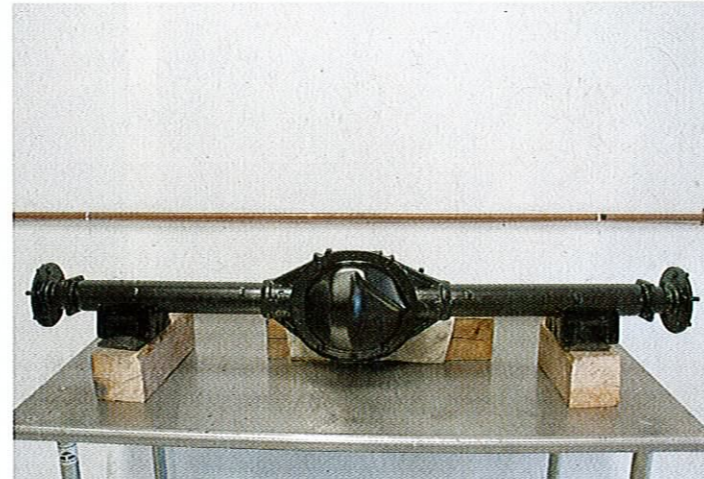
Completely blown apart with decades of well-earned rust still on the ground, the only thing to be reused will be the rearend—once it's taken apart, checked, and freshened up.



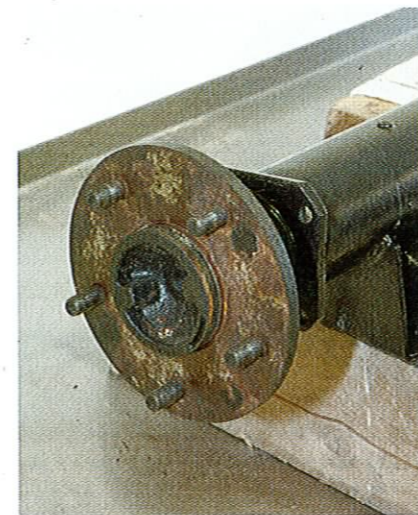
Gee, poor Paul always gets stuck with the clean up! Here he uses a wire brush to remove any rust on the rearend to be followed by degreaser, 80-grit sandpaper and scuff pads in getting it ready for a fresh new look.



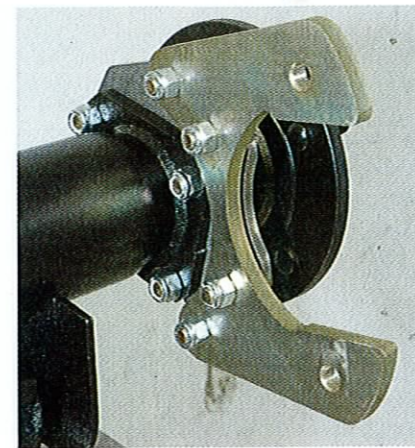
While the suspension and gas tank were out, it was a perfect time to clean up the bottom of the car and get it ready for a coat of paint since the front half has already been tended to.



Once it was fully checked for cracks or any other damage, the stock rearend received a new coat of paint. How's that for looking factory fresh?



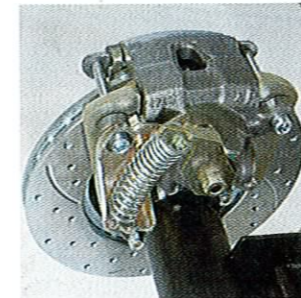
With the rear drum brakes and backing plates removed, this is the perfect place to start the installation of the Master Power disc-brake conversion.



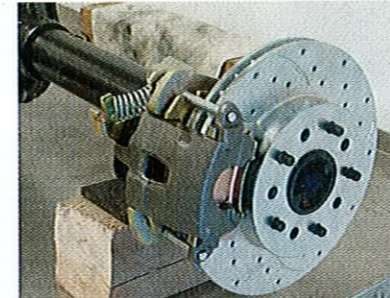
Installation of the new disc-brake conversion kit from Master Power is a snap. With the provided hardware, first mount the primary caliper bracket to the axle flange, followed by the secondary bracket being mounted to the primary bracket. Be sure to use the supplied lock washers as advised between the brackets as they are bolted together.



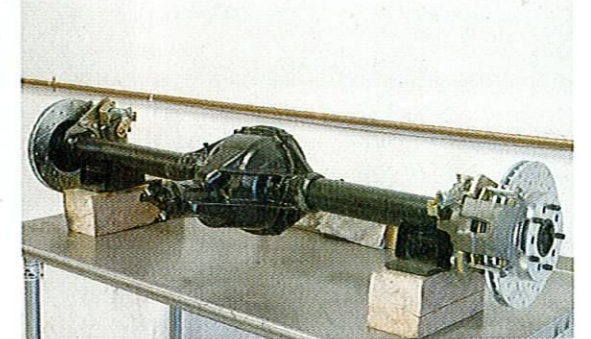
Next, slide the new rotor onto the axle hub.



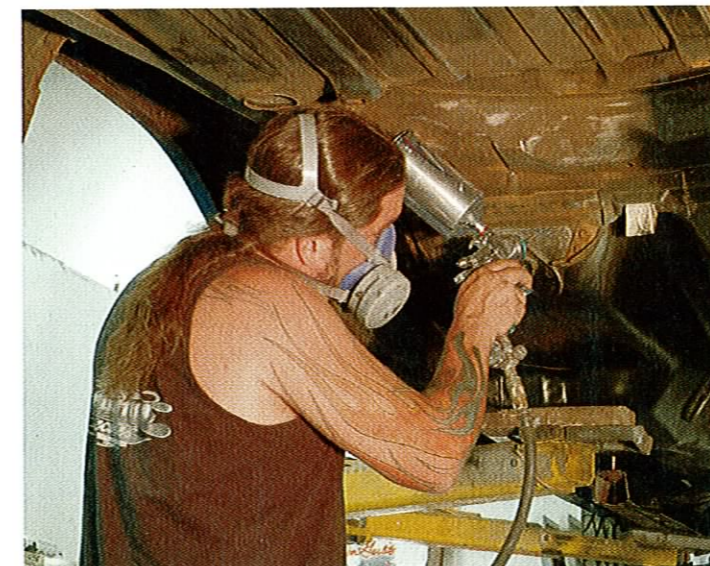
Then install the new caliper. Note that depending on the wheel application, new wheel studs may be required, so it's a perfect time to check out your needs at this time.



This alternate view lets you see just how nice the new disc-brake system looks, thanks to perfect fitting components from Master Power.



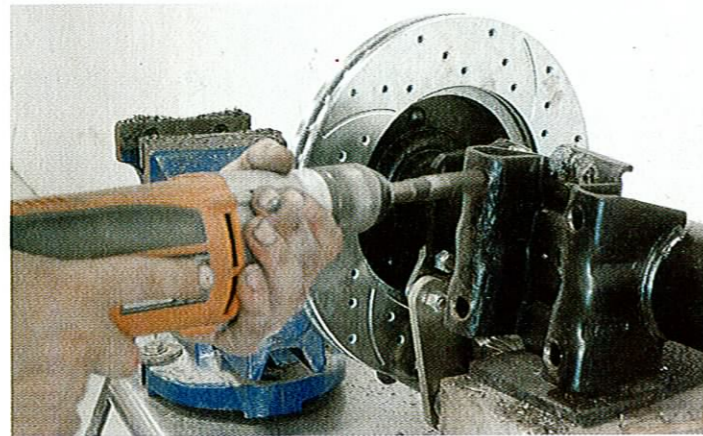
Here's the freshly bolted-up rear disc-brake system and cleaned-up rearend ready for installation.



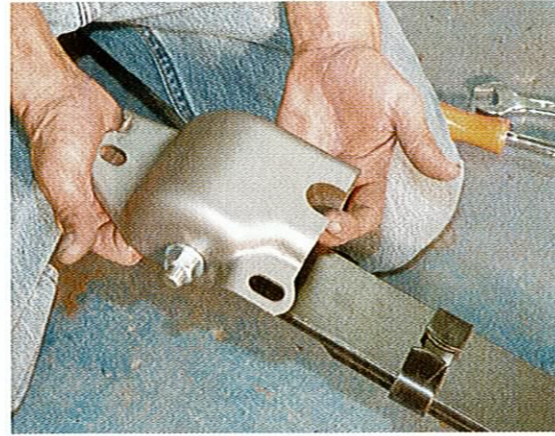
While the rearend was being upgraded, shop owner Peter Newell spent some time laying down a fresh coat of SEM's Rust-Shield rust and corrosion control coating in semi-gloss black. This will match up nicely with the flawless work already completed on the subframe and undercarriage of the rest of the car.



The preparation for installation of the new Hotchkis rear suspension components requires some minor modification to both the upper and lower spring perches to accommodate the beefier U-bolts supplied in the kit. Here Paul drills the lower spring perch with a 5/8-inch drill bit.



With the lower spring perches completed, Paul then drilled out the upper mounts with the same 5/8-inch drill bit. An application of penetrating oil while drilling the area will help make this procedure much easier.



Next, the freshly repainted front leaf-spring perch hanger is installed to the new Hotchkis leaf spring in preparation of it being mounted.



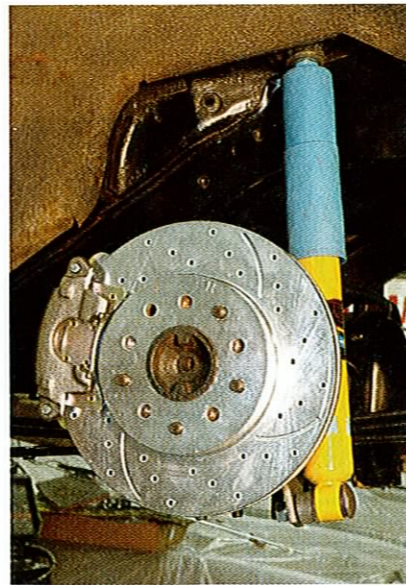
Once the rear spring perch is cleaned thoroughly, it's lubed with the provided product from the kit, and the new bushings and heavy-duty rear shackles are installed.



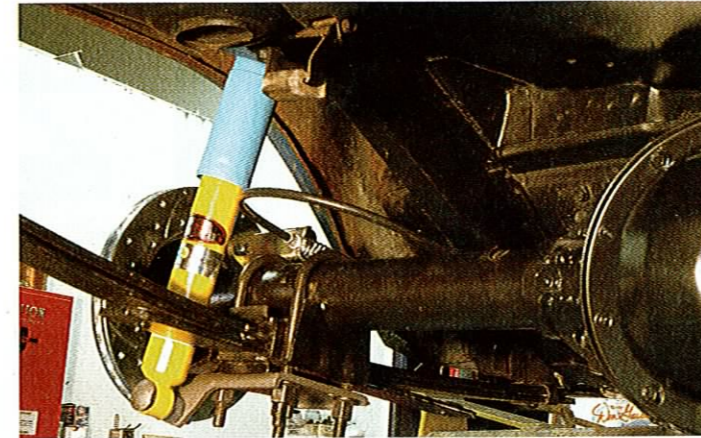
Using more of the provided lube, the rear bushings are installed into the new leaf spring, and the rear of the leaf is finally mounted securely into place.



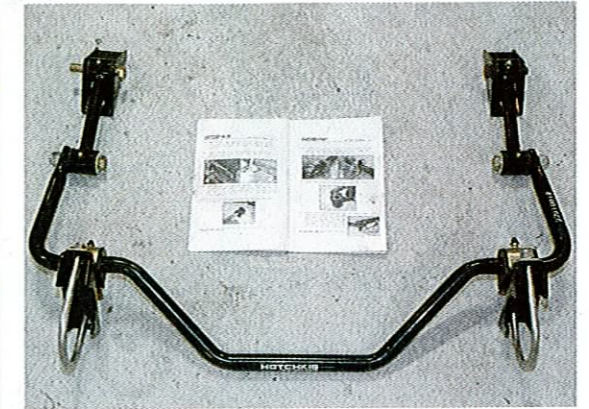
With the freshly repainted and detailed undercarriage of the '69 looking fine, the new Hotchkis springs are ready to accept the rearend to complete the installation.



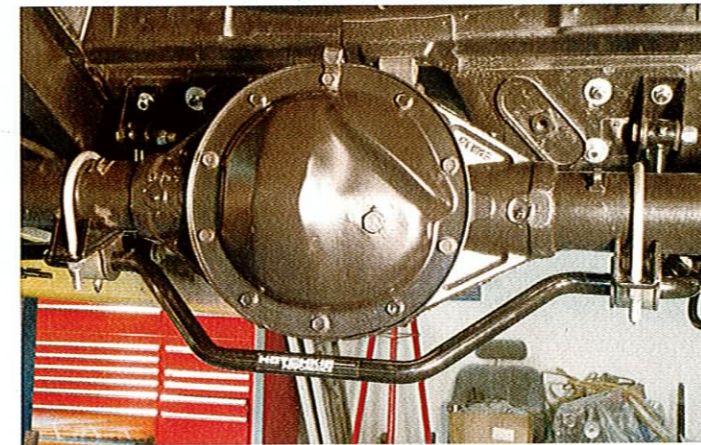
With the rearend securely mounted, Paul installed the new HPS 1000 rear shocks.



This image lets you see just how rock-solid the installation is with the provided components and hardware provided by Hotchkis.



Assembling the rear sway bar setup was simple with the detailed instructions provided in the Hotchkis kit. The setup requires the removal of the rear seat bottom for eight mounting holes to be sourced and drilled to attach the front of the system to the car.



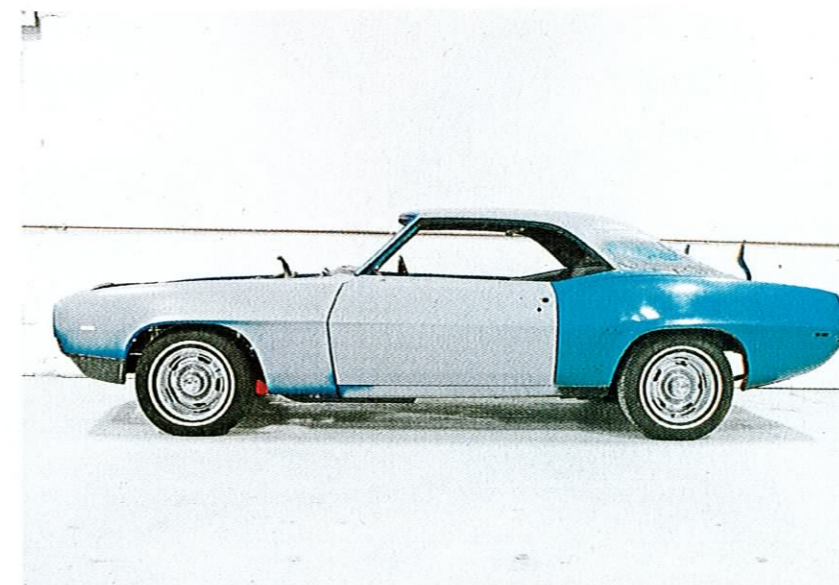
Now this is just plain bitchin'. The rear sway bar doesn't just look great, it will be worth its weight in gold once the car hits the street.

SOURCES »

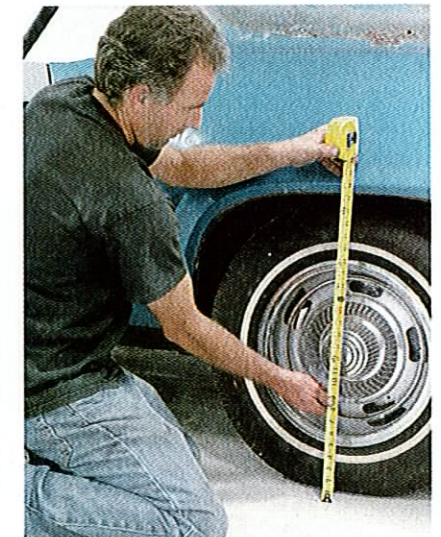
MASTER POWER
888.351.8785
www.mpbrakes.com

HOTCHKIS PERFORMANCE
877.466.7655
www.hotchkis.net

COMPETITION SPECIALTIES
508.668.7432
www.competition-specialties.com



It's easy to see the dramatic improvement in the car's overall stance and attitude, even with the old radials still in place. Hotchkis claims that the car will receive approximately 1½-inches of lowered stance once the complete rear kit is installed.



Paul tells us that the measuring tape doesn't lie, and that they did, in fact, achieve the results that Hotchkis claims on the kit. Once the final wheel and tire combination are decided, you can bet that Coco's Camaro will ride and look like a dream.