

Bolt-On, Smog-Legal Syclone Exhaust Upgrade

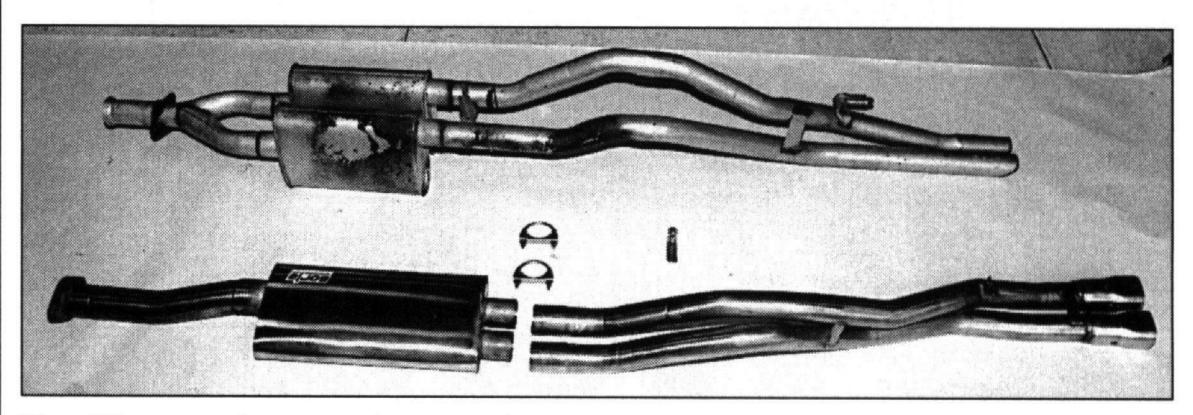
By Tom Morr

formidable performer straight off the showroom floor, but as is the case with any factory vehicle, there's always room for improvement. However, given the current state of emissions laws, legal modifications are limited. Among the most popular mods is the installation of a less-restrictive exhaust system behind the stock catalytic converter.

Borla Industries was recently tapped to develop a cat-back system for the Syclone for SCCA's now defunct street truck racing series. Its objective was to allow exhaust gases to exit more quickly and reduce power-robbing bends in the system. The result of the company's efforts was a bolt-on, smog-legal, stainless-steel system that boosted power and performance. The Borla system is constructed of T-304 aircraft-quality stainless-steel material for the muffler and mandrel bent pipes (18-gauge/.049wall thickness). It also utilizes a single 3-inch pipe from the catalytic converter to the muffler in place of the flow-restrictive factory Y-pipe that splits the exhaust into two mufflers. The 3-inch pipe allows for the expansion of the exhaust gases due to superheating at the converter while reducing back pressure at the same time.

Another significant difference between the Borla system and stock setup is the muffler design. The two stock Turbo mufflers use reversion (bouncing the exhaust gasses off of baffles) to deaden the sound, while the single Borla muffler traps sound as heat energy through absorption in synthetic packing material. The Borla unit also features a larger inlet pipe (3 inches) and twin 2½-inch outlets for a less restrictive exhaust flow.

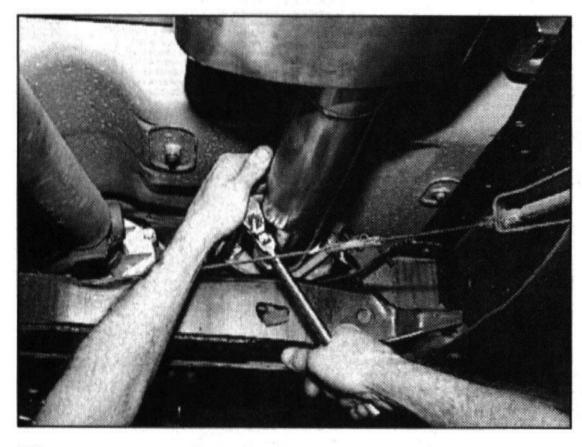
Ed Bales at R&E Racing performed the installation on our test mule Syclone in less than an hour. Then it was off to Los Angeles County Raceway (LACR) for some testing. (Dyno testing on a Syclone is out of the question due to the fact that it's all-wheel drive.) Pro hotshoe Jim Wheeler of Wheeler Racing did the driving duties on the quartermile. All passes were made in Drive to ensure uniformity in testing.



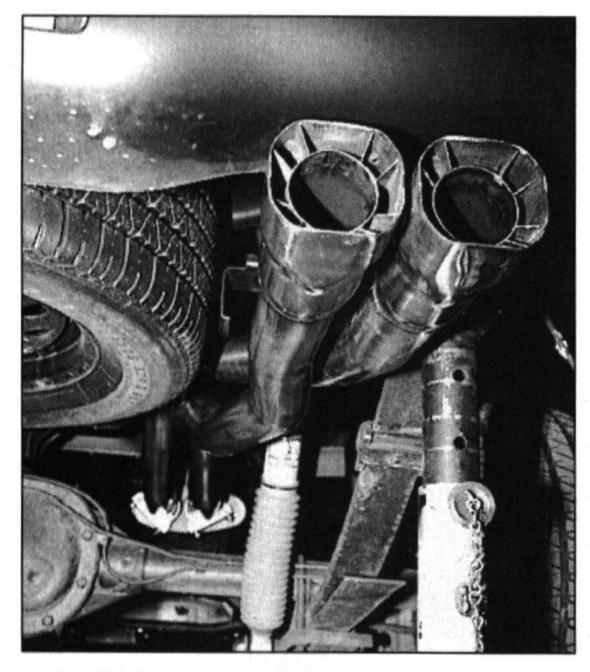
The differences between the stock Syclone exhaust system (top) and the Borla system (bottom) are obvious. The Borla system eliminates the restrictive Y-pipe behind the catalytic converter and replaces it with a 3-inch section.

The results? The best time the truck could muster in stock trim was a 15.78second pass at 89.19 mph. With the Borla system installed, the Syclone turned in a best of 15.43 at 91.60 mph. Utilizing the NHRA correction factor for the track's altitude, the Syclone turned in a 15.53 at 90.71 mph stock and 15.18 at 93.16 with the Borla exhaust. Driveability also improved, according to Wheeler. "The Borla exhaust provided better acceleration off the line. It was actually possible to chirp the tires and it gave more turbo on the top end."

Despite government regulations, smog-legal performance can be found through the utilization of the proper components, and the Borla stainless cat-back system for the Syclone is one of them.



The system simply bolts up behind the stock catalytic converter, taking less than an hour to install.



Twin 2½-inch exhaust outlets are capped by Borla's patented intercooled tips, reducing temperatures near the Syclone's bodywork.

SOURCES

Borla Performance Industries, Inc., Dept. ST09, 2639 Saddle Ave., Oxnard, CA 93030, 805/983-7300

R&E Racing, Dept. ST09, 44533 N. Sierra Hwy., Lancaster, CA 93534, 805/948-7622