

Canyon Carver

Part 1

SETTING UP A PERFORMANCE TRUCK WITH CUSTOM TRUCK SHOP, DJM, BONSPPEED WHEELS, WILWOOD BRAKES AND TOYO TIRES



LOWERING A TRUCK AND THROWING ON A SET OF BIG WHEELS HAS ALWAYS BEEN POPULAR AND AN EASY WAY TO SET YOUR TRUCK APART FROM THE REST IN THE PARKING LOT. But what about people who drive their trucks—I mean really *drive* their trucks. We're not talking about cruising the streets and freeways here; we're talking about taking turns at 60-plus mph, drivers who run the canyons all out alongside Ferraris and Corvettes, taking the tight turns at full speed.

Brian Zacuto of Magnuson Products has always carved the corners at high speeds and intended to continue to do so with his '05 GMC Sierra. Running the infamous "Snake" on Mulholland Drive north of Los Angeles has always been a great source of excitement for Brian. Sadly, the factory Sierra was no match for the low-slung sports cars and muscle cars out running the twisties.

Aside from running canyon turns, autocross events have always been popular with Brian, and in recent times more and more trucks have been getting involved and running tighter times right behind their muscle car counterparts.

The time is ripe for performance-handling trucks that also have plenty of style as well, and this is where DJM Suspension has stepped in to offer performance lowering kits for late-model trucks. The front lowering system consists of a new lower control arm and ball joint that raises the spindle mount up 3 inches and corrects the geometry. Out back, the 4-inch drop is handled using 2-inch shackles, and a new set of hangers raises the front of the leaf springs. New DJM Calmax shocks are used on all four corners. Usually wheels and tires are thrown on and the lowering job is complete, but factory body roll, especially with a lowered truck, is a huge annoyance when running canyons or autocross. When hitting the turns, body roll also has an affect on driver experience. It diminishes driver confidence in the truck's handling ability, and prevents the driver from pushing the truck to its full potential. To remedy this, DJM Suspension



Sources

BONSPEED WHEELS
888.999.7258
www.bonspeedwheels.com

DJM SUSPENSION
800.237.6748
www.djmsuspension.com

STYLIN' TRUCKS
www.stylintrucks.com

CUSTOM TRUCK SHOP
Dept. STTR
882 W. Cienega Ave.
San Dimas, CA 91773
909.599.2203
www.customtruckshop.com

MAGNUSON PRODUCTS
805.642.8833
www.magnusonproducts.com

TOYO TIRES
714.236.2080
www.toyotires.com

WILWOOD ENGINEERING
www.wilwood.com

offers front and rear anti-sway bars to reduce body roll and increase handling. The front is a simple replacement with a stiffer, thicker bar. Out back, the anti-sway bar comes with full bolt-on hardware, making installation a snap.

We finished off the performance lowering kit that was installed at Custom Truck Shop in San Dimas, California, with a set of race-inspired 20 x 8.5 and 22 x 10-inch bonspeed GT-B billet wheels, powder coated. Of course, we still needed performance tires, so we

looked to Toyo Proxes STII tires to fill the void. Toyo's performance truck tires come in a variety of sizes and are rated for use on trucks, but that doesn't mean that they don't offer performance. The tread has been designed not only for comfort and low noise, it also features woven sipes for better traction and grooving for premium handling. We opted for 255/40R20 and 285/40R22 to match the sidewall heights and provide some meat for burnouts and on the autocross course. Finally, a set of massive brakes was installed to stop the

power monster and improve control when taking the turns in the canyon or on the autocross course. Sixteen-inch Wilwood rotors and six-piston calipers were installed up front inside of the 20-inch bonspeed wheels to squeeze the truck to a complete stop when necessary.

Next up the truck's drive train will be upgraded with a custom Magnuson supercharger and an Eaton True Trac unit to provide plenty of balance and traction to the rearend that will see a lot more horsepower and torque. ■

Here is the performance package offered by DJM Suspension for its lowering kits. The kit consists of a front replacement anti-sway bar and a rear bar with mounts and link bars.



The front kit consists of a 3-inch lower control arm with shocks and shortened sway bar mounts.



You can see the clean welds and detail on the DJM lower control arm that includes a fresh, flipped ball joint.



The rear kit consists of a 2-inch shackle and 2-inch drop hanger for the 4-inch total drop. Also included are a shock extender and new DJM Calmax shocks.



Disassembly of the front end begins by removing the brakes and shocks, unbolting the factory sway bar links, and loosening the ball joints to remove the spindle and coil spring.



The factory lower control arm is unbolted and tossed aside.



The factory sway bar is unbolted and removed.



It's time to prepare the DJM 3-inch drop lower control arms. The provided sleeves and bushings are removed so that the mounts can be fully greased.



The bushings are reinstalled along with the provided Zerk grease fittings.



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Grease the inside of the bushings before the sleeves are reinstalled.



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Once all of the metal sleeves are reinstalled, grease the ends of the control arm mounts. It's always better to have more grease.



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Bolt the lower control arms back up to the front end using the factory bolts.



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Lower the truck on the lift so that the coil spring can be reinstalled. Place a jack under the lower arm to compress the spring so that the shocks and spindle can be reinstalled.



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The new shorter performance shocks from DJM are installed to keep the coil compressed and secure so the spindle can be bolted back up.



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Don't forget to replace the cotter pin once the spindle is reinstalled.



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Tighten up the lower control arms and reinstall the brakes.



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The new DJM anti-sway bar is installed by greasing the bushing mounts and bolting up the bar to the factory mounting locations.



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DJM supplies new shorter end links that are assembled and bolted to the new anti-sway bar.



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It's time to move on to the rear now. Begin by unbolting and removing the leaf springs one side at a time. Use a transmission jack to keep the rearend in the air.



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Grease the drop shackles in the same manner as the control arms.

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The front leaf spring hangers must be removed; they are riveted on. The easiest method is to torch the rivets and hit them with an air chisel to knock them out.

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Clean up the frame and hit it with some flat black spray paint to prevent rust.

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Bolt the new DJM hanger onto the frame in the factory location. These hangers move the mounting point up 2 inches.

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Install the new drop shackles onto the leaf spring. Bolt the leaf spring back to the mounts and reinstall the U bolts.

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Getting to the inside of the frame on the driver side is tough because of the gas tank. Many people drop the tank but Custom Truck Shop has a quicker method. They loosen the straps and push the plastic gas tank cover back to gain clearance and install the hanger.

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The DJM shock bracket is installed. The extender gives the passenger shock a less drastic angle for better performance.

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The brake line bracket on the driver side shock mount is trimmed to avoid rubbing the new shocks.

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The new DJM shocks are installed.

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The driver side leaf spring is reinstalled and the gas tank straps are tightened.

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It's time to install the rear anti-sway bar from DJM. The rear mounts are bolted up around the rear cross member next to the shock mounts.

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DJM provides two sets of link bars depending on the amount that the truck will be lowered. We went with the short set.

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The bushings are greased and the anti-sway bar is put in place to determine the best mounting location off the rear end housing.

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The brake line clamp mounts need to be removed to install the U-bolts that will mount the bar.

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The link bars are bolted to the anti-sway bar.

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The bar is installed to the rear end housing using the provided mounts and bolts.

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Everything is tightened and checked for clearance.

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Here you can see the finished rear anti-sway bar and its clearance around the rear end differential and shocks.

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Next we move on to the wheels and tires. We are using Toyo Proxes STII tires measuring 285/40R20 and 285/40R22 for a staggered performance look.

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bonspeed Wheels offers several different styles. We opted for their GT-B wheel with a black powder-coated center for a race-inspired look. The 20 x 8.5 and 22 x 10-inch wheels are extremely stylish.

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JT at Custom Truck Shop in San Dimas, CA, mounts the tires using the back of the wheels so that the polished lips aren't scratched up at all.

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The bonspeed GT-B wheels and Toyo Proxes STII tires are mounted up to finish off the look of the performance truck.

Finally, the truck's front end is aligned, and it's time to install a set of massive Wilwood brakes on the front of the truck.

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The new Wilwood brakes will fill the larger wheels and provide plenty of stopping power and control through the turns. A set of 16-inch Wilwood rotors and six-piston calipers will do the trick nicely.

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Here is the factory front brake setup that could use some help.

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The brake line is clamped and the factory caliper is unbolted and removed.

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The pad holder bracket is also unbolted and removed.

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Disconnect the brake line and unbolt the brake line brackets. Note the covering on the sway bar so that the brake fluid doesn't damage the powder coating.

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Carefully remove the factory caliper and brake line.

Install the supplied fitting adapter on the brake line.

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Carefully hammer on the spreader bracket to the brake line.

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Thread the new stainless steel braided brake line to the fitting on the factory brake line.

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Install the new 16-inch Wilwood brake rotor and the new six-piston caliper. Check the spacing on the caliper to determine if it is centered over the rotor.

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Remove the caliper and tighten up the supplied bracket to the spindle.

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Slide two spacers over the bracket bolts to raise up the caliper to the 16-inch rotor position.



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Reinstall the massive caliper over the rotor and onto the mounting bracket.



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Put some threadlocker on the caliper bolts and tighten them up.



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Load the supplied pads inside of the caliper.



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Spring-loaded bars will hold the pads in place. Install the lower bar, then flip the spring up and install the upper bar over it before tightening them up.



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Install the new stainless steel braided brake line mating it up to the caliper.



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Install and tighten up the bleeder valve.



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Siphon out the old brake fluid.



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Fresh DOT4 brake fluid is then added, make sure to have plenty on hand so that you can fully bleed the brake system.



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The new Wilwood brakes fill out the bonspeed GT-B wheels and Toyo Proxes STII tires nicely. The stopping power perfectly complements the lowered DJM stance with anti-sway bars. It is time to hit the canyons and enjoy the ride!