



A CREW CAB DUALIE BUILT FOR HAULING MORE THAN JUST HAY

# 12-VALVE

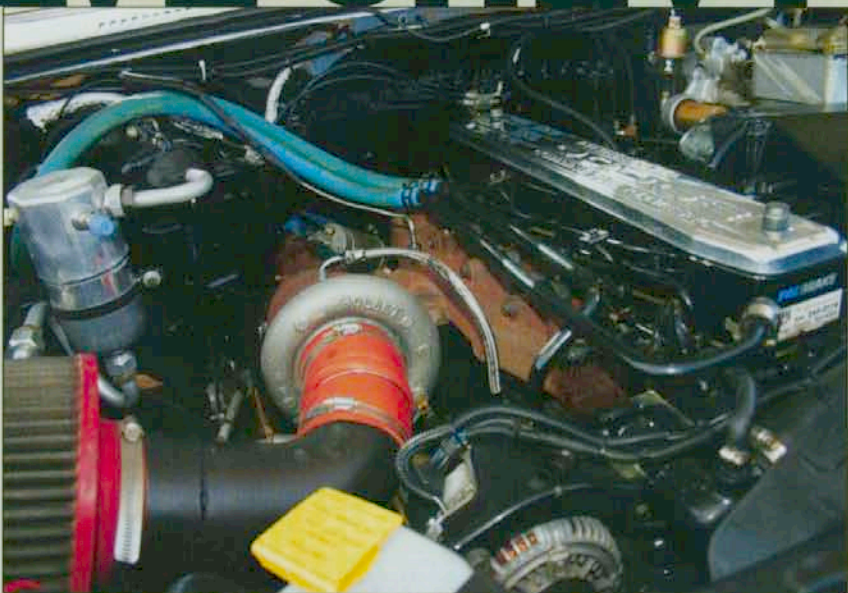


BY TREVOR REED ■ PHOTOGRAPHY: STEPHEN CLARK

# CHEVY

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TROY CHAMBERS OF ANDERSON, California, loved his '80 Chevrolet Silverado 1-ton dualie, but he needed more torque for towing snowmobiles, transporting horses, and hauling hay. The Crew Cab could hold the entire family, and the Scottsdale trim package along with some Camper Special factory upgrades made for a comfortable commute, but the old GM diesel could not maintain safe highway speeds. Not ready to give up on his baby, Troy decided to track down a simple engine that could be easily modified for big torque gains: the trusty 12-valve Cummins 5.9L.



Sorry, there is no kit to make this engine swap easy. Troy Chambers of Anderson, California, first showed us his dualie at the '06 Nor-Cal Diesel Rally put on by his employer, J&H Performance, in Redding, California. One photo led to hundreds of phone calls to the high-performance shop from dieselheads who wanted a nonexistent 6.2L-to-Cummins swap kit.



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## 12-VALVE CUMMINS SWAP

If one mechanical diesel is good, then two must be better, right? That's why Troy combined two '90 Cummins 12-valve engines to create one good-as-new, rebuilt 5.9L. He ditched the worn-out parts, such as rings, spun bearings, and ragged gaskets, then united the stronger of the two blocks with the best cylinder head.

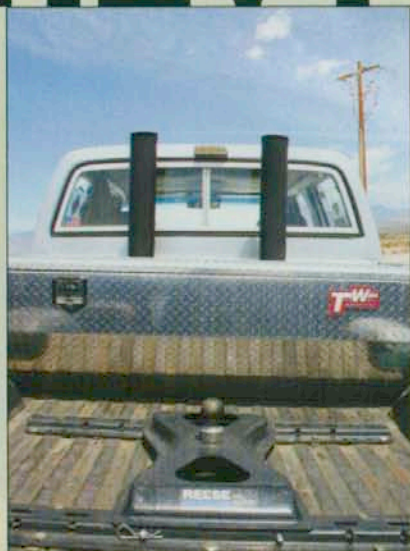
A custom intake pipe by J&H Performance sucks air through a big AFE filter. A new Holset HX35 turbo (good for up to 45 psi) was mounted to the stock exhaust manifold, and a Pac Brake exhaust brake was added. The compressor pushes air through a '94 Dodge Ram intercooler before it's stuffed into a stock intake manifold that was painted black. High-pressure clamps and silicone boots were used to prevent blowouts when the truck is under extreme loads. A MagnaFlow 4-inch exhaust system was modified by Troy and leads into home-made dual "summer stacks" that are installed during the sled-pulling season. A custom-built P-pump and 90hp injectors by Dynamite Diesel provide enough fuel for about 500 hp and 1,000 lb-ft of torque. That's loads of pulling power to keep the horse trailer moving at a nice clip on steep highway grades while keeping EGTs low.

## DRIVETRAIN

The Cummins was mated to a Dodge NV4500 five-speed manual transmission that was sourced from a '95 Ram along with an NP205 heavy-duty 4x4 transfer case. A Zoom clutch ensures power is transferred to a Dana 80 rear axle with a Lock Rite, and a Dana 60 in the front that uses a Tru Loc auto locking differential. Both axles use 3.73 gears, and the rear features a high-capacity Mag-Hytec pan to prevent wear during towing and sled pulling. The front axle was also upgraded with a set of reliable Warn locking hubs.

## EXTERIOR

Stock 15-inch rims with chrome covers by Summit Racing wrapped with Yokohama LT Radial 811 tires can be found at each corner of the truck. Custom traction bars built in the J&H Performance shop are hooked to the rear axle and help keep the tires in contact with



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the ground. An extra leaf was installed in each of the front leaf-spring packs to ensure the heavy Cummins engine has enough support up front. A Reese fifth-wheel hitch and a Taylor Wings toolbox in the bed allow Troy to keep the Chevy in ready-to-haul mode.

Bright body strips along with clear corner tail-lights and a chrome rear bumper help the truck stand out, but it's the custom front bumper built by Troy that makes it look truly unique. He spent a lot of time making sure the lines on the bumper match the truck (and we think he did a great job), but Troy has plans to make the front pusher look even better. A White Night reverse lighting kit was installed around the factory hitch, and Troy says it's very helpful when it's time to put the toys back onto the trailer at the end of a long day.

## INTERIOR

After playing in the snow, passengers are treated to six-way, powered, heated seats that were snagged from an '00 Dodge Ram. Troy didn't want his family to suffer from the effects of the elements, so riders also benefit from a fully functional heating and air-conditioning system that uses the factory GM controls. The interior was also enhanced with Auto Meter gauges to watch the boost and EGT levels, controls for the Pac Brake, a CD player with satellite radio, and a CB setup.

## SLED PULLS

As you can tell by the pulling hoop in the receiver, in addition to towing a trailer filled with quarter horses and at least one ornery miniature mule, the Chevy is used for sled-pull competitions. With the summer stacks in place, Troy fights for traction in his four-wheel-drive Chevy during meets all over the West. The truck performs well but may be retired from the sleds after this season for the sake of daily-driving reliability.

## WORK TRUCK

This truck was really built for hard work. Even before the Cummins swap, this Bow Tie dualie was constantly tasked with moving people, equipment, snow toys, animals, and tons of hay. Now it does those same things, but it's a whole lot faster, and best of all, Troy didn't have to part with his favorite truck. **DP**

