

FIRST LOOK! TURBOCHARGED NEW BEETLE

Dune Buggies & Hot VWs

JUNE 1999

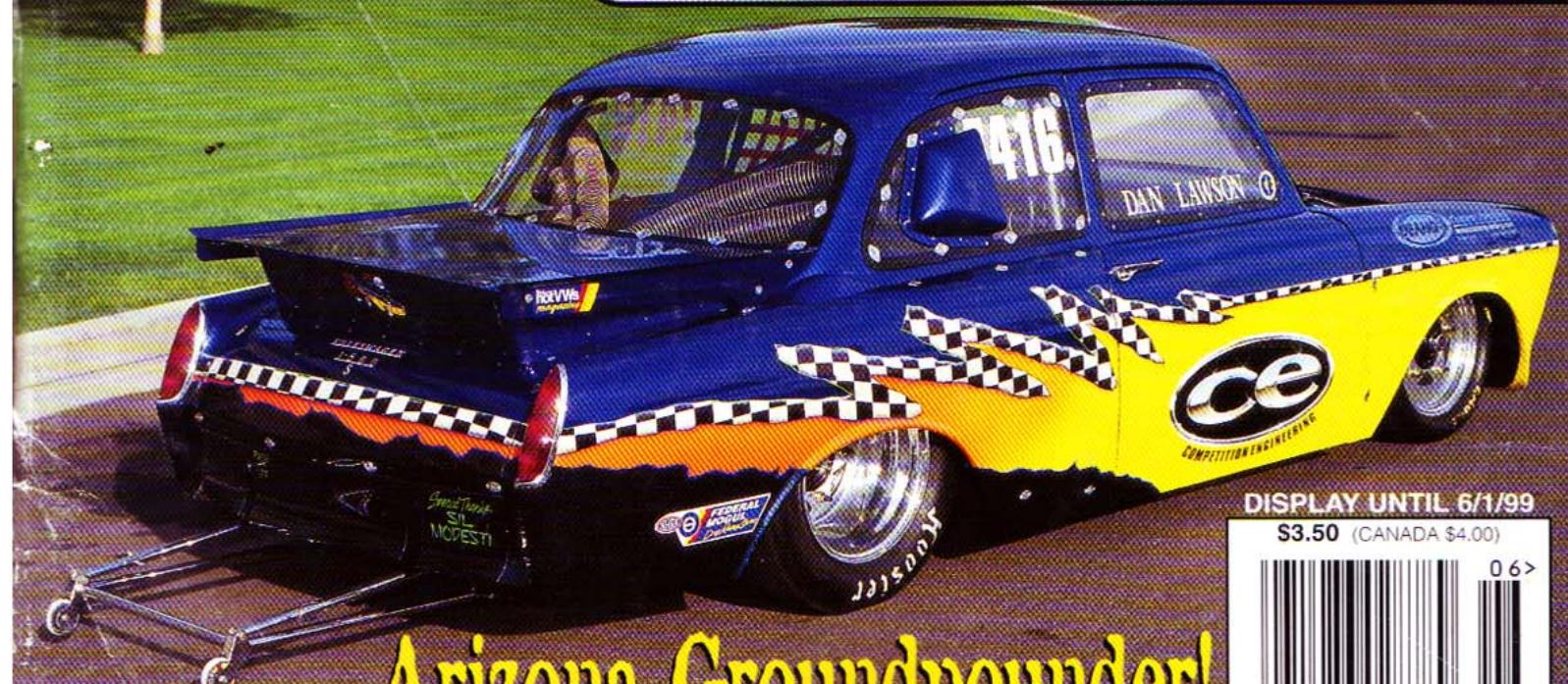
dune buggies and hot VWs



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PRONOTCH

Dan Lawson built a state-of-the-art Notchback Quatermiler

Dan Lawson, and the crew from Competition Engineering (CE), located in Tempe, Arizona, have designed and built this car to run with the "big boys." Being based on a '62 VW Notchback was rare enough, but when we found out that the entire car was built in and around Dan's shop, including the chassis, the story got much more interesting. With the completed racer only a few days old when we shot these photos last November, the car had already posted a first-time-out pass of 10.18/131 mph.

Credit for much of the car's impeccable fabrication goes out to the talented Sid Modesti, along with Dan and the rest of the crew at CE. Based on a 94.5-inch wheelbase, the NHRA-certified chrome moly chassis uses a combination of 1-5/8-, 1-1/2-, 1-1/4-, 1-, and 7/8-inch tubing sizes. Chassis Shop front struts found their way on the nose, along with a Stiletto rack and pinion, and a pair of modified Wilwood disc

brakes. The front suspension uses a pair of 75-lb. rated springs, to provide control over its 5 inches of wheel travel. A Jaz 4-gallon fuel tank resides up front, along with a heavy duty 16V Turbo Start battery.

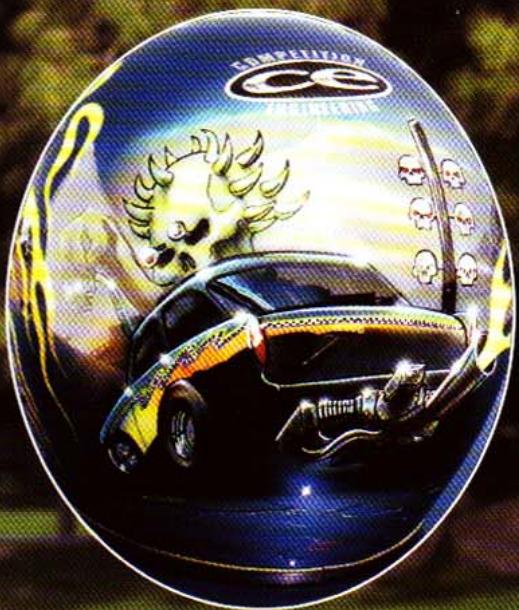
To get a close look at the rear suspension, Dan quickly loosened a set of Dzus fasteners mounted on the rear ('glass) quarter panels, to expose the complete rear-half of the car. Underneath, we found a pair of CE-built chrome moly ladder bars, using a pair of AFCO dual-adjuster shocks with one of various coil-over springs, rated between 650 and 750 pounds. Rear wheel travel has been measured at 5-1/2-inches, while rear braking has been assigned to a pair of highly-modified JayCee/Wilwood disc brakes.

The transaxle found in this car is based on an 1976-1980 (091 case) Type 2 IRS box, built by Bill Capatch of Arizona Transmission Exchange

(ATE) in Phoenix, Arizona. It has been highly modified to use a Dave Folts (of La Habra, California) U-joint axle kit (no C.V.-joints are used), and aluminum spool. A complete listing of the gear ratios used are in the engine/transaxle specifications box.

Now for the good part, the power source! Based on a Pauter Big Block, the Dan Lawson-built 391cc engine (161 cubic inches), uses a DMS/Pauter 81.63mm flanged, full-circle crank, Pauter "Rodzilla" aluminum 6.1-inch long connecting

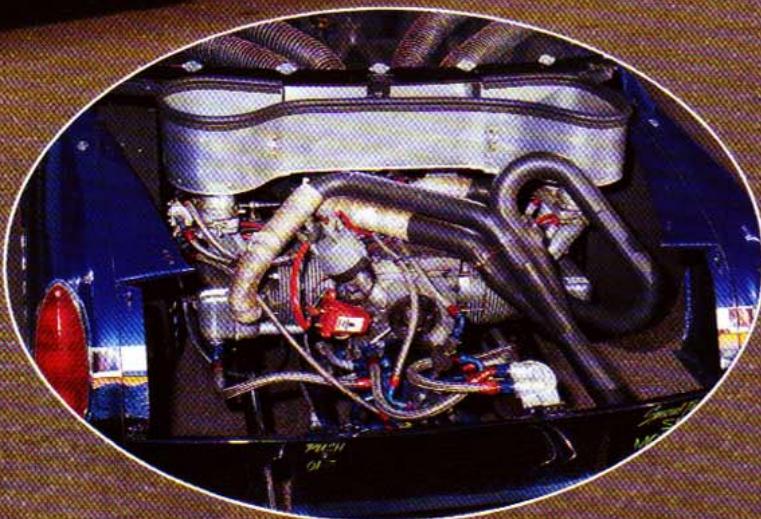




BY DEAN KIRSTEN

From any angle, Dan Lawson's new "Pro Notch" is one exceptional racecar.

Outrageous paint and bodywork (cool helmet too!) came from the super team (Deano, Matt, Mike, and "Krash") of Deano's Bodyworks in Tempe, Arizona. BELOW, 2645cc Pauter-based engine uses 58mm injectors and CE-modified Angle-Flow (A/F) heads. Horsepower is 285+.





Just your basic 1962 Type 3 Notchback, right? Unlike most VW racecars, Dan's Pro Stock features working Halogen headlights and NOS Type 3 flat lensed tails. Fiberglass front nose came from Bugpack, custom-made fiberglass rear quarter panels came from Competition Engineering, while doors are gutted steelies. Body has been sectioned 4 inches to lower overall stance. **BELOW LEFT**, interior is all business. A 1-5/8-inch roll cage protects Dan, along with Simpson belts, window nets, and Beard seat. **BELOW RIGHT**, massive airbox is fed by two NACA ducts, by way of four flexible induction hoses.

rods, and 101.6mm Diamond pistons, fitted into a set of L.A. Sleeve cylinders. This setup, when combined with a pair of A/F (Bugpack Angle-Flow) heads, modified with 52.8mm intakes and 40.7mm exhaust valves, and tons of work (thanks to Mike Fischer and Dean Lowry), help produce over 285 horsepower. With a compression ratio of 14:1, along with a Dan Lawson hand-built 58mm injection system, and custom-fabricated 2-1/8-inch headers by McCabe, e.t.'s in the nines should be just around corner for the CE team.

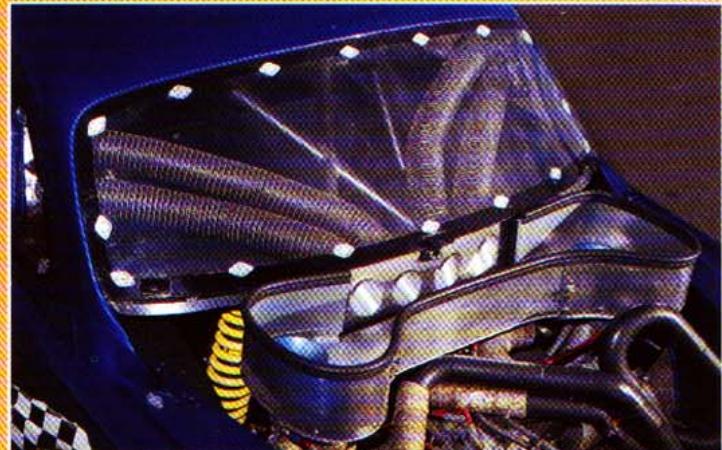
Total access to the interior is made easier, thanks to two removable 'glass doors. Inside, we found a Beard Super Seat and Simpson belts that keep Dan in place during assaults on the quarter-mile. Hand controls include a Formulating France 13-inch steering wheel, and an MSE Gate Shifter (which Dan loves), while the feet operate a Frame Works tubular pedal assembly. Instrumentation consists of an AutoMeter tach with Ultralight,

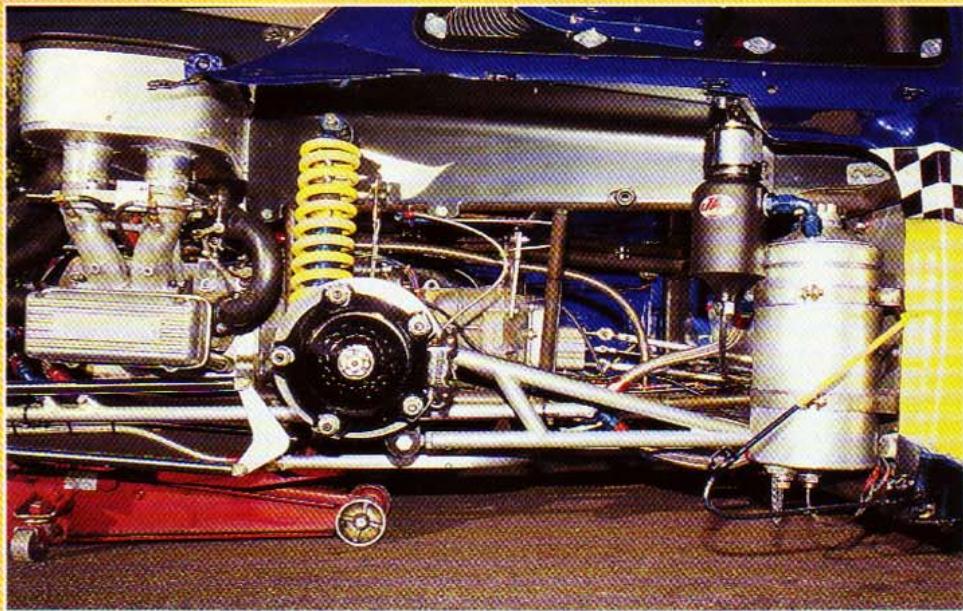
and oil pressure and temperature gauges. Changing the engine's ignition timing can be accomplished by simply adjusting the MSD 7AL box, mounted on the passenger's side floor panel. By the way, all of the interior's aluminum work was done in .050-inch thick sheets, thanks to Dwayne Dixon of Tempe, Arizona. Once completed, each of the sheets was painted Hammertone Gray. We should also mention that the chassis was not painted, but left bare, and only covered occasionally with a gun-bluing treatment to protect against corrosion. This also allows for easier chassis examinations for cracks, and possible future additions.

What makes this particular race car a standout is, without a doubt, the body. Using a '62 Type 3 Notchback, Lawson cut the body in sections and separated the roof and cowl from the quarter panels, and so on. To lower the overall stance of the car, the body was sectioned, or lowered, 4 inches (4 inches was removed from the bottom of the

body and quarter panels). The roof drip rails were shaved, as were the front cowl vent and wiper holes. Both the steel front end and rear quarter panels were replaced with fiberglass units to save weight (doors remain steel). Once fully mocked-up and fitted, the body was then mounted to a custom-made chassis fixture on wheels, and then delivered to Deano's Body Works in Tempe, Arizona. This process not only made working on the body easier for Dean Calderwood, Matt Howard, Mike Learn, and "Krash" Kleinman, but also kept it square, and out of harm's way.

The "super" crew at Deano's performed their usual magic, creating this wild paint scheme using Spies-Hecker and House of Kolors' Magik Blue Pearl, Sunrise-to-Sunset pearl metallic, black, white and, of course, clear. This car is so detailed that the graphics wrap all the way into and around both doorjambs, inside the fender wells and even the brackets are painted to match!

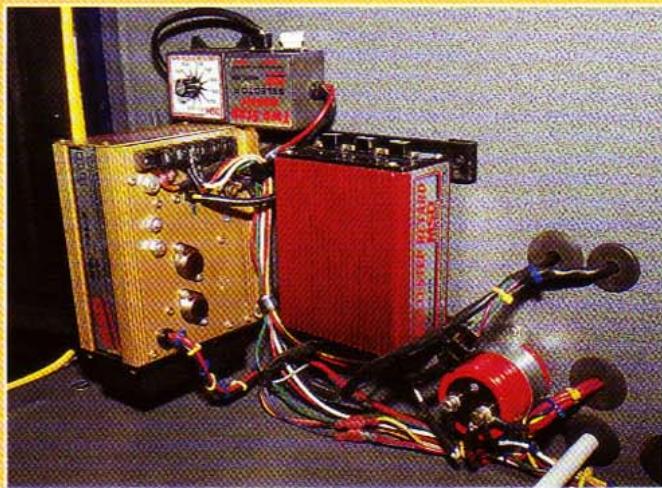




Once the body received this wild paint job, Mike Learn came over and applied the graphics and lettering. By the way, both the (Halogen) headlights and taillights/brake lights function so that night runs are safe and Dan knows where the hell he's going. No airbrush headlights for this racer!

The finishing touches were a full set of Monocoque aluminum wheels; 3.5x15 up front with 23.5/15-inch Goodyear tires, and 9x15-inch rear wheels mounted to 10/26/15-

inch Hoosier slicks. With the car now completed, Dan looks back at the four-year construction time and can't but help thank the following: Bob Bogard at Precision Powdercoating; Dean Lowry; Mike Fischer; Sid Modesti; the entire crew at CE (Pat, Marc, Wayne, Brady, and Jeremy); good friends Greg Parker, Dennis Dennison, and Tony Pedotto; and his family, wife Holly, and sons Alex and Sam, for their support. •



ABOVE, with quarter panel removed, the rear suspension can be seen. Large aluminum tank is part of the engine dry sump oil system. Brakes are JayCee/Wilwoods. **LEFT**, ignition system consists of an MSD 7AL box, red Blaster coil, (3-step) Multi-Retard box, and (2-step) Dial-Selector RPM Module. **BELow LEFT**, front suspension features a pair of Chassis Shop struts. **BELow RIGHT**, driver controls include an MSE Gate Shifter, Frame Work pedals and a hand-operated staging brake.



ENGINE/Pauter Big Block

DISPLACEMENT/2645cc

BUILDER/Dan Lawson, Competition Engineering, Tempe, AZ

CRANK/81.63mm, full-circle,

DMS/Pauter, flange-mount

RODS/Pauter Rodzilla, aluminum, 6.1-inch, 2-inch journal

PISTONS & CYLINDERS/Diamond 101.6mm pistons, L.A. Sleeve cylinders

RINGS/Total Seal; Dykes top, slant-gap second, stock oil ring

CAM/Pauter roller, .660-inch lift at valve, 317° duration

CAM GEAR/Pauter, straight-cut

OIL PUMP/Pauter, billet, 4-stage, dry sump

OIL/Kendall Racing, 20W-50

HEADS/A/F (Angle-Flow), highly modified, fully welded by Mike Fischer and Dean Lowry

VALVE SIZE & MAKE/52.8mm intake x 40.7mm exhaust, titanium

COMPRESSION RATIO/14.0:1

ROCKER ARMS/Pauter, 1.5:1, roller tip

ROCKER SHAFTS/Pauter

PUSHRODS/Manton, tapered (3/8-to-5/16-inch), forged steel

IGNITION/MSD billet distributor, MSD 7AL box

SPARK PLUGS/NGK B9ES

CARBURETION/fuel injection, 58mm throttle bodies, custom-made by Fischer Engineering & Competition Engineering

INTAKE MANIFOLD/A/F (Angle-Flow), cut, modified, and welded

EXHAUST SYSTEM/2-1/8-inch, custom-made by Rob McCabe @ R.E.F.

CLUTCH/200mm, KEP 1700-lb. pressure plate, dual Tilton discs, modified flywheel by Dean Lowry

HORSEPOWER/285hp

OTHER MODIFICATIONS/hand-made hardlines for oil and fuel lines, lightened top plate and lower pan (Pauter block)

TRANSAXLE/091 Type 2

BUILDER/Bill Capatch, Arizona Transmission Exchange (ATE), Phoenix, AZ

RING & PINION/4.57:1

GEAR RATIOS/3.30:1 1st; 2.06:1 2nd; 1.44:1 3rd; 1.09:1 4th

SPECIAL MODIFICATIONS/Dave Folts aluminum spool, U-joint axle kit for bus box