

High-performance doesn't have to mean a stripped interior. The inside of this Scirocco is as clean as the outside.



Some people like to make believe they have a fast car and hang a lot of ornaments on the outside without making the inside live up to the look. For Tim Hildabrand of San Jose, California, however, the license plate that reads "60 in 6" is no idle boast.

It's only natural that Tim have a killer Scirocco. Not only does he work at a Volkswagen dealer (Bob Himsl Volkswagen in San Jose) as a suspension, upholstery and electrics specialist, but he is also president of the Northern California chapter of Club Scirocco, and technical editor of their newsletter, "Desert Wind." And while he is quick to credit the dealership for the support they have given him and his 75 local club members, it quickly becomes obvious even in a short conversation that Tim is the mover and shaker who is responsible for all the activity among owners of Volkswagen water-pumpers in North-

ern California.

Although Tim's Scirocco started life as a mild-mannered 1978 Special Edition with the small displacement engine, it has gone through some changes since he bought it used for \$6500 with 30,000 miles on the odometer. Now with 98,000 miles under its steel belts and \$8800 of Tim's hard-earned money (not to mention time!) invested in it, it looks like the best is yet to come for this pet project.

Staying with the original block, Tim opted for a 1.7-liter crank and pistons from the factory. Everything was balanced and magnafluxed, the rods shot-peened and rebushed, and the crank Tuftrided. He also had the head cc'd, deciding on 8.0:1 compression as the best for the turbo. The head itself was left pretty much stock, although the valve guides were replaced with better material and a three-angle valve job was performed by Doug Peterson at Comptech in San Jose. Tim also built

Hurricane Force Scirocco

A turbo beast from Northern California

By Greg Raven

Photos by Pete Pesterre



With lowered springs and wide wheels, this Scirocco looks like it's ready for business. The rear fenders had to be trimmed just slightly to accommodate the low-profile tires.

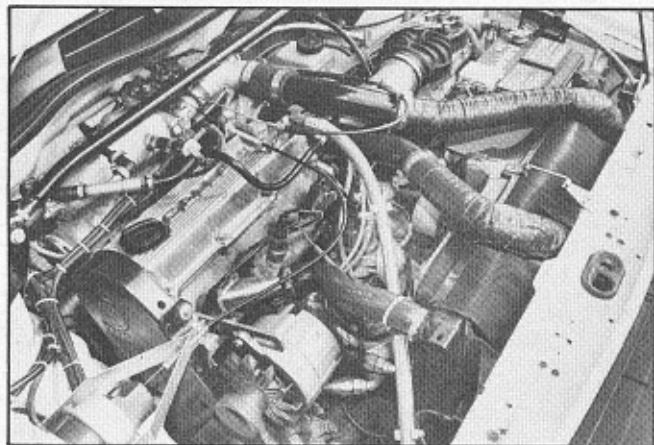


himself a baffled oil pan to help cope with the centrifugal forces the car would develop in the races he had planned for it. The thing that really makes the difference is the Callaway Turbo Stage II kit (Callaway Turbo-systems, 31 High Street, Old Lyme, CT 06371, (203) 434-9002).

Although the Stage II setup comes with an oil cooler, it doesn't include an intercooler, which Tim felt was necessary to get the most out of his turbo motor. So, buying an intercooler core from an Audi, he plumbed his own, mounting it in front of the radiator next to the oil cooler. To get more air to the intercooler, Tim removed some of the

sheetmetal behind the grille and front headlights. Another modification involved relocating the Callaway Micro-fueler to better suit his installation. Tim later discovered that Callaway locates the Microfueler in the same place on their intercooled turbos.

With more power being pumped out by the engine, you'd think the clutch would be the first thing to burn up, but Tim still uses the stock 190mm clutch, although it is the F + S Sport version. So far, no problems even with several standing start runs to its credit. The higher output did allow Tim to switch to a five-speed transmission from a 1981 Scirocco, which gives him the



The turbo installation packs a lot of punch into a small space. The ducts across the top of the radiator feed the intercooler. Note the two headlight relays to the left of the battery.

Gauges include (top to bottom, left to right) oil temperature, oil pressure, water temperature, turbo boost, clock and voltage meter. The knob at the bottom of the console controls the waste gate. The switches behind the shifter control exterior lighting effects.



gear ratios he likes.

Getting that much power to the ground is always a problem in a front-wheel drive vehicle, and one that isn't quite sorted out yet. The additional power requires a totally different driving style than one would use in a normal Scirocco. With an estimated 200hp, wheel spin tends to show up at the least desirable moments. He's got a good start on it, though, with Bilstein Sport shocks, GMP adjustable upper stress bar, high density bushings, lowered progressive rate springs front and rear and a set of anti-roll bars from Suspension Techniques. For traction, he's using the 15x7-inch ATS alloys holding 195/50 VR 15 Phoenix Stahlflex 3011s. Because of the ground clearance lost when the car was lowered, Tim runs an aluminum sump guard, which he feels is superior to the steel guards because of the weight factor and, surprisingly, longevity. Next on Tim's wish-list is a limited-slip differential.

The extras don't stop there, however. Outside, there are the front spoiler and mud guards by Kamei, and the rear spoiler by Zender. The "turbo" emblems are stock 930, and add a tasty touch to the clean exterior of the car. Tim tinted the windows himself (!),

Continued on page 71

THE UPHOLSTERED SNAP ON STARTING AT \$64.95



- EASY TO INSTALL
- UNDETECTABLE AS A SNAP ON
- FULL COVERAGE OF YOUR SEAT — NOT JUST A WRAP AROUND
- CUSTOM FIT FOR ANY YEAR
- SEWN IN 1/2" LAYER OF FOAM PADDING
- TOP QUALITY VINYL, VELOUR, OR SHEEPSKIN

FOR VW'S PORSCHE FIAT DATSUN TOYOTA HONDA MINI PICK-UP AUDI VOLVO BMW PINTO CHEVETTE DODGE COLT CAPRI AND MORE

We also have: carpets, door panel cover kits, foam pad kits, headliners.



1335 Walker Street, Dept. B • San Luis Obispo CA 93401 (805) 541-5716

MOVING?

DON'T MISS A SINGLE ISSUE!

Let us know your new address right away. Attach an old mailing label in the space provided and print your new address where indicated. Please allow 6-8 weeks for change of address to become effective.

MAIL TO:
VOLKSWAGEN & PORSCHE
P.O. Box 49659
Los Angeles, CA 90049

VOLKSWAGEN & PORSCHE

Name _____

New Address _____

City _____ State _____ Zip _____

(If label is not handy, print old address here.)

ATTACH LABEL HERE

HURRICANE FORCE

removing each window in order to do the job right with raw materials from Solar Control in Los Angeles. Tim also removed the black trim tape that comes standard on the Special Edition Scirocco, and replaced it with black paint for more durable good looks. Front brakes have been changed over to the GTI vented rotors, which Tim had slotted by Hammel Fabrication for better performance in the wet. The standard sealed beams were replaced with Cibie 85/100s on the low beam side, and 100-watt units for the highs. Bosch 100-watt fog lights complete the picture.

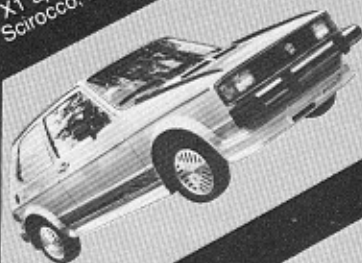
Inside, there's the Alpine 7136 with bi-amped speaker system utilizing the two eight-inch sub-woofers and an 80-watt amplifier on the low end, and Alpine ribbon tweeters and Pioneer mid-range speakers with a separate 36-watt amp. The sub-woofers are mounted through the back of the rear seats, using the entire trunk as the speaker cabinet. Power window mechanisms are currently Normarks, although Tim plans to replace them with Electric Lifes. The Black Bart alarm features a pager and remote battery, as well as a dual horn setup. Tim installed the factory aftermarket cruise control, retrofitting a standard equipment turn-signal/cruise control wand from a 1983 GTI. Autopower of San Diego supplied the rollbar, onto which he mounts the Halon fire extinguisher. With a car this clean, you would expect the details to be well cared for, and they are, with niceties like the garage door opener and remote alarm buttons built into the driver's side sun visor, and diodes built into the dash to give visual warning of radar traps.

What this all adds up to is a well-mannered street car that can use up to 17 pounds of boost with a good mix of fuel and turn in quarter-mile times in the low 14s, or, shuffle along with 14 to 15 pounds of boost with pump gasoline and return mileage figures of 21 to 24 mpg in the city and 28 to 30 mpg on the freeway. So far, the combination is working great. After 30,000 miles of turbo use, the car seems to be dialed in pretty well.

With all the various club activities, Tim's Scirocco is kept plenty busy demonstrating the difference between show and go. If you have a water-pumper and you would like to become more involved with other Volkswagen owners and compete in slaloms and autocrosses, you can contact Club Scirocco at Club Scirocco Membership, 4020 Payne Ave., San Jose, CA 95117. Don't expect to be able to make your car a copy of Tim's though. As Tim says, "I like to do things to my car that nobody else has done."

THE X1 SYSTEM BY KAMEI

The X1 system includes aerodynamic spoilers, rear skirt, decor set, windsplits, and steering wheel. Kamei aerodynamic products have been wind tunnel designed and tested to provide improved style, handling and fuel savings. Kamei spoilers are the only spoiler recognized by both the E.P.A. for fuel savings and T.U.V. for safety and performance. X1 applications available include the Rabbit, Scirocco, BMW 318i, BMW 320i and Mustang.



RABBIT



SCIROCCO

Kamei Spoilers are available by direct mail—prices vary according to application.

Send \$2.00 for the latest catalog, emblem and decal to Kamei, P.O. Box 426, North Haven, CT 06473 VWP-4

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____



VW & PORSCHE

PUBLISHED BI-MONTHLY

VOL. 15, NO. 2 APRIL, 1984

FEATURES

- 26 Hurricane Force Scirocco** *A turbo beast from northern California*
- 28 Revmaster Aviation Q2** *An airborne air-cooled airplane*
- 32 Choosing Off-Road Tires** *A complete guide to rough stuff rubber*
- 36 Audi 4000S Quattro** *Affordable all-wheel drive—it's nice!*
- 38 Immaculate 1954 Speedster** *It's not quite all original—but who cares?*
- 40 Porsche Carrera 3.2** *The SC is dead—long live the Carrera*
- 43 Homebuilt Beetle Museum** *One couple's homage to the best from Wolfsburg*
- 47 Power Build for the 924** *A new Porsche power kit*
- 50 Apex GTI** *Not just another pretty face*
- 52 "IMSA" 914; 924 GTS** *Two beautiful performing Porsches*
- 56 Magnum Force** *A Beck carb kit to replace faulty CIS*
- 60 Distributor Revival** *Putting new life in the water-cooled VW*
- 67 VW & Porsche Club Listing** *The best way to get automotively involved*

DEPARTMENTS

- 6 Tech Letters**
46 Motorsport

- 20 News From Europe**
64 Some Ideas on Tools

- 23 In Scale**
78 Parts Counter



On the cover: Apex GTI photographed by George Olson; and '54 Speedster shot by Vince Manocchi.

