

At long last, Volkswagen's rakish sport coupe gets the power it deserves

Just like in real life, good looks and charm can be used to mask the shortcomings in an automobile. Take the VW Scirocco as a case in point. Since the day it was introduced in Germany in 1974, the stylish 2+2 liftback lived with far less power than it really deserved. The Giugiaro-penned little coupe was replaced by an in-house design in 1981, but the aerodynamic efficiency of the new Scirocco wasn't backed up by the substance of a competitive sports car-horsepower.

The worldwide performance renaissance that has blossomed throughout the industry during the '80s finally forced VW's hand in Europe. Two years ago, the top-of-the-line Scirocco GTX model was given an engine and suspension transplant from the extremely successful Golf GTI to help it stay at least somewhat competitive on the Continent. The U.S. version was also fitted with the U.S. GTI's powerplant, but 100 ponies really wasn't competitive with the outputs of the Scirocco's stateside competition. For 1986, though, the Scirocco lineup is getting a massive shot of the right stuff. At the heart of the performance upgrade is a new 16-valve 4-cylinder engine, which VW has specifically targeted for use in the Scirocco 16V GTX and the Golf GTI 16V models.

Replacing a conventional 2-valve head with a more efficient 4-valve counterpart has become an increasingly popular and cost-effective way

for manufacturers to pump the power curve of an engine, a fundamental economic truth that has not been lost on Volkswagen. It first showed a 16V Scirocco prototype at Frankfurt in 1983. Since then, the vehicle has undergone considerable refinement, most of it coming in the powertrain department. This summer, the firm introduced a new production version of the car in Europe. While this Super Scirocco won't appear here in the U.S. until sometime in the first half of 1986, we did get a chance to do some preliminary evaluation with one of these new 16V models on its home turf in southern Germany.

The 16V engine replaces the 112-hp 2-valver currently used in the European performance version of the Scirocco. The new 1.8-liter DOHC powerplant is also based on the veteran EA827 engine that has been part of the VAG family since the days of the original Audi 80. Under development since 1981, the 16V produces 139 hp DIN at 6100 rpm and 133 lb-ft of torque at 4600 rpm in basic Euro trim. For the first time, VW will also offer an emissions-equipped version

for the home market, fitted with a full Lambda-sond sensor package and catalytic converter. Though down some 10 hp, the torque figures are the same for both engines. However, the de-smogged version develops its greatest twist at 4250 rpm.

Will significant numbers of Germans feel the substantial tax break that goes along with the purchase of any cat-con-equipped car will offset the modest loss of top-end performance and the hassle of searching out the limited number of stations currently pumping unleaded fuel? This question has the experts scratching their heads. But it is known that this "home market" clean-air variant will be quite similar to the vehicles we'll see here in America, save for trims and various federalization changes.

In conventional European tune, the 16V engine is fed by Bosch K-Jetronic multi-point injection. The emissions version uses the higher-tech KE system, which includes a more precise electronic control package along with the catalytic converter. The new aluminum alloy head has

VW Scirocco 16V GTX

by Bob Nagy
PHOTOGRAPHY BY THE AUTHOR



VW design parameters demanded that the new 16V powerplant provide exceptional durability as well as scintillating performance

a 20% higher flow rate than its 2-valve counterpart, and the tuned, venturi-type inlet runners ensure optimum delivery of air to the cylinders. The basic design is unique in that it locates the exhaust valves in a vertical plane and inclines the intakes 25° with the spark plug in between. This allows for a relatively narrow head and also yields an internal combustion chamber layout relatively insensitive to detonation.

VW design parameters demanded that the 16V provide exceptional durability as well as performance. Consequently, the 5-main bearing block was well reinforced to handle the additional stresses. The GTI engine was called upon to contribute its heavy-duty crank and rods plus its water and fuel pumps, while the automatic oil-spray cooling system for the pistons was adopted from VW's existing turbodiesel variant along with its larger-capacity oil pump. To further help dissipate heat, the stems on the exhaust valves are sodium filled. The 16V's hydraulic bucket-type cam followers totally eliminate any need for valve adjustments.

Despite the relatively high 10.0:1 compression ratio used in both 16V variants, the design of the piston crown and adjacent squish area makes it almost impossible to bend a valve. Those inclined to miss an occasional shift will be happy to know that the engine has also been fitted with a positive fuel shutoff that cuts in promptly at the 7200-rpm posted redline. The distributor in the 4-valve powerplant is driven by the exhaust camshaft, a new setup necessitating relocation of the radio antenna to the top of the roof to eliminate interference problems.

To help put its robust new powerplant to best use, the Scirocco 16V GTX has also received a major sus-

pension revamp. Heavier springs have been fitted up front, and upgraded shocks reside at each corner. The rear anti-roll bar diameter has been upped from 20.5 to 24 mm, and ride height lowered 10 mm. For added stiffness, the front upper reinforcing strut from the GTI links the tops of the shock towers. The Scirocco's stopping power has also been markedly improved. The standard disc/drum setup has given way to larger 4-wheel power discs with vented front rotors, a larger booster, and rear proportioning valve. The new beefier binders were genuine confidence builders on our test drive, affording good pedal feel and consistently providing short, straight stops.

Cosmetically, the 16V bears a striking resemblance to the special California Edition Scirocco that was sold on the West Coast two years ago. The fender flares and rocker panel extensions are identical and permit the 16V to be shod with some decent-sized tires for a change. According to VW, problems with stone chipping have mandated the use of an abysmally skinny 175/70HR13 on all per-

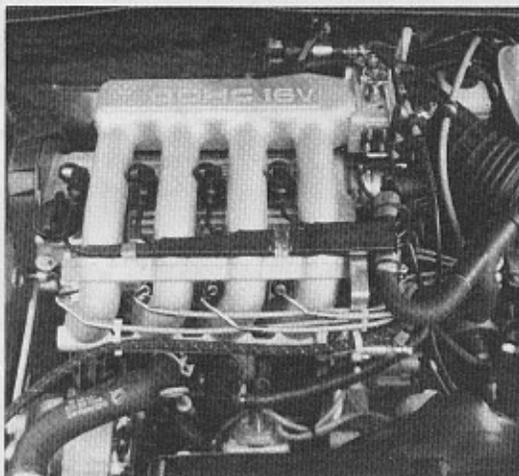
vious Sciroccos not fitted with the flares/extensions. The newest offspring wears 185/60VR14 rubber all around, on 14 x 6-in. light alloy rims. The 16V's new rear spoiler, which cuts lift by 30% and helps contribute to the car's 0.38 Cd figure, is also a dead ringer for the one presently found on U.S. Sciroccos.

Driving over a variety of lightly traveled Bavarian backroads and the occasional stretch of autobahn between Munich and the Austrian border, one couldn't help but be impressed with the new GTX 16V package. The Scirocco, long regarded as a car with modest performance but above-average balance and handling, really comes alive with the additional go-fast goodies. Engine flexibility is good, throttle response immediate, and the 1871cc twin-cammer revs freely all the way up to its rigidly enforced limit. The GTI's smooth-shifting close-ratio 5-speed gearbox, which retains the same ratios save for an incrementally lower OD 5th, proved an excellent match for the 16V's power and torque.

Although we had no chance to do



At the heart of VW's latest image-boosting program for the Scirocco is a new 16-valve 4-cylinder engine that churns out 139 hp DIN in European trim.



Compare our prices

on performance
radial tires



Enjoy superior performance of top imported steel belted radials at cut prices. No blems or seconds. Order or get advice by phone. Ask for Dept. D-9.

Toll-free 800 835-8473

(In California, Alaska, Hawaii, 714 250-9141)

Phone Pacific Time, M-F 7-6, Sat 8-1. Telex 181689.

Use Visa/MasterCard

Tell us card number & expiration date. Or send certified check, MO or personal check. In Calif & Pennsylvania, add 6% sales tax. No COD's. Call for free illustrated catalog.

More than \$7 million inventory. Most UPS shipments go out within 48 hours. Allow 3-10 days shipping time. If personal check add 14 days to clear our bank. Shipping extra. Phone for shipping costs. Advertised prices good through September 30. Phone for prices on other Bridgestone, Michelin, Continental, Pirelli, Englebert & Quantum tires. Specialty alloy wheels. We ship from our Calif or Pennsylvania warehouses.

BF GOODRICH

Comp T/A UTG: 140-180AA. Radial. 2 fiberglass belts, 2 nylon caps*, 2 rayon body plies. Metric 70, 80, 85 & 90 series. VR speed rated. Blackwall. Tubeless.

* = 50 & 55 series only.

185/70-13	\$ 77	185/90-15	\$112
205/60-13	93	205/60-15	114
185/70-14	83	215/60-15	121
185/60-14	102	205/55-16	170
205/70-14	89	225/50-16	161

BRIDGESTONE

S407 UTG: 180AA. Radial. 2 steel belts, 1 or 2 polyester body plies. SuperFiller stiff head compound. High performance all-season design. P-Metric 70 series. HR speed rated. Blackwall. Tubeless. * = raised white letters.

P175/70R13	\$41	P185/70R14*	\$55
P175/70R13*	46	P205/70R14	52
P185/70R13	43	P205/70R14*	59
P185/70R13*	49	P185/70R15*	55
P185/70R14	47	P215/70R15*	63
P185/70R14*	53	P225/70R15*	68
P195/70R14	49	P235/70R15*	71

137 Potenza UTG: 140AA. For high performance cars. Radial. 2 steel belts, 2 polyester body plies. SuperFiller stiff head compound. P-Metric 60 series. HR speed rated. Blackwall. Tubeless.

P185/60R14	\$77	P205/60R15	\$81
P225/60R14	86	P215/60R15	87
P195/60R15	78		

E81 Potenza UTG: 140AA. For high performance cars. Radial. 2 steel belts, 1 nylon belt, 2 polyester body plies. Metric 55 & 50 series. VR speed rated. Blackwall. Tubeless.

185/55-15	\$118	205/55-16	\$150
205/50-15	132	225/50-16	157
225/50-15	150		

CONTINENTAL

CH 41 UTG: 150AA. Radial. 2 steel belts, 2 nylon caps, 1 or 2 rayon body plies. HR speed rated. Blackwall. Tubeless.

185/60-13	\$58	185/60-14	74
205/60-13	72	185/60-15	79
185/60-14	66	205/60-15	83

CH 51 UTG: 150AA. Radial. 2 steel belts, 2 nylon caps, 1 or 2 rayon body plies. HR speed rated. Blackwall. Tubeless.

175/70-13	\$35	185/70-14	66
185/70-13	57	205/70-14	71
185/70-14	62		

MICHELIN



MX/MXL UTG: 280AB. Radial. 2 steel belts, 1 polyester body ply. SR speed rated. Blackwall. Tubeless.

145-13	\$32	175-14	\$41
155-13	36	175/70-14	49
165-13	41	185/70-14	49
185/70-13	40	185/70-14	54
175/70-13	45	155-15	41
185/70-13	50	185/65-15	54

PIRELLI

P3, P3/70 UTG: 140-180AB. Radial. 2 steel tread belts, 1 nylon cap, 1 rayon body ply. SR speed rated. Blackwall. Tubeless.

145-13	\$21	165/70-13	\$28
155-13	26	175/70-13	32
165-13	28	185/70-13	35
175-14	32	185/70-14	37
185-14	33	185/70-14	40
185-15	31	185/70-15	40

P6 UTG: 130-140AA. Radial. 2 steel belts, 2 nylon caps, 2 rayon body plies. Metric 65 & 60 series. HR speed rated. Blackwall. Tubeless.

185/60-13	\$30	225/60-14	\$ 80
205/60-13	74	185/70-15	94
185/60-14	67	185/60-15	70
185/65-14	62	205/60-15	84
195/60-14	75	215/60-15	105

P7 UTG: 180AA. Radial. 2 steel belts, 3 nylon caps, 1 nylon body ply. VR speed rated. Blackwall. Tubeless. * = F-type.

175/70-13*	\$ 62	225/60-15	\$175
205/60-13*	99	275/55-15	182
205/55-14*	114	345/35-15	214
225/55-14*	129	185/50-16	155
205/50-15	134	205/55-16	155
225/50-15	162	205/50-16	164

P8 UTG: 200AB. Radial. 2 steel belts, 2 nylon caps, 1 nylon body ply. Low rolling resistance design. Metric 65 series. SR speed rated. Blackwall. Tubeless.

175/65-13	\$42	185/65-14	\$36
185/65-13	48	205/65-14	61
185/65-14	50	185/65-15	54

P77 UTG: 150-180AA. Radial. 2 steel belts, 2 nylon caps, 1 nylon body ply. Asymmetric tread design. M & S rated. P-Metric 75 & 70 series. HR speed rated. Whitewall. Tubeless. h = blackwall.

P175/70R13h	\$48	P185/70R14	\$30
P185/70R13h	51	P205/70R14h	62
P205/70R13h	54	P205/70R14	56
P205/70R13	49	P205/70R15	58
P185/70R14h	50	P215/70R15	67
P185/70R14	53	P225/70R15h	77
P185/70R14h	55	P225/70R15	70

YOKOHAMA

A008 UTG: 140AA. Radial. 2 steel belts, 2 rayon or polyester body plies. Metric 70 series. HR speed rated. Blackwall. Tubeless.

175/70-13	\$64	185/70-14	\$71
185/70-13	68	205/70-14	84

XGT UTG: 170AA. Radial. 1 steel belt, 1 polyamide belt, 2 polyester body plies. P-Metric 60, 55 & 50 series. VR speed rated. Recessed raised black letters. Tubeless.

P205/60R13	\$19	P225/60R15	\$57
P205/60R14	116	P245/60R15	168
P215/60R14	121	P255/55R15	178
P245/60R14	142	P255/55R16	188
P215/60R15	132	P225/50R16	198

MXV UTG: 170AA. Radial. 2 steel belts, 2 rayon body plies. HR speed rated. Metric 65 & 60 series. Blackwall. Tubeless.

185/60-14	\$70	185/60-15	\$81
195/60-14	74	205/60-15	84

any official clocking, a number of impromptu acceleration runs were sufficient to convince us that the 8.1-sec 0-100km (0-62 mph) times—8.6 sec with the cat-con cars—claimed by the factory were pretty realistic. We saw an indicated top speed of 218 kph on the autobahn with our non-catalyst test vehicle, 10 km over its published figure. Even allowing for a slightly optimistic speedometer, that's still not too shabby for a car that is rated at 31 mpg at a steady 120 kph and 21

mpg in the urban cycle.

The upgraded underpinnings are well suited to the Scirocco's station in life, imparting exceptional control and stability while severely curtailing all sensations of harshness. The 16V GTX corners noticeably flatter than a base model, and the decreased ride height clearly helps reduce body roll. Like most front-drivers, the sport Scirocco still retains some degree of inherent understeer. But the tail can be brought out and caught

Golf GTI 16V



Introduced simultaneously with the Scirocco 16V, but not due here in the States until model year 1987, was a 16V version of the Golf GTI. Besides the more potent engine, it too has received a comprehensive massage of the suspension and brake systems as well as a unique front spoiler. While circumstances conspired to prevent us from getting any time behind the wheel of a smogged Scirocco, we were able to drive both versions of the new GTI 16V back to back.

Since the Golf and Scirocco have curb weights within 30 lb of each other (2161 lb and 2138 lb, respectively) we felt that a seat-of-the-pants comparo between the two GTIs would yield findings that could also be applied to the Scirocco. With two people and 100 lb of luggage aboard, the difference between the emissions and non-emissions engines proved to be just about imperceptible most of the time. A non-catalyst car had a bit more enthusiasm above 5000 rpm. Although the clean-air version is reputed to have slightly better low-end pulling power, its maximum torque still comes high enough in the rev

range so that one is not likely to notice much difference in a normal driving regimen.

Since the new GTI line was just introduced here last year, VW elected to hold off on bringing a 16V version to the U.S. for one more season and will instead concentrate its efforts on maximizing the impact of the 16V powerplant in the Scirocco line. Too bad, because we think the tradeoff between style and practicality makes the GTI an extremely livable, and, in some cases, far more desirable choice for a good number of performance freaks who find the passenger compartment in the sexier-looking Scirocco just too claustrophobic. We were repeatedly advised that the car we finally get might differ considerably from what we drove. But all the most probable changes fall on the positive side of the ledger—upgraded interior trims, flush aero headlamps, and different alloy wheels. While our vote in the 1985 COY runoffs makes it obvious that we believe the present GTI to be a solid choice for cost-conscious FTD freaks, we think the new 16V version is going to be well worth the wait.

—B.N.

TELETIRE

42-137

Send mail orders to Dept. D-9, 17622 Armstrong Av., Irvine, CA 92714. Call first for shipping charges. 38 4day Tire Stores in Calif, Ariz, Texas, Kas, Mo & Wash to service factory warranty problems.

©1985 Lansdale & Carr.