

WHITELINE

Flat out



VW Golf MkV

The MkV Golf is a great re-design and improvement from the earlier model, particularly due to the all-new rear multi link suspension, although with the wider customer demographic vehicle handling dynamics and component quality has been compromised. This is good news for an enthusiast as there is a lot of potential for improvements on top of good underpinnings.

MkV Weaknesses

- Poor roll control
- Excessive front bump steer
- Minimal alignment adjustments
- High compliance bushing, front and rear



WHITELINE SOLUTIONS

SWAY BARS

Body roll was improved by fitting a set large adjustable 24mm (solid) front and 24mm (solid) rear swaybars with settings of +23% +46% for the front and +57% +95% +150% for the rear. These settings were chosen based on extensive testing, calculations and suspension geometry simulations to deliver optimum roll control and a predominantly neutral handling bias, with the adjustments giving the driver the capability of dialling in some understeer through neutral to some oversteer.

There are also heavy-duty non-adjustable options available in 22mm front and 22mm rear designed to suit lower spec models fitted with smaller 23mm tubular (equiv solid =21.3mm) front and 20mm tubular (equiv solid =18.2mm) factory swaybars. This yields an increase of +14% for the front and +114 % for the rear.

WHITELINE SWAY BARS

- BWF19 Front 22mm fixed sway bar
- BWF19XZ Front 24mm blade adjustable sway bar
- BWR20XZ Rear 22mm fixed sway bar
- BWR20XZ Rear 24mm blade adjustable sway bar

BW20XZ PICTURED



BUMP STEER CORRECTION KIT

Next on the handling improvement priority list is to reduce front bump-steer. Original bump-steer was measured to be 8.4mm toe-out @ 40mm compression and 4mm toe-in @ 40mm droop. This is relatively large amount for a contemporary chassis, generally found to be less then 2mm on a well designed platform. The prototype kit currently in development is aimed at delivering a similar outcome by utilizing specially engineered tie-rod ends that relocate the outer steering arm pivot to a more favourable position.

WHITELINE BUMP STEER KIT KCA314 Bump steer correction kit (under development)

ALSO AVAILABLE FOR THE VW Golf Mk5 Gti
W0503 Bush kit - control arm front



Flat out

WHITELINE
Redranger Pty Ltd *Flat out*

For specialist advice in Australia call **Free call 1800 040 003**
Whiteline direct on ph: 61-2-4340-2355 Fax: 61-2-4340 2466

Web Site: <http://www.whiteline.com.au> E-mail: sales@whiteline.com.au

Snail mail: 4 Warringah Close, Somersby NSW 2250. Australia

ABN 99 124 177 297

WHITELINE

Flat out



VW Golf MkV

WALK - WHITELINE ANTI LIFT/ CASTER KIT

The high compliance bushing used throughout the car, and in particular the front lower control arm rear bush, made the car very dull and unresponsive. The front is being addressed with a WALK (Whiteline Anti-lift/Caster kit) using a specially engineered lower control arm rear polyurethane bushing designed for an extra +0.5deg with static caster increase and revised anti-lift geometry. The result is increased front grip in both longitudinal (forward) and lateral (cornering) acceleration, and improved steering feel and response.



WHITELINE ANTI LIFT/ CASTER KIT
KCA316 Anti lift/ caster kit

TRAILING ARM

For the rear trailing-arm to chassis mount, a polyurethane replacement bush kit is currently in development, which will greatly reduce the disconnection between rear suspension and the chassis without any noticeable detrimental effect to comfort.

WHITELINE TRAILING ARM/ LATERAL ARM KIT
W0504 Bush kit trailing arm - rear



RECOMMENDATIONS

Handling Pack

- BWF19XZ Front 24mm blade adjustable sway bar
- BWR20XZ Rear 24mm blade adjustable sway bar
- KCA314 Whiteline Bump Steer Correction Kit (under development)
- KCA316 Whiteline Anti Lift / Caster Kit

Works Pack

- BWF19XZ Front 24mm blade adjustable sway bar
- BWR20XZ Rear 24mm blade adjustable sway bar
- KCA314 Whiteline Bump Steer Correction Kit (under development)
- KCA316 Whiteline Anti Lift / Caster Kit
- W0504 Bush Kit – Trailing arm - rear
- W0503 Bush kit - control arm front
- KLC050 Spherical sway bar link kit



Flat out

WHITELINE
Redranger Pty Ltd *Flat out*

For specialist advice in Australia call **Free call 1800 040 003**
Whiteline direct on ph: 61-2-4340-2355 Fax: 61-2-4340 2466
Web Site: <http://www.whiteline.com.au> E-mail: sales@whiteline.com.au
Snail mail: 4 Warringah Close, Somersby NSW 2250. Australia
ABN 99 124 177 297