



Fitting Instructions

VWR StreetSport Plus Coilover Suspension

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VWR StreetSport Plus Coilover Suspension

Installation Guide

Thank you for choosing the VWR StreetSport Plus Coilover Suspension - developed exclusively by Volkswagen Racing from the race programme. This advanced suspension system will dramatically enhance the driving experience of your vehicle.

We have included instructions on fitting and maintenance over the next few pages. Please take time to read through, and ensure that your fitting agent reads these. We would suggest that you keep these notes with your car for future maintenance/owners.

Tooling required:

- ▶ Set of spring compressors
- ▶ VW upright splitting tool
- ▶ Adequate socket & ratchet set (metric)
- ▶ M14 & M6 spline socket
- ▶ Torque wrench



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Overview

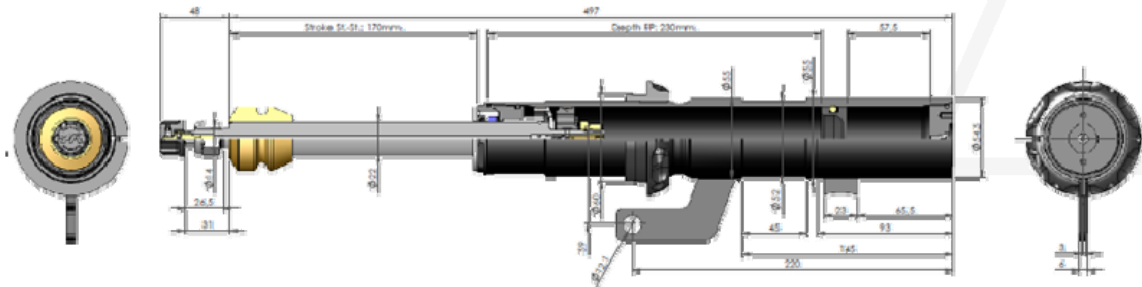
When fitting the VWR StreetSport Plus Coilover Suspension Kit, the following guidelines should be adhered to:

- ▶ Suspension kits are integral components for vehicle handling and are therefore safety critical.
- ▶ They should therefore be fitted with the utmost care and attention.
- ▶ It is recommended that they are fitted by persons possessing the necessary expertise i.e. a trained vehicle technician. This fitting guide is intended for the use of experienced technicians.
- ▶ Ensure that when removing or installing springs that a spring compressor is used to maintain safety at all times, not doing so could result in injury, incorrect installation and component damage.
- ▶ These instructions are for guideline purposes only and do not take into account any special features that may apply.
- ▶ Ensure that ride height and damper settings are suitable for the vehicle they are to be installed upon and even on each side.
- ▶ Caution: These are a monotube shock absorber which operate under very high gas pressure. These should only be serviced or opened by a VWR-Approved damper agent and under no circumstances should be opened by an untrained person.

Removal & Preparation Instructions

- ▶ The standard struts should be removed as specified by manufacturer's instructions. Manufacturer's recommended tools and a suitable spring compressor must be used in order to remove most standard suspension systems. We recommend the use of a vehicle lift when carrying out any suspension work.
- ▶ Never use impact drivers to install or remove nuts on the piston rods as permanent damage may occur. It is imperative that you do not damage the piston rod surface through use of pliers or similar, as the slightest damage will result in seal damage, and will not be covered under VWR warranty.
- ▶ Once original components are removed, ensure sure all damper mounting points are clean and rust free. Ensure all spring seating locations are clean and have high points such as dirt or debris removed.
- ▶ Before fitting the new suspension kit, we recommend setting ride height and damping settings to our recommended starting settings.

You are now ready to begin reinstalling your VWR StreetSport Suspension kit.



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- ▶ Before reinstall, remove the adjuster knob from the top of the front dampers by slackening the allen key recessed into the knurled knob using the supplied allen key. Also at this stage, remove top mount from stock damper body which then needs to be transferred on to the VWR damper. Take the chance to inspect used top mounts, and consider replacing for new mounts if they show signs of wear. Refit the adjuster knob once top mounts are fitted.
- ▶ Install the VWR Suspension Kit components on the vehicle as specified by the vehicle manufacturer. Except where stated otherwise in this document, all torque values must comply with the manufacturer recommended specifications.
- ▶ After assembly and installation is completed, the vehicle should be rolled onto level ground. Once on level ground, measure the ride heights and adjust to customer requirements. Note that it is common for new suspension systems to settle by an additional 5-10mm (0.2-0.4 inches). Once ride height is set, examine the clearance around the suspension over the full range of motion of the wheel to ensure clearance from tyres, bodywork and suspension components.
- ▶ With ride height set, and before use, ensure that the locking bolt on each spring collar is tightened to prevent movement of the collar using the supplied allen key. CAUTION - do not over tighten the locking bolt. Maximum torque is 4Nm. Damage to the spring collar will result if over tightened.
- ▶ Once the desired ride height is achieved, the suspension geometry needs to be adjusted in compliance with the manufacturer's settings. If a value cannot be reached due to the difference in ride height, a value as close as possible to the manufacturer's tolerance range should to be achieved.
- ▶ For vehicles with ESP the fitting of new suspension components may cause an engine fault code to appear. This is only temporary as the vehicle electronics adjust to the new components/height. On some models this will clear itself after driving approx 3-5 miles, or by turning the steering wheel from full left to full right. If the fault light remains or returns, please refer your vehicle to a factory trained technician who can interrogate the vehicle through the factory diagnostic port.
- ▶ Once all the above steps have been completed, reinstall the wheels insuring that all bolts have been torqued. The kit is now fully fitted, before you drive away **DOUBLE CHECK EVERYTHING!**

Set-Up Instructions

Ride Height Set-Up

Our suggested starting point for ride height adjustment is defined below. We recommend that you set this ride-height off the car before fitting, and from this initial setting, additional adjustment can be made up or down according to intended usage and customer preference.

The spring perches should only be adjusted by the L-shaped tool, with one allen key end and one round end, as supplied in the kit. The allen key end is used for loosening/tightening the spring perch bolt, and the round end of the spanner is used to adjust the height of the spring perch.

▶ Rear spring perch:	Before fitting on the vehicle, we recommend setting the rear spring perch to the centre-point of its adjustment - ie 15mm (5/8 inch) of visible thread showing on either side of the perch. Ensure both perches are set to the same height.
▶ Front spring perch:	Before fitting on the vehicle, we recommend setting the front damper spring perch to a height of 50mm (2 inch) above the bottom end of the thread. Ensure both dampers are set to the same height.

Set-Up Instructions

Damping Set Up

Our suggested starting point for damping adjustment is defined below. From this initial damping setting, additional adjustment can be made according to intended usage and customer preference.

Notes on damping adjustment:

- ▶ There are 12 points of adjustment on each damper, controlled by the easily-reached knob on top of the front damper and around the bottom of the rear damper.
- ▶ This is designed to ensure that damper adjustment can be made easily without jacking or removing any components from the car.
- ▶ Both compression and rebound are controlled via this single damper adjustment knob, making changes easy and effective.
- ▶ Turning the knob anti-clockwise (counter-clockwise) reduces the damper rate, clockwise increases it.

Recommended starting position:

▶ Rear damper:	Before fitting on the vehicle, carefully turn the adjuster knob fully anti-clockwise until it moves no further. Then, being careful to count each click, move the adjuster 4 clicks clockwise. Ensure both rear dampers are at the same setting.
▶ Front damper:	Before fitting on the vehicle, carefully turn the adjuster knob fully anti-clockwise until it moves no further. Then, being careful to count each click, move the adjuster 6 clicks clockwise. Ensure both front dampers are at the same setting.

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No cancellation, refunds, exchange, or credit on used parts, modified parts, painted parts, special order parts or custom order parts. No refund, exchange, or credit after seven days. Returns of merchandise, for any reason, are subject to a 20% handling fee.

All shipping charges are not refundable and must be prepaid. All returned items must be in as-new, resellable condition. Any item that has been installed on a vehicle will not be accepted for return under any condition. Please note that certain items such as special order items are non-returnable or refundable. All merchandise is in good condition when leaves our shipping department. If a part is lost (box broken, opened, etc) or damage via transit, you should immediately notify RacingLine).

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