

Fitting tips for shocks & coil springs

Replacing Shocks and coil springs is relatively straight forward, but best practices should be followed. KYB provides some basic tips and techniques for replacing worn shock absorbers and coil springs.

Shock Absorbers

- Don't hold the piston rod with any tools (mole grips etc), as this will damage the surface of the piston rod and may cause the oil seals to leak.
- Don't put any water, oil or other liquid inside the strut housing as this may damage the cartridge. KYB cartridges are designed to be used without liquid at both high and low temperatures.
- Don't use an impact wrench to tighten a nut onto a piston rod. This can make the torque higher than the recommended limit.
- Use any fitting parts (nuts, spacers, washers etc) supplied with the shock absorber, rather than the OE parts, as sometimes they may be a different size.
- If the shock absorber being replaced is not the original one, but an aftermarket part from another brand, any ancillary parts (dust cover, bump stop, bushing etc) can not be re-used for KYB shock absorbers. You may need to order OE parts.
- Shock absorbers should always be fitted in pairs.

- Always prime shock absorbers before fitting – fully extend and compress the unit 3 times to remove air pockets inside the shock.
- Always ensure the vehicle is back on all 4 wheels before tightening upper mountings.

Coil Springs

- Use an appropriate spring compressor tool when replacing coil springs. Using an improper compressor can be hazardous, or even fatal.
- Coil springs should always be fitted in pairs, to ensure an even ride height and to ensure the vehicle doesn't pull to one side when braking.



- Take care when compressing springs, they could cause serious injury if they come loose during installation.
- Check spring seats, and top mountings for damage before replacing broken or worn springs.
- After installation, check that the springs are seated correctly.
- Always check wheel alignment after installation.
- Worn or broken spring can damage shock absorbers and other suspension components, it is best recommended practice to replace shock absorbers at the same time as springs.
- A number of coil springs are side load springs, which are curved in shape, but when installed and compressed the spring is straight. Side load (or "banana") springs are curved and exert a side force on the shock absorber which reduces the friction between the shock absorber piston rod and the seal.



This not only improves shock absorber response, but also extends the shock absorber life. Side load springs are fitted to many modern cars.

This type of spring is often highly stressed and more difficult to compress than a standard spring. It is recommended to use a powerful spring compressor, otherwise the spring will not be compressed sufficiently to fit onto the strut.

