Welcome to Two-Way Coilover Ownership

Congratulations on the purchase of a true two-way adjustable coilover kit (Feal 442)! This kit has built-in independent height adjustability, spring pre load adjustability, independent rebound damping adjustability, and independent compression damping adjustability. Most MacPherson applications also include spherical bearing equipped camber adjustable top mounts.

The Feal 442 kits can be rebuilt, re-valved, and upgraded to a 3-way adjustable kit (Feal 443). Feal 442 kits are also compatible with Feal Adjustable Bump Stops (FABS), extended damping adjusters, shock covers, radial bearings, and most other Feal Suspension accessories. If you want to add any features, don't hesitate to ask.

The Feal Suspension 2-Way Technology Advantage

After years of experience tuning, testing, and rebuilding shocks, we developed our own product. Throughout this process we have learned how and why certain two-way shocks work well and others do not.

There are many variables that make a two-way shock work well, but let's focus on the specifics of a properly designed two-way shock that brings value over one-way shocks, and over poorly designed two-way shocks.

No Crosstalk Between Compression and Rebound Adjustment:

Feal 442 kits use a precision check valve that is engineered and made in USA. This valve prevents fluid from flowing through the rebound adjuster on the compression stroke, completely separating the compression and rebound adjusters from affecting one another. Many two-way adjustable kits on the market do not have this additional feature. Without completely separating the rebound and compression adjustment, it is very difficult to tune your car. Feal Suspension recognizes that rebound must be adjustable independent of compression, and our check valve technology is standard on all 442 and 443 kits.

Simultaneous Low and High Speed Compression Adjustability:

Feal 442 kits adjust low speed and high speed compression simultaneously with every compression adjuster click. Many two-way kits on the market only adjust high speed compression, and little to no low speed compression force is changed; however, low speed compression force has a significant effect on your car's dynamics. Adjusting only high speed compression has little effect on the way a vehicle handles and is mainly useful when tuning for sharp and or very large bumps. Feal Suspension dedicated much time and effort to create a reservoir flow piston and adjuster mechanism that allows low and high speed compression force to be adjusted simultaneously.

Large Spectrum of Adjustability:

A compression and rebound damping adjuster is only useful if it offers a large enough spectrum of adjustability. Not enough damping force change means that there will not be a noticeable difference in performance even after adjusting. Feal Suspension's compression and rebound adjustment circuits have unique jetting needle shapes, proper jet orifice sizes, and custom valved reservoir pistons to offer a very large and useful range of adjustability.

Incremental Adjustability Throughout the Range:
A large spectrum of adjustability is necessary, but is only useful if you have control of all the force in the range. Many two-way kits on the market only show a significant force change from full stiff/full slow rebound to one or two clicks out from that setting. The rest of the range is similar to the shock being at the full soft setting. Many companies have difficulty developing a two-way shock to have a large spectrum of adjustability, and it is even harder for them to make the adjustment proportional throughout the full range. Feal Suspension has developed compression and rebound adjuster circuits to offer proportional incremental adjustments through the entire range of clicks.

Ride Height and Spring Pre load Tips:

Visit www.fealsuspension.com > FAQs/Tech > Coilover Ride Height and Droop Set Up Guide
Or http://fealsuspension.com/wp-content/uploads/2019/08/441-setup-guide-REVISED.pdf