Feal coilover setup guide

Congratulations on purchasing a set of Feal coilovers!

All Feal coilovers come with:

- Independently adjustable spring preload and ride height adjustment
- Adjustable damping

Certain applications include preset spring preload and ride height!

Some kits include more adjustment features than outlined in this guide.

Please contact sales@fealsuspension.com with any questions.

1. Set ball park ride height

Set ride height using ride height adjustment,
NOT by adjusting spring preload

- Loosen ride height locking collar
- Turn shock body clockwise to lower car, counter-clockwise to raise car
- Make sure to adjust height evenly side to side
- You can measure from center of wheel hub to fender lip for reference
- Minimum thread engagement for MacPherson suspension is 50mm. Minimum engagement for multi-link suspension is 20mm

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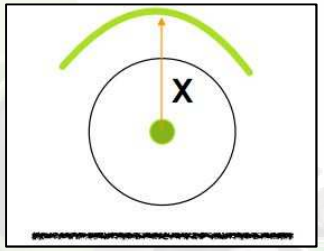
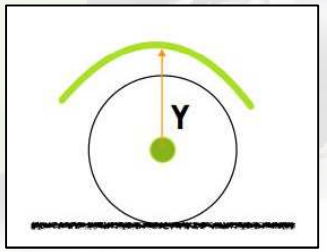
2. Set proper droop

- Suspension droop = (Distance of wheel hub center to fender lip when car is in the air “X”) - (Distance of wheel hub center to fender lip when car is on the ground “Y”)
- Droop = X – Y
- *Make sure to roll the car after placing it back on the ground before measuring Y.*





To determine what the proper droop amount is for your suspension:

- Measure shock stroke (the chrome surface on shock shaft including the bump stop).
- Divide shock stroke by motion ratio acting on your shock to determine total wheel travel.
- Multiply total wheel travel by .35 to determine what 35% of total wheel travel is.

For example:
If Shock Stroke is **115mm** and Motion Ratio is **.8**
Total wheel travel: **115mm / .8 = 143.75mm**
35% of total wheel travel : **143mm x .35 = 50.3125mm**

- Based on the above calculation, you would adjust spring preload until you have about 50mm of suspension droop.

IF YOU DO NOT WANT TO USE THIS CALCULATION,
A RULE OF THUMB IS TO SET DROOP TO 40-55MM (1.5” - 2.25”)

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3. Adjusting spring preload

- Loosen spring seat locking collar
- Increase droop by removing preload from spring
- Decrease droop by increasing preload to spring
- Do not induce “negative preload”. Make sure the spring contacts both the upper and lower spring seats under full droop.
- Snug spring seat locking collar to spring seat collar when finished

4.Setting final ride height

Set ride height using ride height adjustment,

NOT by adjusting spring preload

- Roll car back and forth to settle suspension before measuring ride height
- Subtract droop travel from total shock stroke to estimate remaining compression travel
- Adjust so that there is enough clearance between tire and chassis for full compression travel
- Lock all collars using supplied spanner wrenches and a hammer, or a dull brass punch and a hammer. Tap on the end of the wrench with a hammer until firmly snug

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5. Adjusting shock damping

- All 441 kits have the damping set to the middle adjustment out of the box (15/30)
- To stiffen ride, turn adjustment knob clockwise 5 clicks at a time
- To soften ride, turn adjustment knob counter-clockwise 5 clicks at a time
- After dialing in a ball-park ride feel, adjust the damping by 1 click at a time to fine tune

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