# Shock Tuning Quick Guide



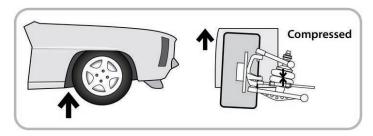
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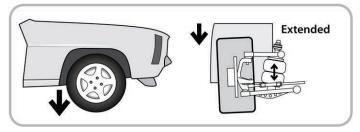
350 S. St. Charles St sales@ridetech.com Jasper, Indiana 47546

### Step 1. Understanding "compression" and "rebound".

**Compression** is when the suspension compresses. This occurs when you would hit a bump in the road. The bump forces the wheel/tire/suspension assembly to "compress" or move upwards into the car.

**Rebound** is the opposite...when the wheel/tire/ suspension assembly falls into a pothole, or simply "rebounds" from being compressed.





Step 2. How to turn the knob[s] on the shocks to control these forces.

Clockwise is firm Counterclockwise is soft



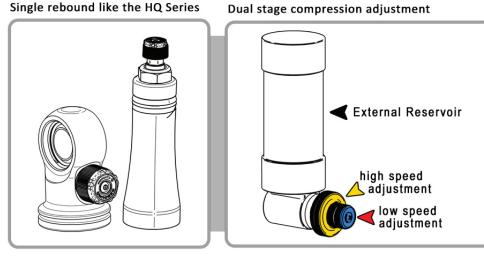
#### Step 3. Where are the knobs?

If you are working with the HQ Series shocks, you will have one rebound adjustment. If you are working with the TQ Series shocks, you will have 3 possible adjustments (dual stage compression adjustment and a single stage rebound adjustment like the HQ Series )

**HQ Series** Single rebound adjustment



TQ Series (3 possible adjustments)



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### Step 4a. How to set your initial rebound adjustments

[on the HQ Series rebound adjustable units AND the TQ Series Triple adjustable units.]

- a. Set the adjustment knob fully firm [clockwise]
- **b.** Then back off all knobs by 10 clicks. This is approximately the middle of the adjustment range. [note: You may be able to count more clicks through the adjustment range, but the last 4-5 clicks toward "soft" are so insignificant to the valving that we do not consider them effective or repeatable. That is why we use full firm as a starting point.]
- c. Drive the car.
  - **a.** If the ride quality is harsh you may consider softening the rear shocks.
  - **b.** If the front end is bouncy, you may consider stiffening the front shocks.
  - **c.** We recommend that you experiment with the entire range of shock adjustment so you are aware of the wide range of influence that these shocks have on ride quality and handling performance.

### Step 4b. How to set your initial compression adjustments

[on the TQ Series single rebound and dual compression adjustable units]

- a. Set both the high speed and low speed adjustment compression adjustments to full firm [clockwise]
- **b.** Turn the high speed compression adjustment [inner knob] counterclockwise [softer] by 10 clicks for a front shock and 15 clicks for a rear shock. [note: You may be able to count more clicks through the adjustment range, but the last 4-5 clicks toward "soft" are so insignificant to the valving that we do not consider them effective or repeatable. That is why we use full firm as a starting point.]
- **c.** Turn the high speed compression adjuster [outer ring] counterclockwise [softer] by 15 clicks for a front shock and 20 clicks for a rear shock. [yes, this very soft high speed compression adjustment is intended for best ride quality]
- d. Drive the car.
  - a. If the ride quality is harsh you may consider softening the low speed compression adjustment.
  - **b.** If the general ride quality and handling performance is good, but you still experience a harsh ride or even bottoming out on speed bumps or potholes, you may consider softening the high speed compression adjustment. The high speed compression adjustment will influence the events where shock piston velocity may exceed 20 in/sec. It will have only a minimal effect on the low speed circuits that influence general handling and ride quality.

Don't be afraid to explore the full range of shock adjustments available. This is what you've paid for! You cannot hurt anything by turning these knobs...you can always go back.

You will find these GENERAL RULES to apply:

- The rear shocks have the most influence on ride quality. [because you sit closer to the rearend than the frontend]
- The front shocks usually have a much firmer setting all around than the rear because the front shocks "see" twice the weight [due to being mounted approx. halfway between the pivot point and the load point of the control arm].
- The front shocks will generally need 3-4 clicks of adjustment change in any direction to be felt.
- The rear shocks generally need 2 clicks of adjustment change in any direction to be felt.

We have an advanced shock tuning guide on our website (ridetech.com/tech) that will discuss tuning for autocross, road course, spring rates, tire pressures, alignment, and other relevant topics to optimize handling performance.