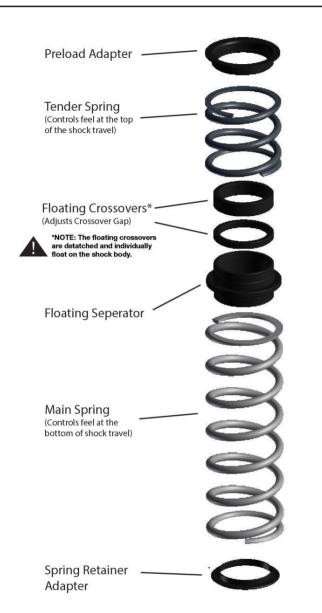


# **DUAL RATE SPRING KIT**

Install Instructions

Page # 1 of 5

Front and Center Shock Applications Sport / Pro Kit



\*\*Spring Kits come tied together in the orientation to be installed.





\*Install with minimum preload unless specified, make sure there is enough tension to safely secure the spring and mounting hardware to the shock.



\*\*Kits vary depending on the application and can be different than the diagram shown above.





Important! Read all instructions carefully and double check your wortk. Failure to follow instructions may result in damage to suspension components. After installation is complete be sure to cycle the suspension through it's motion. We are not responsible for any damage that can occur from improper installation. We are not responsible for any damage that can occur from wear to shock surfaces or related components. \*NOTE: The floating crossovers are detatched and individually float on the shock body, this is normal.

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If in doubt, just ask!

#### Installation

Visit our website to watch the DR Spring Kit Easy Installation Video



- Twisted Spring Kits are shipped how they are to be installed.
- The tender spring is always on top of the longer main spring toward the preload collar no matter the shock's orientation. All floating seperators should be over the shock body, not the shaft.
- Remove your stock retaining clip and slide the spring off of the shock.
- The plastic body protector on some shocks must be removed to install the spring hardware. It can be reinstalled so long as it does not interfere with the spring hardware's movement.
- Stickers on shocks may interfere with the movement of the spring hardware, it may be necessary to remove them.
- Install the Dual Rate/Triple Rate spring assembly as provided with minimum preload unless specified, make sure there is enough tension to safely secure the spring and mounting hardware to the shock.

#### Notes for installation of Center Shock:



- Make sure the limit strap is in factory setting.
- The center rear shock does not act as a pivoting fulcrum. We do not recommend adding preload to the center shock to reduce steering effort or to increase weight transfer
- \*\*Please note that moving spring hardware can wear on the shock body. Hygear Suspension is not responsible for any damage or wear to your shocks after installation. Wear components like spring hardware can be purchased individually if need be.\*\*

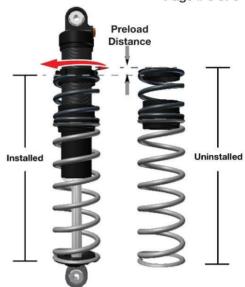


Once the shock is installed, cycle the suspension through its motion to ensure that there are no clearance issues. We are not responsible for any damage from improper installation.



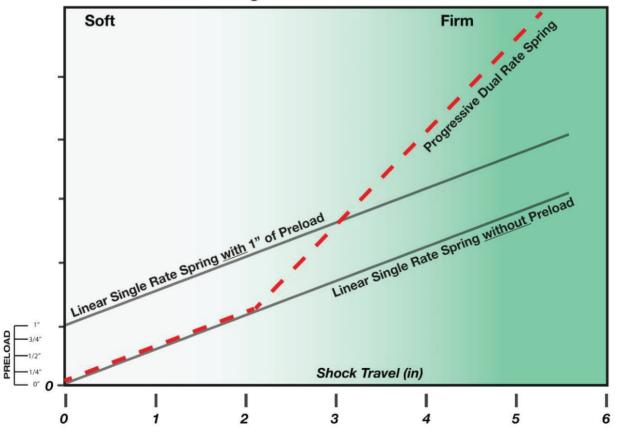
## **Preload Adjustment**

- Spring preload is used to set the vehicles ride height.
- Spring preload is the difference between the uninstalled length and the installed length of the spring.
- The Dual Rate spring kit allows you to set ride height without affecting ride quality.
- The multi-rate springs become progressively stiffer throughout the shock's motion so they can start out plush and become stiffer further into the travel, this prevents bottoming.
- Install with minimum preload unless specified, make sure there is enough tension to safely secure the spring and mounting hardware to the shock.



\*Always measure preload with vehicle off the ground (no load on the shock)

### The Dual Rate Advantage





Crossover Gap is the distance the tender spring is allowed to travel. Once the Crossover Gap is completely closed, the tender no longer has an affect on the rate and only the main spring is working.

- A smaller crossover gap will make the spring set more progressive, this gives the suspension a firm feel at the end of the shock's travel.
- A larger crossover gap will make the spring set less progressive, this gives the suspension a plush feel at the end of the shock's travel.

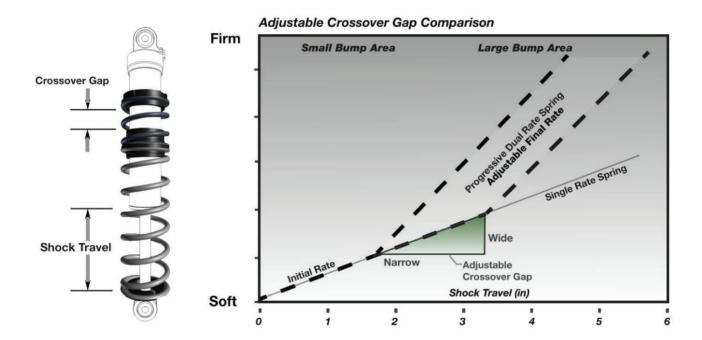
Crossover Gap can be adjusted by:



**Sport Kit:** Adding/removing crossover spacers or flipping the direction of the floating seperator.



**Pro Kit:** Adjusting threaded seperator



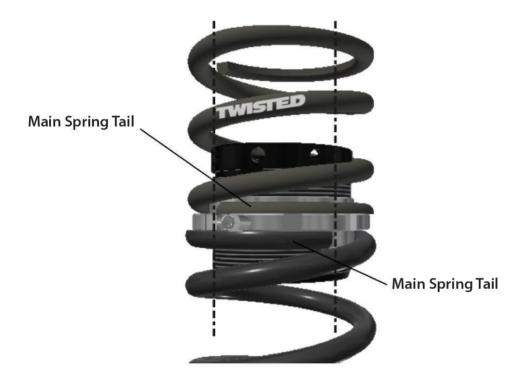
- \*Sometimes it may be necessary to change the spring rate of the main or tender spring to achieve the optimal ride quality that you desire, visit our website to see what other springs are available.
  - For stiff/softer initial rate, change the **tender** spring.
- For stiff/softer overall rate, change the **main** spring.



If in doubt, just ask!

### Helpful Tips:

- Spraying the shock body with a water repelling or dry lubricant can help reduce friction and body wear. It is also recommended to spray the shock with lubricant for off season storage.
- Overlapping the spring tails can help reduce friction and wear.



Please note that shock body wear is possible from the sliding spring hardware.\*\*
The amount of wear can vary depending on the application and riding conditions.

\*\*Sliding spring hardware is a wear component. Both the springs and spring hardware can be purchased separately. Contact parts@hygearsuspension.com to order.



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The multi spring assemblies utilize a connecting hardware that uses the shock body as a guide to keep the springs aligned during compression. Over time this sliding action can show signs of cosmetic wear. **This wear does not damage the structural integrity or functionality of a shock.** Wear to sliding surfaces can vary depending on the application of use. For example, on snowmobile applications, the front ski shock will show little to no signs of wear as opposed to a center shock that's in an environment with more grit and floating debris.

