



**ATV RACING APPLICATIONS** 

A world leader in suspension technology, Custom Axis Racing Shocks has been providing custom built, high performance, shock absorbers to professional racers, serious riders, and general enthusiasts for over 15 years.

We are committed to providing you with the best-quality, highest performing shock absorber available. We utilize our top professional racers to test our shocks in the harshest riding conditions and value their feedback to continuously improve our product line. When you choose Custom Axis, you know beyond a doubt that you are picking a product that has been 100% custom-built according to your vehicle and rider specifications. Nothing is off the shelf — your shock is hand-picked, assembled, and dyno tested at the time of your order. Most of our products can be customized to meet any dimension, valving, spring, or adjustability need that you have.

### **FRONT ATV SHOCKS**

Our full line of front shocks is designed specifically for the demands of ATV racing. Shocks are available with air springs or traditional coil springs, a remote or piggyback reservoir, and with a variety of damping adjustment options.



# **PRO-AIR SERIES**

Available with double (1 compression, 1 rebound) or triple (2 compression, 1 rebound) adjustable damping. Auxiliary air chambers allows independent tuning of spring rate progression and ride height. Hard coated seal sliding surfaces and carbon fiber roost guard provide added durability. Benefits of the Pro Air shock include reduced suspension weight, a progressive air spring effect not achievable with standard coil springs, and an infinite adjustment of spring rate and ride height. Pro Air shocks are available in eye-to-eye lengths from 16.75"-20.5".

# **COIL SPRING SERIES**

Available with non, single (1 compression or 1 rebound), double (1 compression, 1 rebound) or triple (2 compression, 1 rebound) adjustable damping. Easy to grab compression and rebound knobs allow for quick adjustments. Modular design permits retrofitting of existing shocks. Benefits of the Coil Spring Shock include reduced suspension weight, easy installation and removal, and extensive adjustability for any conditions. Available with a piggyback or remote style reservoir.





### **NON-ADJUST PIGGYBACK SERIES**

For the racer who competes on tracks where conditions do not change greatly from one event to the next, or the rider who does not feel comfortable making the right adjustments, properly setup non-adjustable shocks can be a very effective solution. Custom Axis Non-Adjustable front shocks use the same components and unsurpassed build quality as the rest of the Custom Axis line. The only difference is that the adjusters, which are some of the most expensive and complicated shock components, have been omitted for simplicity and reduced cost. These shocks still have the spring preload adjustment and interchangeable crossovers found on our high-end models. They are built for simplicity, ease of use and solid reliability, and are completely rebuildable and revalveable.

### **REAR ATV SHOCKS**

Remote rear shocks are available with single or dual rate springs, and the same range of damping adjustment options which are offered on the coil spring fronts.



### **PLUSH RIDE SYSTEM**

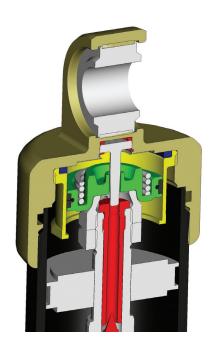
The Custom Axis Plush Ride System (PRS) is a patented, anti-bottoming system available as an upgrade on our Pro Air, Piggyback Coil Spring, and Remote Rear Coil Spring shocks. PRS provides progressively higher damping force as the suspension nears bottom, and is controlled more effectively and consistently than typical bump rubbers. By separating full travel anti-bottoming resistance from normal ride situations, PRS riders enjoy an extremely plush, compliant suspension.

- Faster Jump Landing Recovery
  - · Lower Ride Height ·
- · Added Stability throughout Cornering ·
  - Improved Traction
- · Drastically Reduced Rider Fatigue ·

Multi-spring or air spring suspensions typically require major increases to their main spring rate to resist bottoming, which negatively impacts ride characteristics. With the Plush Ride System, ATV riders can enjoy an optimum, no compromise, setup with a "best of both worlds" feel.



The remote reservoir style rear shock gives the most packaging flexibility of a high-performance shock absorber. It accomplishes this by allowing the reservoir to be mounted remotely to any desired surface. This provides enhancements in accessibility to the adjusters, especially in tight areas that are difficult to reach by hand, as in a rear swing arm installation. Locating the reservoir away from the engine and exhaust can also minimize the effects of heat on damping performance.



## **HOLESHOT SYSTEM**

Available with most front rebound adjustable shocks, the Hole Shot System (HSS) is a pneumatic system designed to maintain a constant shock force off the line to counteract weight transfer on launch, providing exceptional traction to the first corner. The Custom Axis HSS is superior to competitive systems, featuring lighter weight, cleaner installation, and more predictable and consistent operation. While other systems may not release consistently, or may release one side while the other remains engaged, this type of malfunction is not possible with the Custom Axis HSS. It provides the competitive advantage of not only holding the front down, but increasing low-speed compression damping, which translates to the rider as a firmer, more planted cornering feel through the first few turns of the racecourse.

In use, the HSS is pressurized to lock out the rebound adjustment. After the first straight away, the rider pushes a button to deactivate and return to normal suspension characteristics. There is no need to let go of the grip, only a slight sideways movement is needed to disengage the system. Rider friendly and simple to use, HSS is guaranteed to improve your quad's jump off the line.



### SIDE X SIDE SHOCKS

With the recent increased interest in UTV racing, Custom Axis has developed competition shock packages for side-by-side vehicles. Our shocks have been to the top of the podium in GNCC UTV racing, and we continue to test and refine spring and damping specs by working with top teams in the sport. Shocks are available in several different spring and adjustment configurations, and with remote or piggyback reservoirs, for all popular sport UTVs.

The requirements of racing UTV suspension are different than an ATV, and need to be setup accordingly. With a long and successful involvement in F-1, Indycar, NASCAR, Dirttrack, and virtually every other form of auto racing, Penske Racing Shocks / Custom Axis Racing Shocks is quite familiar with the chassis dynamics and tuning required to run up front. If you race UTVs, you know about the investment required and the difference great suspension can make to your results. Once you've spent the money to build a competitive ride and haul it to the track, it really doesn't make sense to run anything but the very best shocks available. Give us a call when you're ready for them.



# A STANDARD OF THE PARTY OF THE

### **SNOWMOBILE SHOCKS**

Custom Axis also offers custom-made snowmobile shocks. All shocks are built to order according to customer specifications and sold exclusively through Hygear Suspension.



8 Cayuga Vista Drive Lansing, NY 14850 (607) 533-7434

### **SERVICE**

Custom Axis shocks are built in the USA using the best materials available, and have a reputation for great durability. However, like any mechanical device which is subjected to the extreme conditions of racing, some periodic maintenance is required to keep them operating at their best. We are fully equipped to handle all service and repair work on Custom Axis shocks, and we can work with the rider to make any desired setup changes. For more information about service, go to www.customaxisshocks.com

### RACE SUPPORT

We understand that even the best suspension sometimes needs expert tuning and adjustment. Custom Axis is proud to support our customers by providing a fully stocked race support rig and technical crew at major national ATV and Motorcycle events such as the AMA ATV Motocross and GNCC Racing Series. We are available to help with tuning and set-up so that your suspension performs at its fullest. You can also have your shocks serviced, revalved, and repaired right at the track — all at a very low cost. Please contact us to find out more about our trackside support program or to see if we plan to attend a particular event.

### **Custom Axis Racing Shocks**

150 Franklin Street Reading, PA 19602 United States (610) 375-6180 (610) 375-6190 (fax)

Website: www.customaxisshocks.com E-mail: info@customaxisshocks.com

