MOTOWOZ SHOCKS
INTRODUCTION & REFERENCE GUIDE

Please email us at info@motowoz.com
or call us at 763-390-9549
if you have any questions

PROUDLY MADE IN THE USA

ITEMS THAT SHOULD BE INCLUDED IN YOUR BOX

*Shocks
*1 Hex Wrench
*1 Spanner Wrench
*1 Reference Guide
*2 Motowoz Stickers
*Rear Shock Mounting Instructions (If applicable)
*Rear Mounting Hardware (If applicable)

If any of these items are missing please contact us at 763-390-9549

R-Front_____L-Front_____Rear_____Rear

_____(if applicable)

Service Logbook

DATE	SERVICE OPERATIONS

MAINTENANCE CHECK LIST

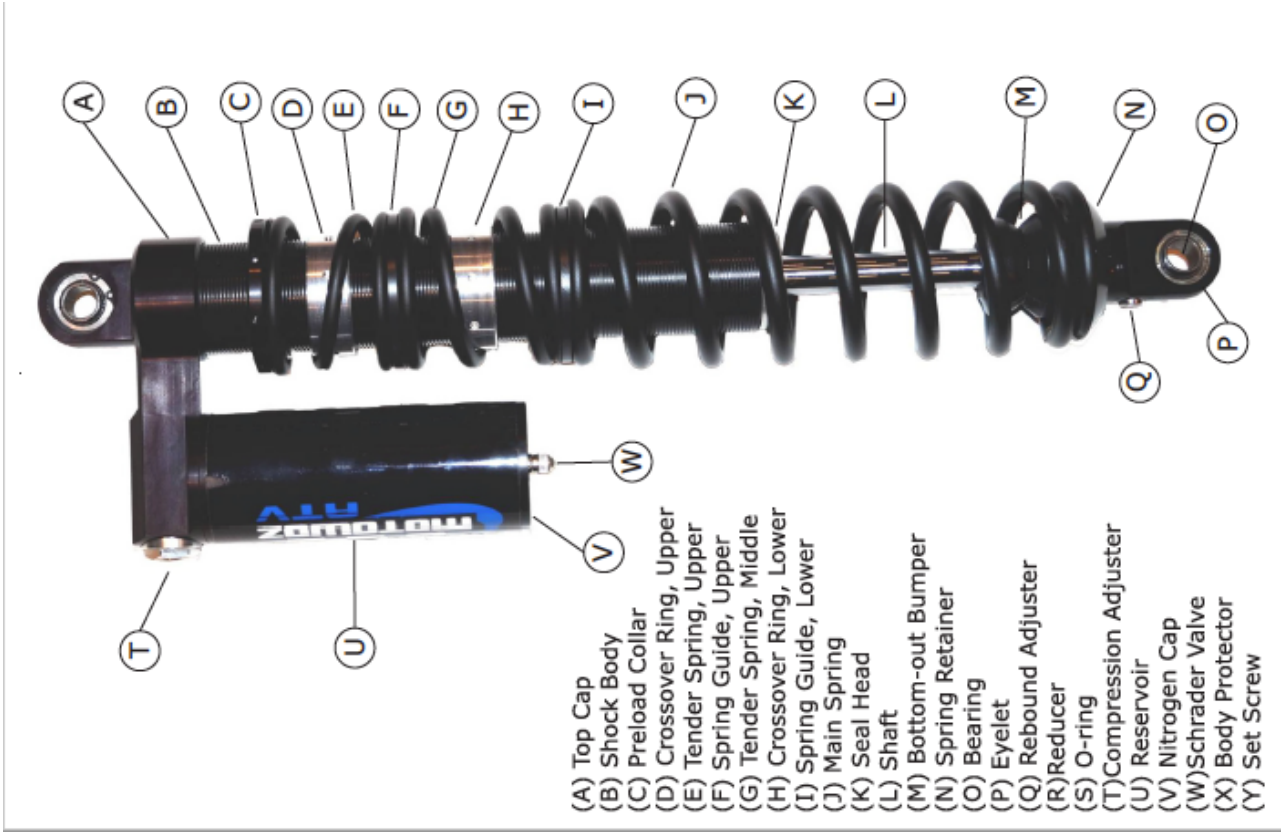
Operation	Interval
Clean shock exterior	Each Ride
Check hoses for leaks (non-piggy back)	Each Ride
Check seal head for leaks	Each Ride
Check mounting hardware	Each Ride
Check damper settings, sag and preload	Regularly
Check for shaft damage	Each Ride
Check spherical bearings	Each Ride
Check crossover/preload setscrews	Each Ride
Full shock service	6 months/1 year depending on use.

IMPORTANT

Please read this manual in its entirety to familiarize yourself with your new shocks

This manual is your basic guide to adjust and tune your shock absorbers to get the maximum performance out of your purchase. Carefully read this manual before and after installing your new shock absorbers. Motowoz shocks are intended to improve control of your vehicle in the worst of conditions when properly adjusted. Without proper adjustment, these shock absorbers could render the vehicle harder to control and/or to steer. It is imperative you read this manual carefully and make sure you understand the adjustment procedures well before operating your vehicle.

Your shocks are serial numbered, these numbers can be found under the bump stops



SERVICING YOUR SHOCKS

Motowoz shocks are built with the finest materials, seals and lubricants, so have your shocks serviced at regular intervals to keep them working at their best. Every time a Motowoz shock is brought back in for service, the same care that went into building it originally, goes into the service of your shock. When using Motowoz factory service you are notified of all applicable updates available for your shocks.

It is HIGHLY recommended that you have Motowoz service your shocks if your are unable to do so PLEASE be certain that you are using a certified Motowoz service center.

Things to ask yourself when having someone other than an approved Motowoz service center rebuild your shocks.

- -Are they familiar with Motowoz shocks and how to service them?
- -Are they familiar with updates for your shocks, or how to perform them?
- -Do they have genuine Motowoz seals on the shelf?
- -Will they use lubricants approved by Motowoz to keep the damping characteristics and performance the same as factory?

BEFORE having another business open up your shocks, please ask if they are an approved service center. Failure to do so can have major consequences and Motowoz will not be held responsible for injury or product failure due to improper servicing. If you have service questions contact use at, info@motowoz.com

GENERAL SHOCK CARE

Caring for your shocks is an investment that will pay for itself. Its an important part of your vehicle and should be treated as such.

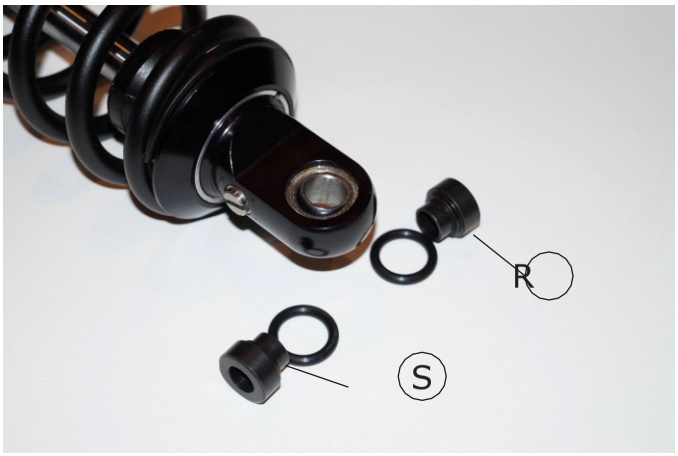
We suggest the use of a non-caustic cleaner such as simple green, or a different cleaner of your choice. When you need to clean a large amount of material off of your shocks you can use a very low psi pressure washer on the shock taking care not to spray where the seal head (K*) and shaft (L*) meet. Once the shock is clean we recommend using Bel Ray silicone detailer on the shock itself. This will keep the spring guides lubricated slightly and your shocks looking great and make them easier to clean next time.

Note:
If you ride a lot in poor conditions the optional shock covers are a worth while investment and they can be found on our website at,
http://motowoz.com

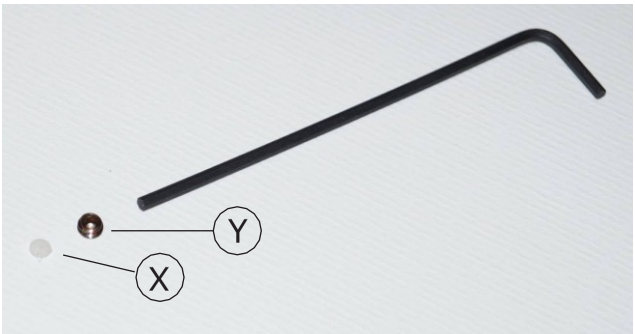
*please refer to shock diagram

Soft Setup

Hard Setup



Reducers are application specific



Supplied hex key, set screw and body protector

PRELOAD EXPLAINED

The preload adjustment collar (C*) is located below the top cap (A*) of the shock. This collar is used to increase or decrease the initial tension on the spring and therefore, the ride-height of the vehicle. The ride height of the vehicle is a matter of rider preference while trying to achieve certain results.

Increasing the preload will raise the vehicle and increase ride-height. This will result in a more responsive feel. Reducing the preload will lower the vehicle and decrease ride- height. This will result in a softer feel. The preload should always be enough to keep the spring firmly in place or damage can and will occur.

*please refer to shock diagram

COMPRESSION & REBOUND

The compression adjuster (T*) controls the amount of compression damping. Turning the adjuster clockwise will increase the damping rate, which will make the shock feel more “Stiff” . Turning the adjuster counter clockwise will reduce compression damping.

The rebound adjuster (Q*) controls the speed at which the shock travels back to its fully extended position after being compressed. Turning the adjuster clockwise will slow the rate at which the shock returns to neutral. Inversely, adjusting counter clockwise will increase the rate at which the shock returns to neutral.

Note:
The ¾” hex head around the compression adjuster is NOT a high speed adjuster. If you find yourself reaching into the tool box for any tool other than a flat blade screw driver, you are NOT “adjusting” the compression or rebound. You or the shock could be seriously injured if you inadvertently disassemble the shock under pressure.

*please refer to shock diagram

REAR SHOCK ADJUSTABLE SPRING PROGRESSION

On the Motowoz rear shock there is only one crossover ring. By moving the crossover ring up the shock body you will effectively soften the setup, just like the fronts. By moving the crossover ring down the body you will stiffen the setup. You can adjust the rear shock crossover ring in the same manner as the front. Loosen the set screw (Y*) taking care not to lose the body protector (X*) under it and spinning the crossover ring into position.

Note:
It is imperative that the upper spring (E*) locks out before the spring below it. Between each spring is a spring guide (F*) and (I*). As the shock moves through its travel you will see the crossover rings contact a spring guide. This is the lockout condition. It is important that the upper crossover ring (D*) contacts the spring guide (F*) before the middle crossover ring (H*) contacts spring guide (I*).

All crossover rings are held in place by a set screw (Y*) that must be loosened to move the crossover rings up or down the shock body. It is important to remember that if you do remove any setscrew (Y*) from the shock make sure that the body protector (X*) is in place underneath the setscrew or you may damage the shock body on reinstallation of the set screw.

*please refer to shock diagram

PRELOAD ADJUSTMENT

To adjust the shocks preload, start by using the supplied (5/64) hex key to loosen the set screw (Y*) in the preload collar (C*). Then using the correct end of the supplied spanner wrench, or by hand depending on difficulty; adjust the collar.

It's common to set baseline preload between 1-3 turns from initial spring contact. To add preload move the collar (C*) down the shock body (B*) adding tension to the spring, from there you can tune it to your preference.

Note:
It is important to recognize that if the preload collar is backed off too far, or is set away from the spring face, the spring will deflect and damage the shock body. When you start adding preload to your setup you must reposition the crossover rings down the shock body by an equal number of turns.

*please refer to shock diagram

ADJUSTABLE SPRING PROGRESSION

Motowoz is the only shock company using an ASP system or adjustable spring progression. The ASP system uses crossover rings to control the duration that each spring is compressed throughout the shocks travel. Here's a break down of how a multi-spring system works and why it can help you fine tune your set up to fit your needs.

Lets look at just the upper crossover ring (D*) and upper tender spring (E*) for a second. This spring controls very small bumps and to some degree body roll, depending on the setup. By adjusting the top crossover ring up the shock body you effectively lengthened the springs use through the shocks travel giving you a "softer" ride. Inversely, by adjusting the crossover ring down the shock body you reduce the travel of the top spring before getting into the travel of the next spring. This will give you a "stiffer" feel.

Note:
If you ride severe chatter type bumps it may be worth it to incorporate more of the top tender spring in your setup to "soak up" those small bumps.

*please refer to shock diagram

ASP - TENDER SPRING

The middle tender spring (G*), in a triple rate setup is for large bumps and small jumps where you are using more of the shocks travel than can be controlled by the upper tender spring. Just like in the upper tender spring, adjusting the crossover ring (H*) for the middle tender spring will control the duration of travel for the middle spring. Moving the crossover ring up the body will "soften" the setup and moving it down the body will "stiffen" the setup.

The main spring (I*) is for big jumps and big hits. By adjusting the duration of travel for your previous springs you can decide how quickly you get into the main spring. Just like the top tender spring, the quicker you lock out the middle tender spring the sooner you will move into the main spring and the "stiffer" your setup will be.

To help visualize this process we ask that with the shocks on your vehicle, move the crossover rings up the shock body and push on the suspension and then move them down and push again. You will see that the difference is very noticeable. With the Motowoz ASP system the setup possibilities are endless and it gives YOU the ability to get your setup exactly where you want it.

*please refer to shock diagram