ARRAY OF KONI STREET SHOCK ABSORBERS

KONI offers a wide range of adjustable performance shocks and struts using the highest quality materials and designs to give your street car or truck optimized handling, ride, and control. Whether using a mono-tube or twin tube design, hydraulic or gas charged, internal or external adjustments, single or double adjustable, ride height adjustable or fixed, KONI brings out the best in every car.

ARRAY OF KONI RACING SHOCK ABSORBERS

For over 50 years, KONI has been the world leader in adjustable racing shock technology. From the world's greatest circuits of Formula 1 and sports car racing to the weekend warriors on the local bullring tracks, KONI single, double, and quadruple adjustable dampers lead the way with performance, control, and consistency.

SUSPENSION KITS

A. The KONI RSK kit includes four specially matched performance dampers and four lowering springs to provide improved ride and handling at a great price while offering tuning adjustments for height and damping.

B. The KONI Threaded Suspension kits have four special externally adjustable, coil-over (where applicable) dampers and four lowering springs to give a large range of lowering and damping adjustability to improve handling and ride on the street.

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For Applications
Use KONI Catalog 103609

For Drag Racing and Road Racing Applications
Use KONI Catalog 103610

For Oval Track Applications
Use KONI Catalog 103223

SPECIAL ORDER SHOCKS

Certain dampers are listed as **special order** in the application guide.
In most instances these dampers are available within 60 days,
or two weeks if you request to pay air freight charges;
however in some cases there are minimum order quantities.
To determine availability please call 859-586-4100.

Identifying KONI Part Numbers. Refer to the chart below to determine an at-a-glance overview of the KONI part number prefixes and what feature each one indicates.

	25	26	30	80	82	86	87	88	90	2812	3012	3013	8010	8040	8041	8042	8210	8212	8216	8240	8241	8242	8610	8640	8641	8740	8741	8742
CONSTRUCTION TYPE																												
Twin Tube Low Pressure Gas														X	X	X				X	X	X		X	X	X	X	X
Twin Tube Hydraulic				X	X	X	X	X	X				X				X	X	X				X					
Mono-Tube High Pressure Gas	X	X	X							X	X	X																
ADJUSTMENT FEATURE																												
Externally Adjustable	-											X	X	X	X		X		X		X		X		X		X	
Standard Adjustable	-	X	X	X	X	X	X	X	X											X				X		X		
Double Adjustable										X	X					X		X				X						X
BODY STYLE																												
McPherson Strut Cartridge						X																	X	X	X			
McPherson Strut Complete Housing							X																			X	X	X
Standard Shock Absorber	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						

Typically, having all the correct information makes all the difference when it comes to a choice of shock absorbers. Common questions asked of the KONI Tech Line are as follows:

Q: What is the difference between KONI Special (red) and KONI Sport (yellow)?

A: The KONI Special (red) has been engineered to maximize the ride comfort with good handling performance for each vehicle application. The KONI Sport (yellow) typically starts at a higher initial valving baseline to give a sportier feel and work on vehicles with higher performance parts. In some instances, KONI will only offer a Special or Sport valving and not both. Some modern cars come from the factory with higher tech suspension systems and wheel/tire packages so they would move directly into the Sport range, however they are still valved to give a comfortable ride with very good handling capabilities.

Q: How much stiffer are KONIs than factory shocks?

A: This is a difficult question to answer because every KONI application is developed for that specific vehicle to get the best ride and handling characteristics. In general, most factory shocks are under damped for optimized handling so KONI engineers select firmer valvings. Unfortunately factory shocks are generally chosen for financial reasons rather than performance so lower technology, cheaper shocks are the standard. In some instances, a factory shock may have good characteristics in some parts of the working range but need some help in other parts and there are even a few instances where the KONI engineers found better handling by softening the factory units.

Q: What is the best adjustment setting for my shocks?

A: There is no single best adjustment setting for your KONIs because every driver and vehicle has different preferences for comfort, performance, performance modifications and roads to drive on. For most vehicles, we suggest that new KONIs be installed in the full soft position (the standard setting right out of the box) to take advantage of the balance of ride comfort and handling designed by the KONI ride development engineers. If the car has performance upgrades (springs, wheel/tire packages, etc.) or the driver wants the car a bit more aggressive, most people find the optimum setting in the 1/2 to one full turn from full soft range. Over the extended life of the damper or if the driver wants a specific firm handling characteristic, the dampers can be adjusted up higher. Very rarely will a KONI ever need to be adjusted to the full firm setting.

Q: What are the best springs to match with my KONIs?

A: One of the great advantages of KONI adjustable shocks is that there is no specific spring for matching optimum performance. Instead you can adjust your KONIs to match your springs. Most performance springs have a higher spring rate than the vehicle's original springs. Since the shock controls the motion of the spring, increased spring rates require more rebound damping for control and that is one of the reasons why KONIs are rebound adjustable (and some are double adjustable). Using higher rate springs with OE or soft shocks will very quickly overcome and wear out the shocks. The KONI adjustment range is typically about 100% (twice as firm at the full firm setting as at the full soft setting) to allow for the proper damping of OE springs and high rate performance springs.

Q: How far can I safely lower my car?

A: KONIs are designed to fit standard height cars and can work with lowered cars as long as they don't bottom out internally and become damaged. Unlike some shocks, KONIs are not position sensitive so they will work properly anywhere in their stroke range providing they are not bottoming or topping out. Different vehicle suspension designs have different stroke travels but a good rule of thumb is that most vehicles can be lowered acceptably about 1 1/2 inches, beyond that the possibility of bottoming increases rapidly although some longer stroke cars can go lower. Most vehicles are equipped with bump stops to keep the shocks and springs from bottoming out. When lowering a vehicle be sure to reuse your bump stops because they are cheap insurance to avoid bottoming damage. Remember also that severely lowered vehicles typically have negative effects on suspension geometry, ride quality and handling, and tire and suspension part wear.

Q: KONI makes some shocks that are not gas shocks. Why?

A: There are basically three types of shock absorber designs: mono-tube high pressure gas, twin-tube low pressure gas, and twin-tube hydraulic (non-gas). Each of these designs has certain ride and performance characteristics that can enhance the performance of a vehicle and KONI is the only company that makes all three designs. KONI ride development engineers evaluate each new vehicle and can decide which shock design would best apply to that vehicle. Some cars respond best to mono-tubes, some like gas pressurized and others don't. Most shock companies utilize only one or two of these styles because it is less expensive for manufacturing but are therefore, limited in design capability and function.

Q: How do I adjust my KONI dampers?

A: In order to determine the adjustment method for you must first determine the damper series. The series is the first 2 or 4 digits before the space in the part number. Based on this number refer to the adjustment section of the KONI Technical Manual or on the web site www.koni-na.com.

Q: I want to lower my car with a coil-over sleeve kit. How do I setup my vehicle with KONIs and coil-over sleeves?

A: There are many coil-over sleeve systems on the market but the key is to get ones that will fit the KONI damper properly. Most of these are built to fit over a large number of aftermarket shock absorber brands but this means many will not really fit well. KONI is unique in that some applications feature an adjustable spring seat mounted on a circlip on the shock body. This circlip design is extremely strong when it is loaded properly and the circlip is captured so that it cannot be forced open. However if the mounting on the circlip is unevenly loaded or not properly captured allowing the circlip to increase in diameter from load or impact, you have a potentially dangerous situation where damage could occur. With proper installation and loading, the circlip system allows for great strength and ride height adjustability at the same time. Additionally, when selecting and installing your coil-over system, care should be taken to avoid allowing the springs to coil bind (compressing the spring down to a solid state) during usage as this can risk bottoming and damage. A proper length bump rubber should be used to keep the spring from coil binding and the shocks from bottoming internally. You should contact the dealer or the manufacture of the coil-over system and get any necessary adapter rings necessary to mount the sleeve system to the KONI.

Q: Why are some KONI shocks not externally adjustable?

A: Whenever possible, we try to have the application be externally adjustable so that they can be easily adjusted on the car. In some cases this is not possible due to design constraints imposed by the vehicle. Some cars have no way to physically access an adjuster on the car or have mounts that prohibit an adjustable shock. In these cases, the shocks are still adjustable but must be removed from the car to do so.

Q: What's the difference between the standard KONI shocks and those in the Threaded Suspension Kits and the RSK kits?

A: The dampers in Threaded Suspension Kits are based on KONI Sport shocks but have been made specifically for the elements of the kits. Depending on the applications, some have different maximum or minimum lengths and valvings to specifically match the springs and lowering goals of the kits. Most are plated and threaded bodies and some are tight steel sleeves on yellow painted shock bodies.

The dampers in the RSK kits are based on the red painted KONI Special shocks but they have been specifically valved to work with the kit springs. Additionally they have multiple spring perch grooves in them so the height of the car can be adjusted at the time of installation.

Q: What is the KONI warranty? How do I go about getting replacements?

A: The KONI warranty is a lifetime warranty to the original purchaser against defects in materials and workmanship and against wear out for as long as you own that car registered for street use. The warranty does not cover damage to the parts caused by misuse, misapplication, installation, motorsports, etc. If you determine you have a defective damper you can either contact the company which you purchased the unit(s) from or contact KONI North America directly at warranty@koni-na.com or 859-586-4100. To process your warranty, we will require a copy of the purchase receipt and a vehicle registration. We will generate a return goods authorization (RGA) and can replace the dampers in advance at your discretion. For more specific information about the warranty see inside back cover.

Q: I own a vehicle with sealed struts, yet you offer an insert for it. How is this possible?

A: KONI has designed an ingenious method of installing inserts into sealed housings thus allowing the use of performance dampers when they were previously unavailable. It has become common practice for auto manufacturers all over the world to save money by using factory sealed strut housings rather than the traditional threaded closed housings when they build new cars. Whenever possible, KONI will make a complete strut housing damper but sometimes the necessary spring perches and mounting brackets are unavailable or financially unfeasible to produce. By designing the KONI Cut-A-Strut insert system, now many vehicles with factory sealed struts have performance damper options. The installation requires only basic tools which most individuals already own. These tools include a cutting device such as a hacksaw, grinder or pipe cutter to open the strut housing as well as an electric drill. Generally it takes an average of 15-20 minutes additional labor per corner over a traditional strut insert installation. KONI has been using this method very successfully for many years on numerous applications from Porsche to Ford, Honda to Hyundai. If you have any questions, please feel free to contact KONI, your dealer, or see instructions on-line at www.koni-na.com.

Q: How can I get my business listed as a KONI Authorized dealer on the Distributor Search on the www.koni-na.com website?

A: Contact your KONI wholesaler. They will determine what opportunities are available to you.

KONI TECH LINE

PHONE: 859-586-4100
info@koni-na.com
Technical Questions can be answered 8-5 EST M-F.

CHOOSING THE OPTIMUM DAMPER FOR YOUR VEHICLE

All Hydraulic shock absorbers work by the principle of converting kinetic energy (movement) into thermal energy (heat). For that purpose, fluid in the shock absorber is forced to flow through restricted outlets and valve systems, thus generating hydraulic resistance.

A telescopic shock absorber (damper) can be compressed and extended; the so called bump stroke and rebound stroke.

Telescopic shock absorbers can be subdivided into:

1. Twin-tube dampers, available in hydraulic and gas-hydraulic configuration.
2. Mono-tube dampers, also called high pressure gas shocks.

TWIN-TUBE SHOCK ABSORBERS (fig. A and B)*

The main components are:

- outer tube, also called reservoir tube (6)*
- inner tube, also called cylinder (5)*
- piston (2)* connected to a piston rod (1)*
- bottom valve, also called footvalve (7)*
- piston rod guide (3)*

How Does a Twin-Tube Shock Absorber Work?

Bump stroke.
When the piston rod is pushed in, oil flows without resistance from below the piston through the outlets A*, B*, C*, and D* and the non-return valve (19)* to the area above the piston. Simultaneously, a quantity of oil is displaced by the volume of the rod entering the cylinder. This volume of oil is forced to flow through the bottom valve into the reservoir tube filled with air (1 bar) or nitrogen gas (4-8 bar). The resistance, encountered by the oil on passing through the footvalve, generates the bump damping.

Rebound stroke.
When the piston rod is pulled out, the oil above the piston is pressurized and forced to flow through the piston. The resistance, encountered by the oil on passing through the piston, generates the rebound damping. Simultaneously, some oil flows back, without resistance, from the reservoir tube (6)* through the footvalve to the lower part of the cylinder to compensate for the volume of the piston rod emerging from the cylinder.

MONO-TUBE SHOCK ABSORBER (fig. C)*

The main components are:

- (pressure) cylinder, also called housing
- piston (2)* connected to a piston rod (1)*
- floating piston, also called separating piston (15)*
- piston guide (3)*

How Does a Mono-Tube Shock Absorber Work?

Bump stroke.
Unlike the twin-tube damper, the mono-tube shock has no reservoir tube. There is still a need to store the oil that is displaced by the rod when entering the cylinder. This is achieved by making the oil capacity of the cylinder adaptable. Therefore the cylinder is not completely filled with oil; the lower part contains (nitrogen) gas under 20–30 bar. Gas and oil are separated by the floating piston (15)*.

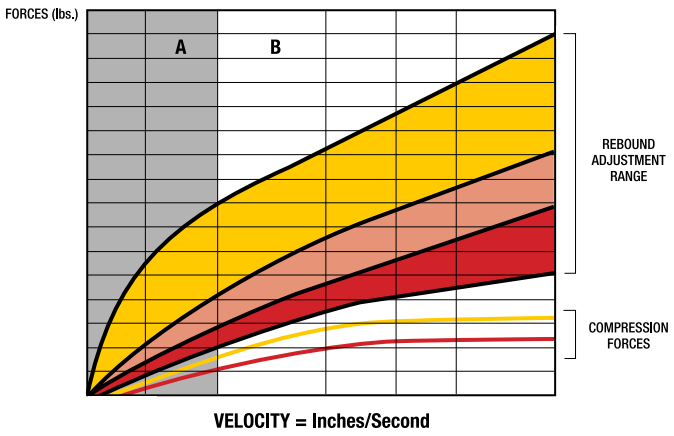
When the piston rod is pushed in, the floating piston is also forced down by the displacement of the piston rod, thus slightly increasing pressure in both gas and oil section. Also, the oil below the piston is forced to flow through the piston. The resistance encountered in this manner generates the bump damping.

Rebound stroke.
When the piston rod is pulled out, the oil between piston and guide is forced to flow through the piston. The resistance encountered in this manner generates the rebound damping. At the same time, part of the piston rod will emerge from th cylinder and the free (floating) piston will move upwards.

COMPARING KONI SPECIAL vs KONI SPORT

The characteristics of shock absorbers hardly ever get the attention they deserve, despite the damper being responsible for comfort, roadholding, stability and safety.

Below is a force velocity graph of a KONI SPECIAL and a KONI SPORT shock, both designed for the same vehicle. The graph displays the adjustment ranges for both shocks. The pink area shows the adjustment range where both shocks are equal in value. The red area indicates that portion unique to the KONI Special, while the yellow area is specific to the Sport shock only. When a car accelerates, brakes or rolls, typical damper speeds are in the (A) area. Damper speeds caused by road surface irregularities (bumps, railroad tracks, etc.) are in the (B) area.



KONI Special (red or black). The KONI **Special** dampers are designed to offer the best compromise between road handling and comfort. If only a **Special** damper is listed, its adjustment forces are designed for all driving requirements.

KONI Sport (yellow). The KONI **Sport** dampers are designed for aggressive driving or cars with suspension upgrades while continuing to offer comfort. If a KONI **Sport** is listed as an alternative to the KONI **Special**, choose **Sport** for aggressive handling characteristics.

KONI Sport (yellow) shocks are identified by the Sport suffix (example, 8040-1026 Sport). KONI Special (red or black) shocks are listed without the Sport suffix (example, 8040-1026).

*PLEASE REFER TO DIAGRAMS ON PAGE 5

WHY KONI?

A KONI is not your average shock absorber. They feature a number of standards that make them unique:

ADJUSTABLE: to set them to your personal preference and to compensate for wear.

TAILORMADE: not a copy of the original, but designed for a specific car or even conditions.

IMPROVEMENT: individually tested until the optimum in handling and comfort is reached.

SAFETY: the handling of your car is a major issue for your own safety.

INVOLVEMENT: KONI test drivers are dedicated car enthusiasts themselves.

BUILT FOR A LIFETIME: a set of KONI shock absorbers will usually outlive your car.

KONI TECHNOLOGY

KONI experts recognize that every vehicle has unique damping needs. KONI manufactures three shock absorber technologies in order to choose the perfect damping solution. Every KONI is adjustable for ultimate performance benefits.

KONI Shock Absorber Components:

1 Piston rod
2 Piston
3 Piston rod guide
4 Piston rod seal
5 Inner Cylinder
6 Reservoir tube
7 Foot valve
8 Bypass valve
9 Bypass spring
10 Adjusting nut
11 Adjusting knob
12 Adjusting detent
13 Compression valve assembly
14 Rebound valve assembly
15 Floating piston
16 Dust cover
17 Adjusting rod
18 Dust cap
19 Non return valve
20 Non return valve
21 Valves

A, B, C, D, E, F, G, H, J, K and L
Various orifices

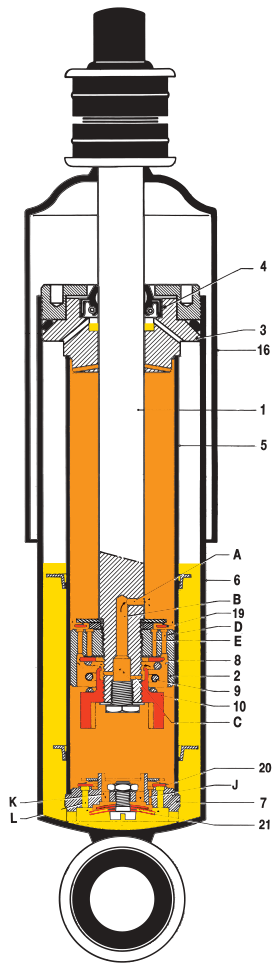
KONI PHILOSOPHY

As KONI is known as the shock absorber specialist par excellence, we commit ourselves to delivering to our customers the finest quality product with the best performance. KONI has vast experience, and a world-wide reputation in developing their products for all applications.

Our engineers ensure that every product is manufactured to meet the highest standards. KONI shock absorbers are produced from the finest materials; surfaces are machined to the narrowest tolerances and quality control is incorporated in all production steps. At the end of the production line every single damper is 100% dyno-tested to assure highest quality.

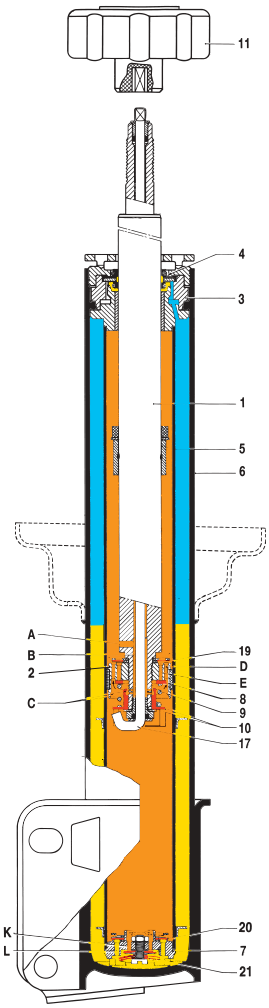
This philosophy results in unrivaled lifetime, superb road performance and maximum customer satisfaction. Our philosophy is one of no compromises!

A



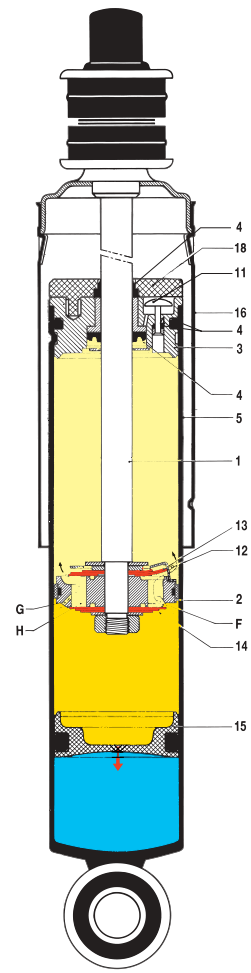
TWIN TUBE
HYDRAULIC

B



TWIN TUBE
LOW PRESSURE GAS

C



MONO-TUBE
HIGH PRESSURE GAS

26, 30 SERIES

REBOUND ADJUSTMENT PROCEDURES

The adjustment is made with the shock fully extended.

1. Remove the plastic dust cover to expose the adjusting button (Figure 2).
2. Hold the damper body by hand where the piston rod emerges from the cylinder. Push the button carefully, by hand, and hold it in that position (Figure 1 & 2). (Do not use any device, other than by hand, to depress button).
3. The adjusting device has been provided with a number of clearly distinguishable stops (clicks), each of which marks an adjustment position (zero + 3 clicks = 4 positions) (Figure 4).
4. The damper may have already been adjusted earlier. Therefore, check whether the shock absorber is in the zero position by turning the piston rod to the left (counterclockwise) with the other hand until the zero-stop is felt - DO NOT USE FORCE!
5. To increase rebound, turn the piston rod one or more clicks to the right (clockwise), and release the adjusting button.
6. Be sure that the adjusting button fully springs back into position. As long as the button is depressed, do not turn the piston rod further; otherwise correct adjustment will be disturbed. As soon as the button has made its complete return, the piston rod may be turned freely. The damper can now be refitted.

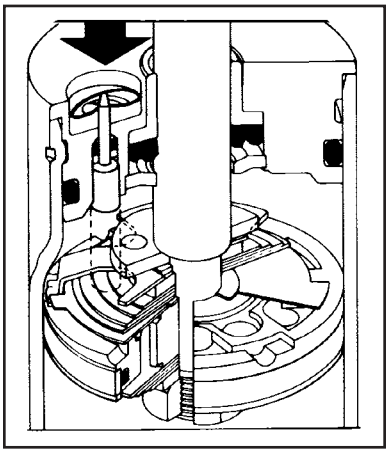


Figure 1.

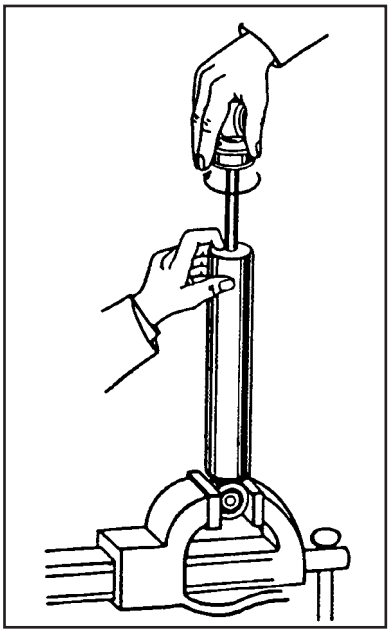


Figure 1. *UNIQUE.* The handy adjustment button. Depress the button while turning clockwise to give increased damping forces.

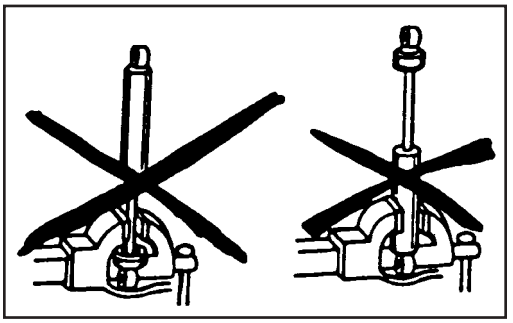


Figure 3. Do not place the shock absorber in a ***vise*** (except at the lower eye). See Figure 2.

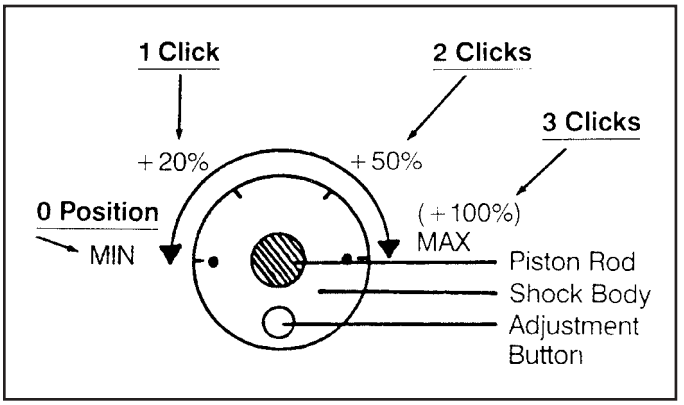


Figure 4. Rebound Adjustment (approximate forces). Listen for the clearly distinguishable clicks, each of which marks an adjustment position. 26 Series range limited to two clicks. 28 and 30 Series range is three clicks.

ADJUSTING DIRECTION

Clockwise = Firmer
Counter Clockwise - Softer

80, 82, 86, 87, 88, 90, 8040, 8240, 8640 SERIES

REBOUND ADJUSTMENT PROCEDURES

Remove the shock absorber from the vehicle and hold it vertically with the lower eye or pin attachment in a vise. Use clamp plates to prevent damage.

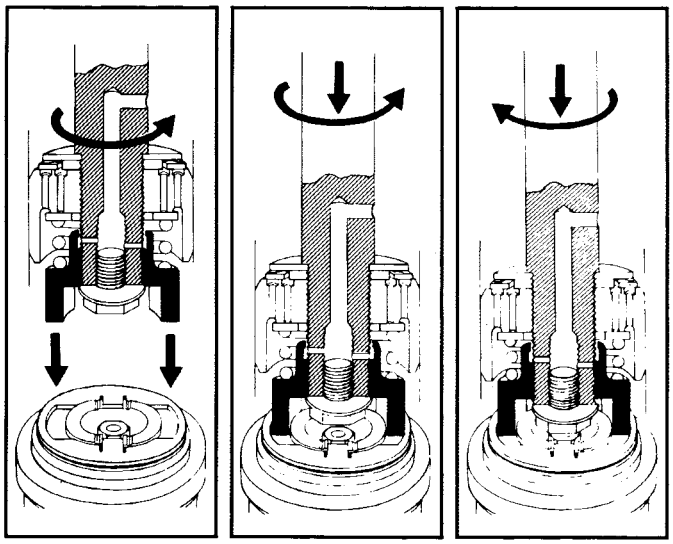
Fully collapse the shock absorber, at the same time turning the dust cap or piston rod slowly to the left (counterclockwise), until it is felt that the cams of the adjusting nut engage in the recesses of the foot valve assembly.

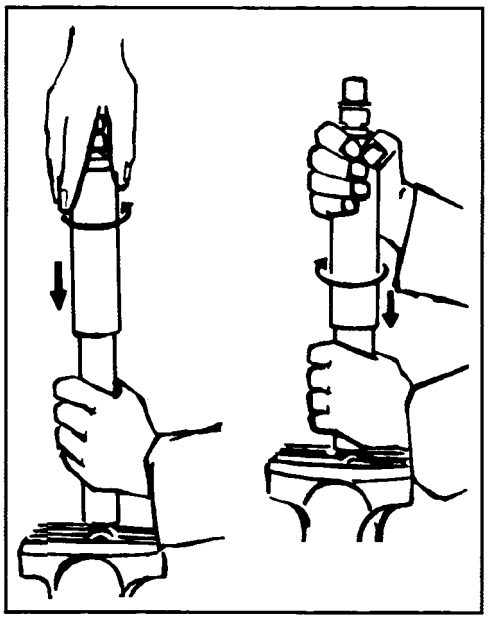
Some shock absorbers include a bump rubber concealed under the dust cover that must be removed prior to adjusting.

The damper may have already been adjusted. Therefore check whether the shock absorber is in the unadjusted position or not by keeping it collapsed and gently turning further to the left counting at the same time the half turns until a stop is felt. Stop turning then and do not use force.

Keeping the shock absorber collapsed, make 1 half turn (180°) to the right (clockwise). In case of prior adjustment add the number of half turns previously found. The total range is about 5 half turns.

Pull the shock absorber out vertically without turning for at least 1 cm to disengage the adjusting mechanism. The dust cap or piston rod may now be turned freely.





ADJUSTING DIRECTION

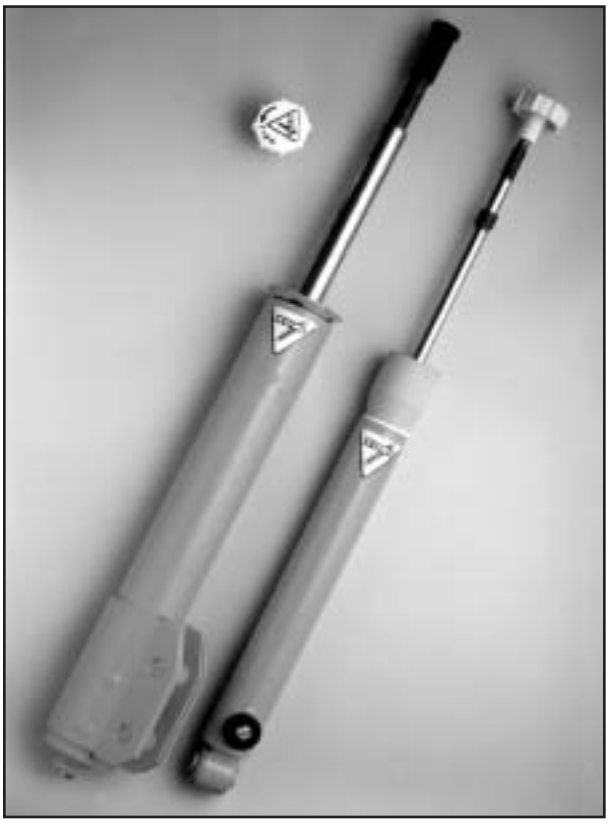
Clockwise = Firmer
Counter Clockwise - Softer

8010, 8041, 8042‡, 8241, 8610, 8641, 8710, 8741, 8742‡ SERIES

REBOUND ADJUSTMENT PROCEDURES

Externally Adjustable. These dampers can be adjusted, literally at the turn of a knob, a technique borrowed from Formula-1 racing where KONI dampers have dominated the field for years. One can switch back and forth, in most cases in a matter of seconds, from a comfortable “touring” setting to a more firm setting for a sporty drive. By means of a knob the damping forces can be altered to driving conditions or personal preferences.

‡Also adjustable in compression.



REBOUND ADJUSTMENT DIRECTION

Clockwise = Softer
Counter Clockwise - Firmer

COMPRESSION ADJUSTMENT DIRECTION

Clockwise = Firmer
Counter Clockwise - Softer

8042‡, 8210†, 8211, 8212, 8216†, 8242‡, 8742‡ SERIES

Independently adjustable in both compression and rebound, this series racing shock absorbers offer over 140 different combinations of compression and rebound, to finely tune the chassis for maximum performance.

General Precaution - Do not place piston rod in a vise, nor cause damage to the rod surface. (Figure 3)

Rebound - Insert a pin into the slotted adjuster located at top eye (Figure 1). Moving the pin from left to right (counter-clockwise) will cause the forces to increase. From the minimum or factory position, there are 12 possible sweeps of adjustment (1 sweep equals 1/4 turn).

Compression - Insert a screwdriver into the lower adjustment device (Figure 2). Turning the screw driver from left to right (clockwise) will cause the forces to increase. From the factory or minimum position, there are 12 possible "clicks" of adjustment.

ADJUSTMENT DIRECTION

Figure 1. Move pin left to right to increase rebound forces (counter-clockwise).

ADJUSTMENT DIRECTION

Figure 2. Turn screw from left to right to increase compression forces. (Clockwise)

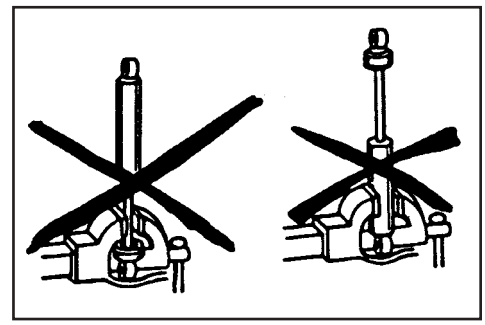


Figure 3. Do not place the shock absorber in a vise (except at the lower eye). See Figure 2.

FITTING OF "BOLT-THROUGH-THE-BOTTOM" STRUT DAMPERS

For normal use on the road, the new strut dampers must be fitted straight from the box. (Original adjustment). In all other cases see enclosed adjustment instructions.

1. ATTENTION: *In case of adjustable attachments mark off their position first before unscrewing the nuts to obtain correct adjustment of wheel camber and caster angles after fitting.*

Remove the complete suspension unit from the car. Compress the spring with coil spring clamps. Remove the fixing parts, bump rubber, dust cover (if any), spring, etc., keeping in mind the correct sequence and position for refitting.

★ The parts (drawn in dotted lines) could be absent or of a different shape.

2. Punch in the exact center of the base of the damper housing. First drill a pilot hole of 3 mm diameter and then drill to ø 14 mm **(fig. a)**. Drain oil.

3. Saw off (depth 1.5-2 mm) the original damper housing, as shown with dotted lines in **fig. b** for the several types **I + II**. The cut must made at highest point on the strut housing where the overall diameter is maintained. If the shock absorber interior cannot be removed by hand, use a light hammer. Remove all the inner parts. Beware of outstreaming oil.

4. Smooth the drilled hole on both sides. File off the nail **W** and clean the inside of the damper housing **(fig. c)**.

5. Fit the rubber protection cover **R** on the strut damper **(fig e-II)** and slide the latter into the housing.

6. Fit now plate **X** - if supplied- with its profiled side directed to the bottom, then the locking ring and the bolt **(fig. d)**.

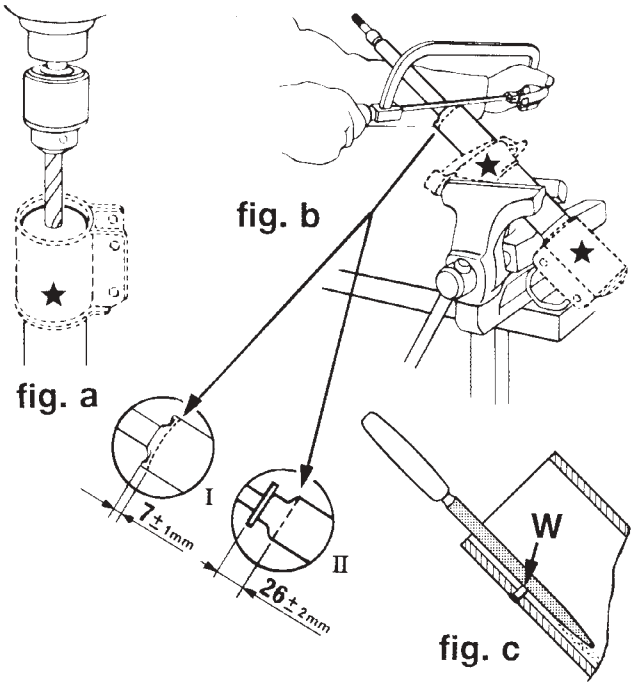
7. Draw the strut damper deeper into the original housing by tightening the bolt with a torque of **85 Nm (63 ft.lbs)** and fit the rubber protection cover as per **fig. e-II**.

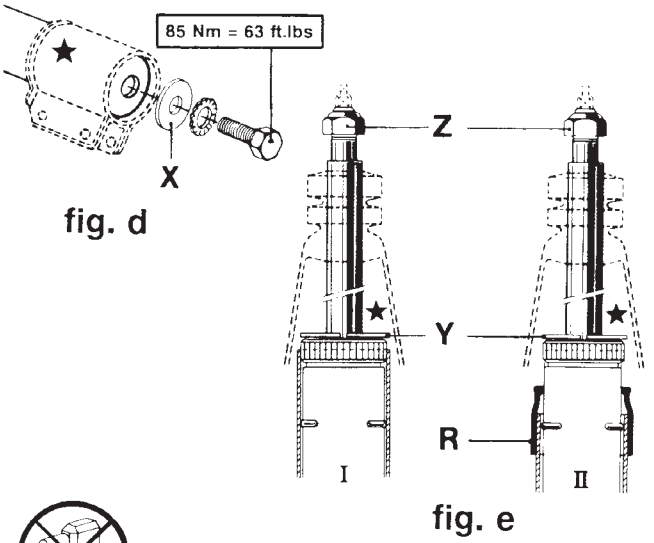
8. De-aerate the strut damper with piston rod by fully extending and compressing it several times.

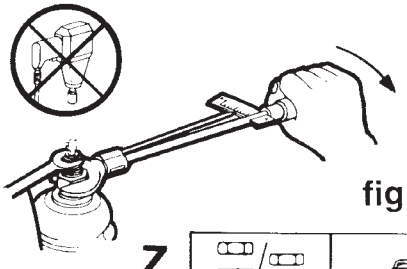
9. Keep the piston rod extended as much as possible and place plastic collar **Y** -if supplied- between the damper body and the bumprubber **(fig. e)**.

10. Fit the suspension unit in reverse order of dismantling. *Renew the bump rubber, dust cover etc. in case of damage*.

11. Tighten the fixing nut **Z** home as far as stop (bush or pin collar) using the torque setting prescribed in the table. **(fig. f)** and release the spring.







Z	Nm	ft.lbs	Nm	ft.lbs	Nm	ft.lbs
M10	35	26	45	33	–	–
M12	50	37	80	59	50	37
M14	80	59	125	92	80	59
M16	120	89	180	133	120	89
M18	165	122	250	185	165	122

ATTENTION:

To avoid any unwanted adjustment of the strut damper never use a pneumatic or electric impact wrench.

Check and set wheel alignment after fitting.

KONI SERVICE CENTER

KONI operates a full service shock absorber service center to provide complete testing, fabrication, restoration, and revalve capabilities. The facility includes services for automotive, motorsports, heavy duty bus and truck, railway and industrial applications.

DYNO TESTING – All KONI dampers are dynamometer tested when they are manufactured, however, racing dampers should be dyno tested periodically to ensure optimum performance. KONI offers dyno services utilizing the latest technology in computer operated multi- and single speed dynos.

REBUILD – KONI dampers, in most cases, are fully rebuildable. Vintage street and racing shocks can be refurbished to like-new condition including paint and decals.

REVALVE – In cases where the original KONI valving may not be optimal for modified vehicles, the valving may be altered to match upgraded suspension requirements. KONI has developed specific valvings for motorsports applications including autocross, drag racing, oval track racing and road course racing.

SPECIAL APPLICATION CONVERSIONS – The KONI Service Center can perform a variety of special modifications including shortened and extended lengths, double and external adjustability and special mounting configurations. Contact the KONI Service Center with your special requirements.

OTHER KONI AUTHORIZED REBUILD FACILITIES – In addition to the KONI Service Center, there are two KONI authorized rebuild facilities in North America. Both utilized KONI trained technicians and KONI parts. They are TrueChoice in Hilliard, OH (800-388-8783) and Pro Parts West in Canoga Park, CA (818-348-5385).

MOBILE SERVICE FACILITIES – KONI operates mobile service units complete with dyno testing and rebuilding facilities for Research and Development and motorsports support.

HOW TO DO BUSINESS WITH THE KONI SERVICE CENTER

Call KONI at 859-586-4100, Service Center hours are 7:30 a.m. to 4:00 p.m. EST. Dampers should be sent to: KONI North America, Attn: Service Center, 1961 A International Way, Hebron, KY 41048. Please include a note with a description of the services required and your name, address and daytime telephone number.

Turn-Around Time: Normal turn-around time is two to three weeks from date of receipt but it is sometimes subject to seasonality so please call KONI in advance to determine your projected availability date. If faster delivery time is required (example: 3 working days), there will be a 50% overtime surcharge.

Terms: Without exception all shocks must be sent to KONI freight prepaid. Method of payment will be VISA or MasterCard.

Costs: Contact KONI at 859-586-4100 for current prices on services.

NON-REBUILDABLE KONI DAMPERS

Although most KONI dampers are rebuildable and revalvable, certain KONI dampers due to their unique configuration are sealed for life. Shocks which are not readily rebuildable include series: 25, 26, 2615, 30, 76, 7610 and some 8640 and 8641.

Construction	25	26	2615	2812	2816	2817	30	3011	3012	3058	76	80	82	86	87	88	90
Sealed	x	x	x				x				x						
Rebuildable				x	x	x		x	x	x		x	x	x	x	x	x

Construction	7610	8040	8041	8210	8211	8212	8216	8240	8241	8242	8610	8640	8641	8710	8740	8741	8742
Sealed	x											x	x				
Rebuildable		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

NON-WARRANTABLE CONDITIONS

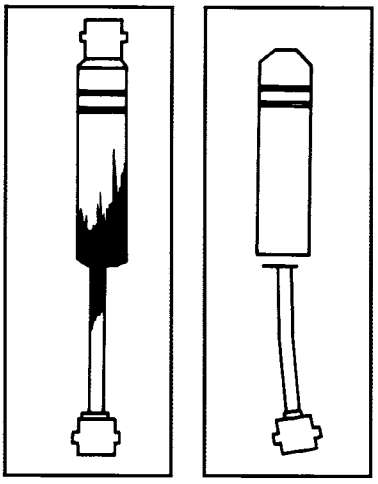
A Light coating of oil. Normal wear incurred in service life. Presence of slight film is intentional and designed to help lubricate the piston rod.

B Bent rod/damaged shock body. Indicates improper installation, collision damage, modification or abuse.

C Broken or damaged mounting components (not shown). Indicates improper installation or abuse.

D Worn bushings and mounting rubbers (not shown). Not covered under warranty.

E Burned unit (not shown). Indicates exposure to fire or salvaged unit.



A ***B***

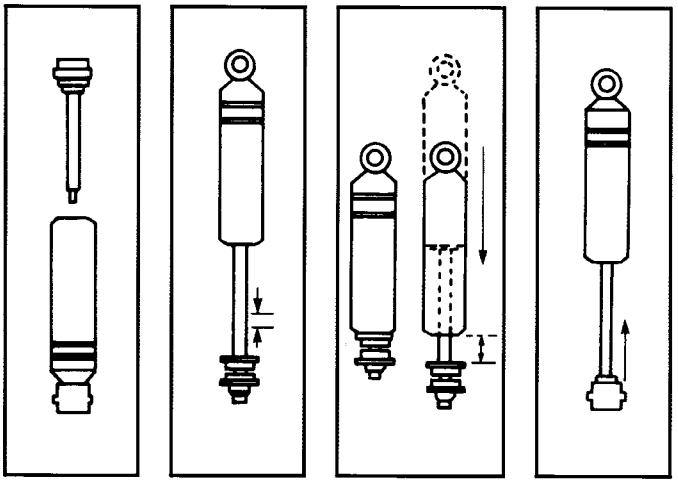
WARRANTABLE CONDITIONS

F Unbroken piston rod separated from shock body.

G Bubbling noise (26,28,30 Series only). Indicates oil and gas have mixed. Test by inverting shock, compressing and releasing.

H Incorrect compressed length. Compress old shock fully and measure exposed piston length to that of a new KONI of the same part number. If difference is more than 3/8" then shock is defective.

J Clicking noise. Test by inverting shock, compressing halfway, then quickly moving the rod up and down an inch. Pronounced end play and click sound indicate a defective shock.



F ***G*** ***H*** ***J***

DISPOSAL INSTRUCTIONS

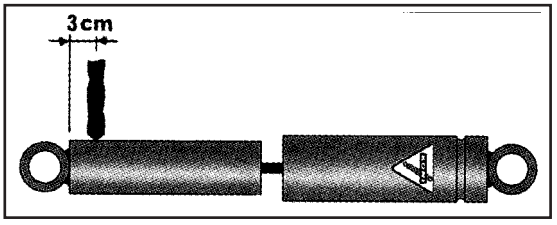


Figure 1.

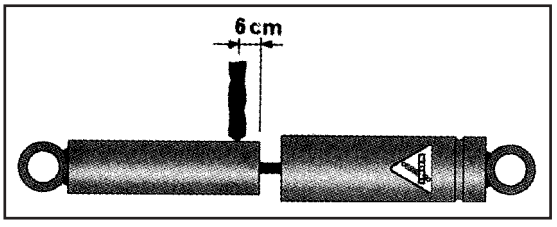


Figure 2.

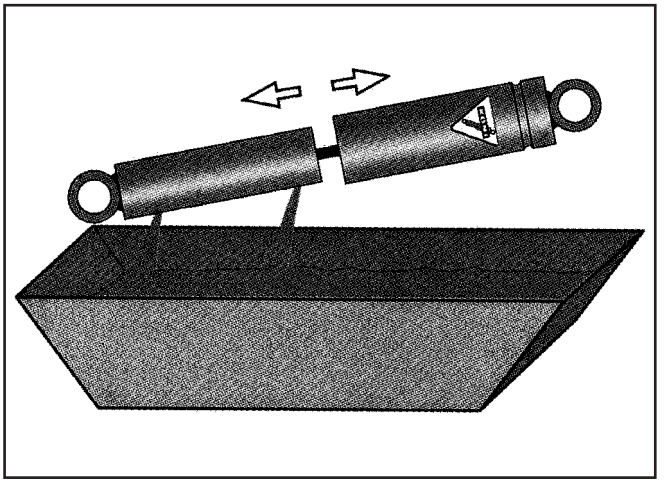


Figure 3.

These instructions apply to the red, black and yellow shock absorbers. Appropriate protective measures should be taken when removing oil and gas from discarded and defective shock absorbers.

1 The shock absorber should be secured in horizontal position.

2 The piston rod should be fully extended before drilling.

3 Drill a hole of approx. 5 mm diameter at 3 cm from the bottom of the shock absorber.

Caution: gas and oil will be expelled from the shock absorber. Appropriate measures should be taken to limit the loss of oil.

4 Drill a second 5 mm hole at 6 cm from the top of the shock absorber to ensure that all the oil is drained.

5 Move the piston rod in and out to force the oil out of the shock absorber until the oil flow stops.

The environmental protection authorities will provide information about the disposal of the oil and other components.

Environmental Protection. The hydraulic oil drained from the shock absorbers should be collected and disposed of in accordance with the legislation concerning waste oil and other wastes.

KONI LIMITED WARRANTY

PASSENGER CAR, LIGHT TRUCK, MOTORHOME & MOTORCYCLE

KONI Inc. warrants all new KONI shock absorbers to the original retail purchaser (purchased after 5/1/80) against defects in material and workmanship, excluding mounting rubbers, washers and bushings, when used under normal operating conditions for as long as such purchaser owns the vehicle on which the KONI shock absorbers were originally installed. This warranty does not apply to, and KONI makes no warranty for, shock absorbers that have been installed;

- Improperly;
- As original equipment on any vehicle except Ford Mustang SVO;
- On any vehicle that has been modified for a use other than or in addition to its originally intended use;
- For an application that is not specified in the KONI literature;
- On any vehicle that has been used off-road, for **racing** or for any other driving competition.

HEAVY DUTY TRUCK & BUS

KONI Inc. warrants all new KONI shock absorbers to the original retail purchaser against defects in material and workmanship, excluding mounting rubbers, washers and bushings, when used under normal operating conditions for a period of 3 years or 300,000 miles, whichever occurs first, (purchased after July 1, 1990). This warranty does not apply to, and KONI makes no warranty for, shock absorbers that have been installed:

- Improperly
- As original equipment on any vehicle which was manufactured outside of the U.S.A.;
- On any vehicle that has been modified for a use other than or in addition to its originally intended use;
- For an application that is not specified in the KONI literature;
- On any vehicle that has been used off-road, for **racing** or for any other driving competition.

In the event of defect, malfunction or failure of the KONI shock absorbers to conform with this warranty, the original purchaser must complete the KONI warranty claim form and return it with the shock absorbers, a copy of the vehicle's current registration and the dated proof of purchase to the dealer from which the shock absorbers were purchased, or to any authorized KONI distributor, or the KONI Inc. Upon verification, warrantor or its servicing organization will repair or replace the shock absorbers at no cost to the original user. However, warrantor will not pay for the cost of the installation of the new or repaired shock absorbers, and the cost of postage and return shipping cost shall be prepaid by the original purchaser.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

THIS WARRANTY IS LIMITED SOLELY TO THE ABOVE AND THIS WARRANTY AND ANY WARRANTIES IMPLIED BY STATE LAW WILL APPLY ONLY FOR THE TERM STATED ABOVE.

THE WARRANTOR WILL NOT BE LIABLE FOR ANY LOSS, DAMAGE, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND WHETHER BASED UPON WARRANTY, CONTRACT OR NEGLIGENCE AND ARISING IN CONNECTION WITH THE SALE USE OR REPAIR OF THE PRODUCT.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, OR ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGE SO THE ABOVE LIMITATIONS OR EXCLUSION MAY NOT APPLY TO YOU. UNLESS OTHERWISE CONTRARY TO STATE LAW GOVERNING THE PURCHASE, THE WARRANTOR'S LIABILITY SHALL NOT IN ANY CASE EXCEED THE CONTRACT PRICE FOR THE PRODUCT CLAIMED TO BE DEFECTIVE OR UNSUITABLE

(THIS WARRANTY IS APPLICABLE IN THE U.S.A. AND CANADA ONLY.)

WARRANTY RETURN PROCEDURE

1. **Contact dealer from which shock absorbers were purchased, OR contact KONI, 1961 International Way, Hebron, KY 41048, attention KONI Warranty, Phone: 859-586-4100, to obtain a Return Goods Authorization number.**
2. Provide dated proof of purchase.
3. Provide copy of current vehicle registration form.
4. Provide your name, address, day phone number, make, model & year of vehicle and description of defect.
5. Return defective unit(s) - (freight prepaid) - with all mounting parts and items 2, 3 and 4.
6. Upon determination of valid warranty KONI will repair or replace at its discretion.