

Congratulations on your purchase of Viking shock absorbers! You can rest assured that you are getting the best value for your dollar with Viking high performance shocks.

## INSTALLATION GUIDE FOR VIKING "C" SERIES CUSTOM MOUNT SHOCKS

\*Note: It is strongly recommended that you purchase a spanner wrench and thrust bearing kit (part **#7995-102**) for ease of adjustment.

## <u>Please read these instructions carefully prior to installing your new Viking shocks.</u> See our full Terms & Conditions of Sale, Disclaimers and Warranty at: www.vi-king.com.

NOTE: Like many performance parts, aftermarket performance shocks may make more noise than factory shocks, due to bearing mounts and/or poly bushing mounts as compared to factory rubber mounts. This is often more noticeable more in rear IRS equipped vehicles. Shocks that have been installed are not eligible for return.

- 1. Verify that your shocks are the correct lengths and mount style before beginning installation. Contact your chassis builder, supplier or Viking if you have any questions. *Products that are used, installed or modified in any way are not eligible for return.*
- 2. Measure your vehicle's ride height by measuring from the center point of the fender lip down to the ground. Mark the spot you measured to for later reference.
- 3. Reference your vehicle's owner's manual to determine the jacking locations, and the instructions for removing the shocks and springs. FAILURE TO FOLLOW THE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR DEATH.
- 4. Jack your vehicle up until the tires do not touch the ground and the suspension hangs freely and remove the wheels. Remove the shocks and springs and retain all mounting hardware.
- 5. Test fit your shocks into the chassis without mounting the springs. Move the suspension through the entire travel range to ensure that it does not bind at any point.
- 6. Extend the piston rod and ensure that the jam nut under the bearing housing is secure.
- 7. Screw the lock nut with the shoulder up and the spring nut with the shoulder up (see figure on the right) down to the last thread **only**.
- 8. Apply anti-seize to the threads on the nuts and the shock. **THE WARRANTY IS VOID AND DOES NOT COVER DAMAGE TO THE SHOCK RESULTING FROM THE FAILURE TO APPLY ANTI-SEIZE PRIOR TO MAKING RIDE HEIGHT ADJUSTMENTS.**
- 9. If the Viking thrust bearing kit is used (recommended), coat both washers with anti-seize. Install the spring seat washer, then the bearing, then the second washer. If you do not use the thrust bearing kit, then coat one side of the washer supplied with the shock with anti-seize and place it coated side down on the spring nut.
- 10. Slide the spring over the shock, put the spring cap into position (may require compressing the spring), and adjust the spring nut up until the spring is slightly compressed. Make certain that the spring is seated squarely in the cap and on the spring nut. All parts should be aligned.
- 11. Install the proper poly sleeves or for bearing mount shocks, insert the bearing in a twisting motion. If you press the bearing into the shock end, do **not** press on the ball; press only on the race surrounding the ball. Install snap rings on both sides of each bearing and ensure they are fully seated in the loops.
- 12. *If your shock has an upper stud mount (part number includes "-R"):* Install the upper stud bushing, washer and nut. Tighten the nut until the bushing OD matches the washer OD and then lock down the jam nut. **WARNING:**

Phone: 952-469-4130 <u>www.vi-king.com</u> Fax: 952-469-4132 **WARNING**: Cancer and Reproductive Harm - <u>www.P65Warnings.ca.gov</u>



Leaving the stud bushing nut too loose will cause excess movement allowing the piston rod to rub on the frame. Over-tightening the stud bushing nut will over-compress the bushing causing failure of the bushing assembly.

- 13. Install the assembled coil-over on the vehicle and adjust the spring nut up about 1/3 of the way from the bottom of the threads on the shock.
- 14. Reattach the wheels and torque everything to the specifications defined by the vehicle's manufacturer.
- 15. Verify that there is clearance around the coil-over shock and that the suspension does not bind at all, even when wheels are turned to full lock position.
- 16. Remove the jack stands and carefully place the car on the ground to check clearances again. Lightly bounce the vehicle at each corner to verify that there are not any clearance issues.
- 17. Measure the ride height as you did prior to installation and ensure that there is sufficient travel in both directions and that you are within the recommended ride height for the shock. Ideally, 60% of the shock stroke is available for compression. Adjust the ride height **only** with the weight of the vehicle fully off of the tires. **THE WARRANTY IS VOID AND DOES NOT COVER DAMAGE TO THE SHOCK DUE TO INCORRECT RIDE HEIGHT OR BY MAKING RIDE HEIGHT ADJUSTMENTS WITHOUT THE TIRES RAISED OFF THE GROUND.** Raise or lower the ride height by adjusting the spring nut to achieve the desired ride height. If it is at the extreme top or bottom of the threads, then you may need a softer or heavier spring.
- 18. It is important to note that your **shocks should never be used as a travel limiter**. Straps or cables made for travel limitation should be used prevent topping out. Vehicles used in a manner where they could bottom out the shocks (such as drag racing) should use a higher rate spring and a bump stop to help prevent shock damage. Any shock can be damaged from wheel stands despite bump stops.
- 19. Once ride height is correct, spin the lock nut up to the bottom of the spring nut and lock them together using the two spanner wrenches. Have your front end realigned upon completion of installation.

## WARRANTY / DISCLAIMER

Viking warrants that the products will be free from defects in material and workmanship for two years from date of sale to the original purchaser. Viking makes no other warranty of any kind, express or implied. Viking shall have no obligation under the foregoing warranty where the defect is the result of improper or abnormal use, your negligence, vehicle accident, improper or incorrect installation or maintenance, nor when the product has been repaired or altered in any way. Viking's liability in the case of defective products subject to the foregoing warranty shall be limited to the repair or replacement only, at Viking's option, of the defective products. In no event shall Viking be liable for the cost of procurement of substitute products, or liable for any indirect, special, incidental, consequential or exemplary damages for any reason. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

In order to be eligible for service under this warranty, return the defective part to Viking together with the pre-approved R.G.A. number issued by Viking. Tag each item with the part number and the specific explanation of defect. All returns must be shipped prepaid to: Viking Performance, Inc., RGA #\_\_\_\_\_\_, 21401 Hemlock Ave., Lakeville, MN 55044.

Purchaser acknowledges that parts and services sold by Viking are exposed to a wide variety of conditions, and that Viking does not have full knowledge of the intended use of the goods. Purchaser agrees to indemnify and hold Viking harmless upon demand against all claims, actions, loss, damage or injury resulting from the direct or indirect use of the products, or purchaser's inability to determine the proper use or application of the products. Viking shall not be liable for any claims, demands, injuries, damages, actions, or causes of action whatsoever to buyer arising out of or connected with the use of any Viking products. MOTORSPORTS ARE DANGEROUS; AS SUCH, NO WARRANTY OR REPRESENTATION IS MADE AS TO THE PRODUCTS' ABILITY TO PROTECT THE USER FROM INJURY OR DEATH. THE USER FULLY ASSUMES THAT RISK. ALL PRODUCTS ARE INTENDED FOR RACING AND OFF-ROAD USE ONLY AND MAY NOT BE LEGALLY USED ON THE HIGHWAY IN CALIFORNIA AND/OR OTHER STATES. We reserve the right to change specifications without notice.