

*64½-66 Ford Mustang  
1117L-A  
Adjustable Lower Control Arm*

*Thank you for your purchase from our new line of Mustang parts.  
Please call us at 877 - 4NO - ROLL if you have any questions  
regarding the service or installation of your Hotchkis Performance products.*

IMPORTANT: PLEASE READ THE ENTIRE INSTRUCTION MANUAL BEFORE  
STARTING THIS INSTALLATION.

*Lower Control Arm Installation*

- 1 *Raise the Vehicle*  
Raise the front end of the vehicle with a lift or support with jack stands. Front wheels should be off the ground.
- 2 *Remove the Front Wheels*  
Remove the front wheels and set aside
- 3 *Remove the Sway Bar Link*  
Unbolt the sway bar end link from the lower control arm. Retain this hardware for reinstallation.

4 *Unbolt the Strut Rod*

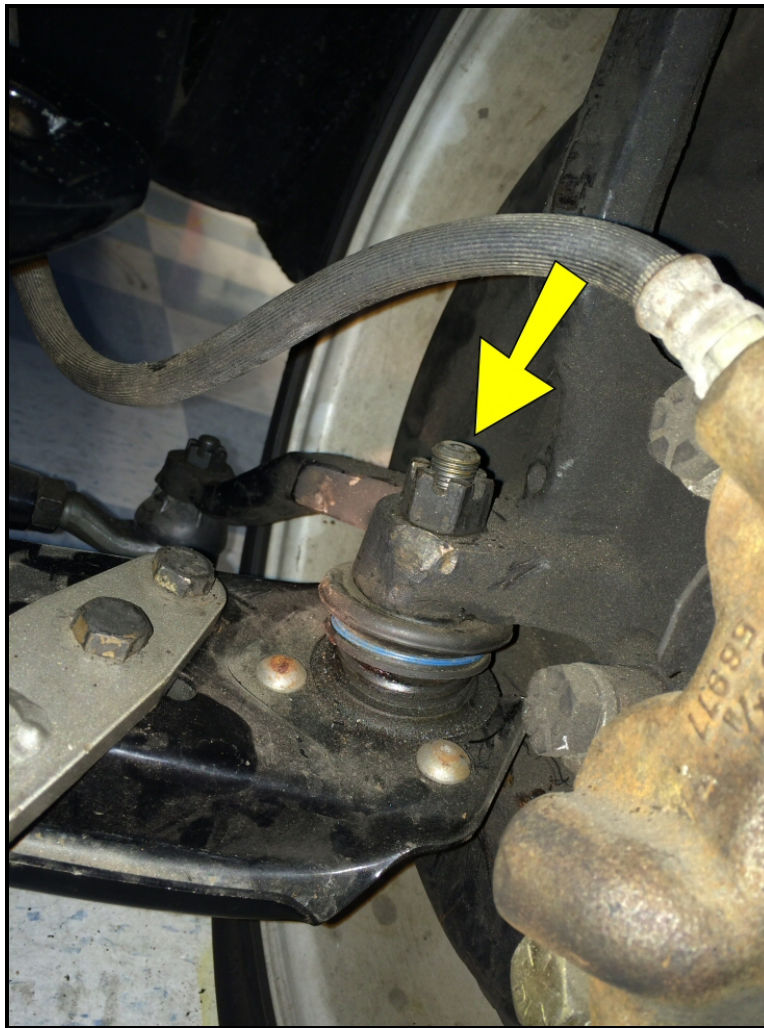
Unbolt the (2) nuts per arm to detach the strut rod from the stock lower control arm. You may discard this hardware. New hardware is provided.



5 *Unbolt the Ball Joint*

Remove the cotter pin from the lower ball joint.

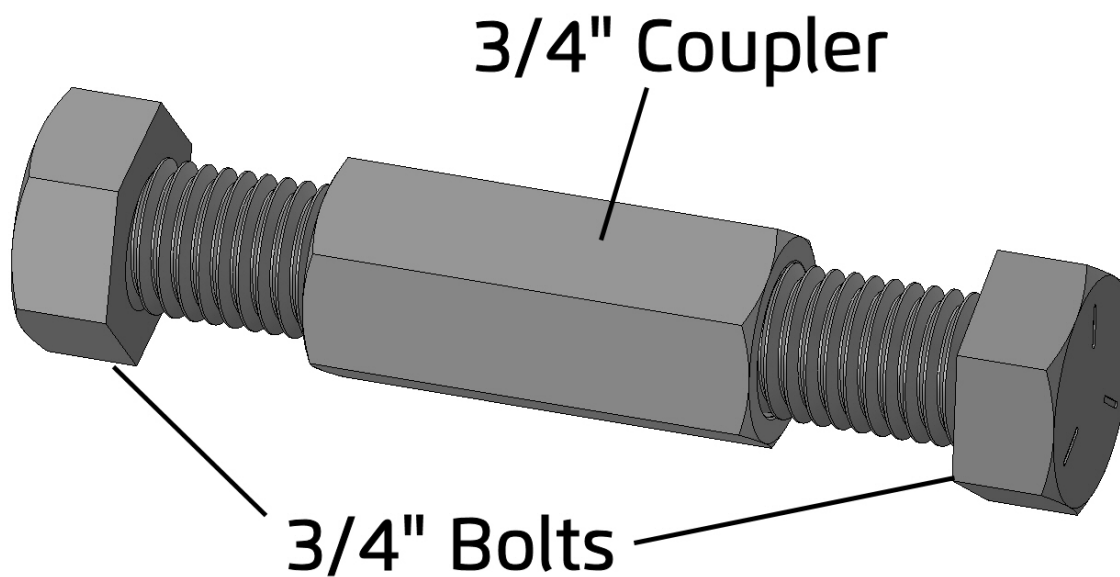
Loosen but do not remove the castle nut that holds the ball joint stud in the spindle. Leave about a 1/8" of gap between the nut and the spindle mating surface.



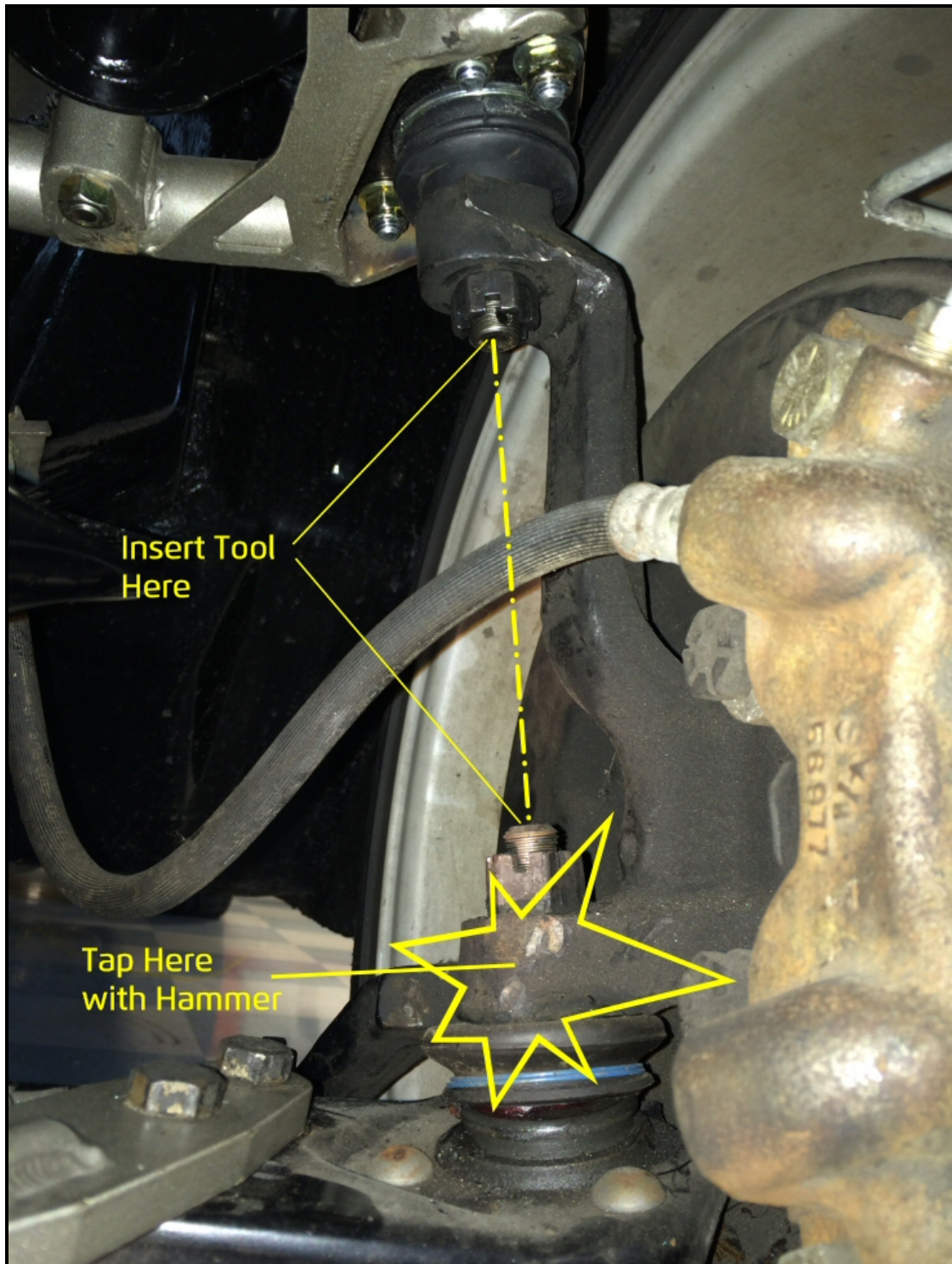
The ball joint stud is taper pressed in the spindle mount. To remove the stud from the spindle force and/or impact is required to break the press fit. There are a number of ways to do this, but the best method is to make an inexpensive tool with off the shelf components. Go to the hardware store and pick up two 3/4" x 1.75" long coarse thread bolts and a 3/4" x 2.25" long coarse thread coupler nut. Assemble the 3 parts and position it between the upper and lower ball joint studs. Unscrew the bolts until you have a moderate amount of tension. Grab a hammer and tap on the side of the spindle mount. The taper fit should pop loose rather easily. Support the lower control arm and spin the Lower ball joint castle nut right off.

Tool Components:

- (x1) Coupling Nut 3/4"-10 x 2.25" long (Mcmaster Carr 90977a215)
- (x2) Hex Bolt 3/4"-10 x 1.75" long (Mcmaster Carr 92865a841)



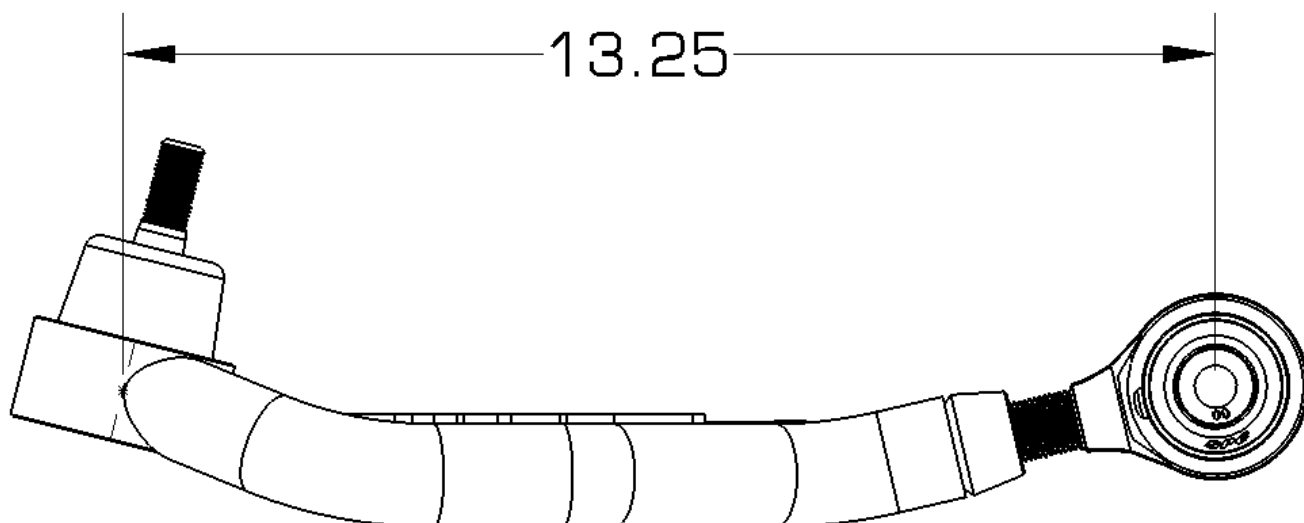




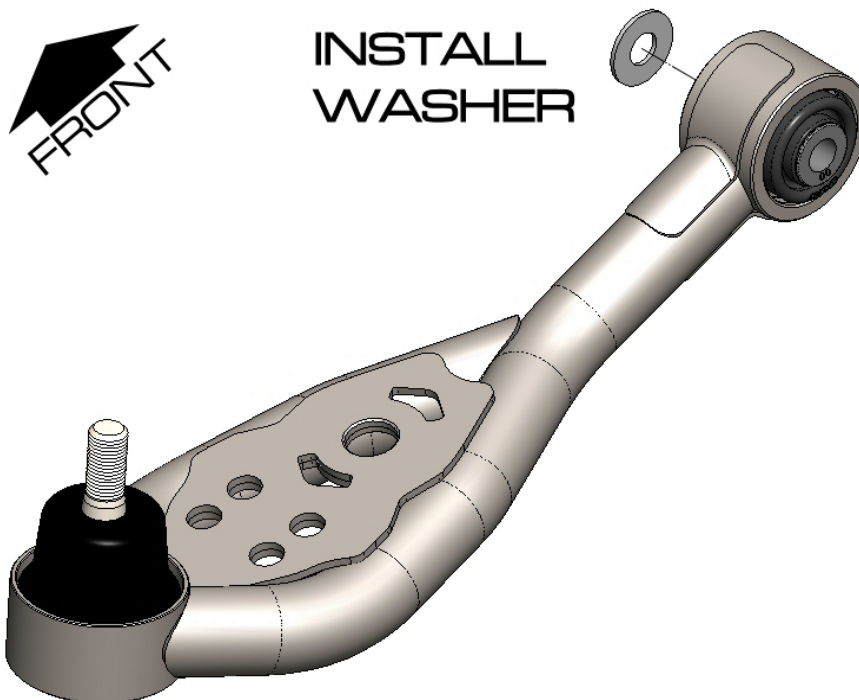
- 6 *Disconnect the Lower Control Arm from the Car*  
Unbolt the inner bushing bolt. Retain this hardware for reinstallation. The arm should be free from the vehicle.



- 7 *Install Hotchkis Arm Inner Mounting Point*  
Grab your Hotchkis lower control arm and reinstall in the same manner as removal. Adjust the Hotchkis arm to an initial length of 13.25"

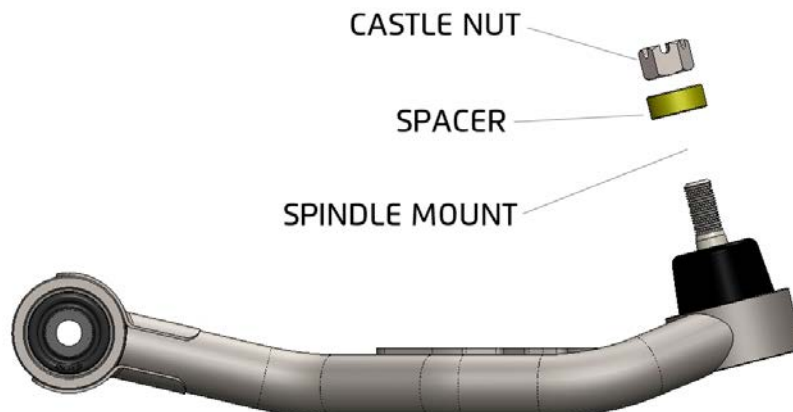


Start with the inner mounting point. You will need to insert the provided stainless steel spacer between the clevis mount and the Hotchkis swivel joint. Tighten this bolt down.



**8** *Attach the Hotchkis Ball Joint to Spindle*

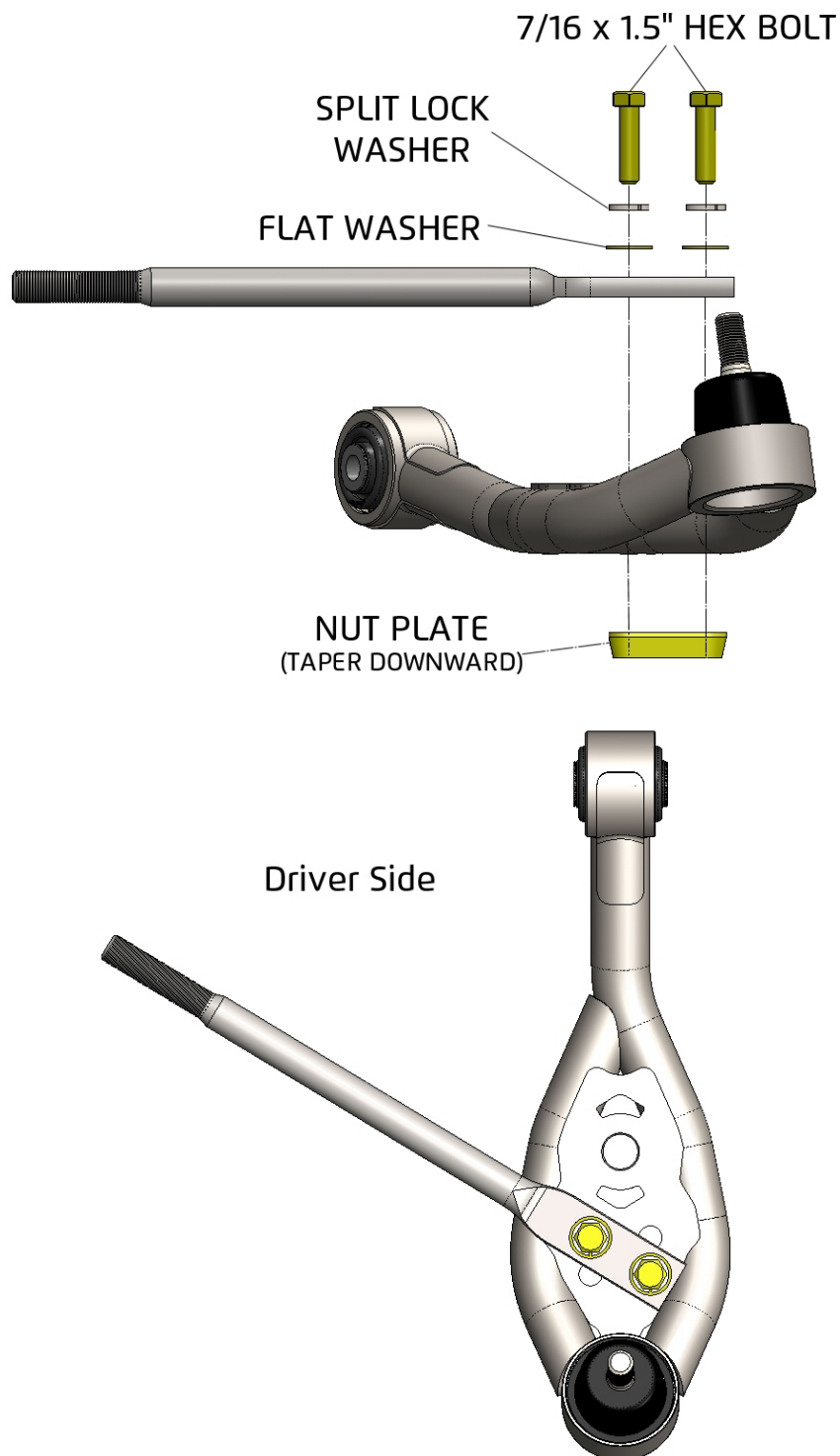
Insert the Hotchkis ball joint stud into the spindle mounting hole. Make sure the tapered surface on the spindle is clean and free of debris. Once seated, install the spacer on the stud and follow with the castle nut. Tighten the nut and make sure the slot lines up with the hole in the stud. Insert the cotter pin and bend the ends to lock in place.





9 *Reinstall the Strut Rod to the Lower Control Arm*

The Hotchkis kit comes with new hardware to fasten the strut rod to the arm. Insert the bolt plate from the bottom of the LCA and have it pass thru the arm and strut rod. Place the washers and nylock nut on top and fully tighten.





## 10 *Alignment Tips*

Once the installation of the lower control arms is complete, please perform a front wheel alignment. We highly recommend using our Hotchkis Upper Control arms (1117U) and Adjustable Strut Rods (14414) in conjunction with the lower control arm kit to take full advantage of this system.

One of the benefits of the Hotchkis Lower Control Arm is the swivel bushing we provide with this kit. The swivel bushing does not deflect like the old OE rubber bushings do. This keeps the alignment consistent and dramatically results in quicker turning response. In addition, the swivel allows the customer to gain more positive caster (with adj. strut rods) without unwanted bind that rubber bushings can exhibit.

The 1117L-A kit adds the advantage of camber adjustment via the lower arm for an additional range of +1.5° to -4°.

Mostly Street/Occasional Autocross Alignment

Camber: -1.5°

Caster: +6°

Toe: 1/16" toe In

Autocross/Track/Race Alignment

Camber: -2° to -2.5°

Caster: +6° or more with adjustable strut rods

Toe: Zero toe to 1/16" toe out

*(Note: Alignment specs based on vehicles equipped with Hotchkis upper & lower control arms and adjustable strut rods.)*

Procedure for adjusting Hotchkis lower control arm:

- Measure camber at ride height.
- Raise the front of the vehicle until the front wheels are off the ground.
- Undo the inner mount for the lower control arm
- Loosen the LCA jam nut, adjust the inner joint to make the arm longer or shorter depending on what camber you need.
- Reattach lower control arm and drop the vehicle back to ride height.
- Re-measure the camber. Repeat the process until desired camber is achieved.

## Hotchkis Performance LLC Return Policy & Limited Warranty

Effective December 1, 2010 all Hotchkis products must be registered to qualify for warranty at [www.hotchkis.net](http://www.hotchkis.net) or via the mail-in warranty card, included with the product, within 30 days of the original purchase date.

**IMPORTANT:** This warranty supersedes all other warranties included with this product.

### Return Policy

We want you to be completely satisfied with your Hotchkis Performance product. For products, presenting signs of shipping damage please contact the freight carrier immediately. All our products are guaranteed to be free from manufacturer's defects. If your order arrives with a manufacture defect, please contact our Customer Service Department at (562) 907-7757. You will be assigned a Returned Goods Authorization Number (RGA). The package you return must show the RGA on the outside of the package, include the original invoice and be shipped prepaid to our facility. The product has to be unused and in its original packaging materials. Exchanges or refunds made after 30 days will be subject to a 20% restocking charge. If you purchased your Hotchkis Performance product from an authorized dealer, you are still covered by this return policy. All returns however, should be made to your dealer, not to Hotchkis Performance directly.

### Limited Warranty

Hotchkis Performance offers a Limited Warranty against defects in materials and workmanship for the term of 36 months (3 years) from the date of purchase of this product. This Warranty only applies to the original retail purchaser who retains ownership of the vehicle on which the product was originally installed. If the product is determined to be defective, Hotchkis Performance will repair, replace or refund the purchase price of the defective product at Hotchkis Performance's sole discretion, which shall fully satisfy and discharge any and all warranty claims. Any repaired or replaced product will be returned to the sender excluding the cost of freight. Products must be registered to qualify for warranty at [www.hotchkis.net](http://www.hotchkis.net) or via the mail-in warranty card, included with the product, within 30 days of the original purchase date.

### Exclusions from Warranty

Items offered but not manufactured by Hotchkis Performance are warranted according to the manufacturer's terms and are not covered by this limited warranty. Hotchkis Performance shall not be responsible for any labor, removal, installation, re-installation or maintenance costs. This warranty does not cover the cosmetic finish or plating of any product or any normal wear and tear to any product including, but not limited to bushings, brackets, end-links, hardware, steering components, shocks or springs. In addition, this warranty does not apply to any products that have been:

- ☐ Improperly installed or installed by someone other than a qualified, licensed auto mechanic experienced in the installation and removal of suspension products;
- ☐ Improperly serviced, misused, or modified, altered or subjected to abuse, negligence, accident or collision;
- ☐ Installed in any vehicle that has been modified;
- ☐ Installed on any vehicle that has carried loads in excess of automobile manufacturer suggested weight limits; or
- ☐ Installed on any vehicle that has been subject to abnormal or excessive use, including rallying, racing, or racing-type activities or off-road use.

### Limitation of Warranty

This limited warranty is the entire and only warranty for the products and may not be modified or supplemented by any other person or company in any form. Any description of the products, by anyone, is for the sole purpose of identifying them and is not part of the basis of the bargain, and does not constitute a warranty that the products will conform to that description. The statements of any salesperson do not constitute part of this limited warranty and cannot be relied upon as a warranty.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. ANY IMPLIED WARRANTIES ARE DISCLAIMED TO THE FULLEST EXTENT PERMITTED BY LAW. THIS WARRANTY DOES NOT

COVER CONSEQUENTIAL DAMAGES, LOSS OF TIME OR REVENUES, INCONVENIENCE, LOSS OF USE OF THE VEHICLE, DAMAGE TO THE VEHICLE OR COMPONENTS OF THE VEHICLE, ANY OTHER TYPE OF CONSEQUENTIAL DAMAGES, OR OTHER INCIDENTAL OR INDIRECT DAMAGES. HOTCHKIS' MAXIMUM LIABILITY UNDER THIS WARRANTY SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE PRODUCT. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages and in such states the above limitations or exclusions may not apply. This limited warranty gives the purchaser specific legal rights and the purchaser may have other rights that may vary from state to state.

#### Technical Information

Hotchkis Performance makes every effort to ensure that you are provided with the most accurate and up-to-date technical information. However, all technical information is approximate and may vary upon application. Additional suspension components may be needed in some applications, depending upon the make, model, engine and chassis of the vehicle. Hotchkis Performance is not responsible for any consequences resulting from manufacturer's technical mid-year changes. Hotchkis Performance products should only be installed by a qualified, licensed auto mechanic experienced in the installation of such products.

#### Warranty Claim Procedure:

The answer to ALL the following questions should be YES before making a warranty claim:

1. ☐ Did you register the product at [www.hotchkis.net](http://www.hotchkis.net) or via the mail-in warranty card within 30 days of purchase?
2. ☐ Is the product appropriate to your application?
3. ☐ Did you carefully and thoroughly read the instructions provided along with the product?
4. ☐ Do you have the original invoice or sales receipt?
5. ☐ Is the return date within 36 months from the purchase date?
6. ☐ Are you the original purchaser?
7. ☐ Was the product properly installed by a qualified, licensed auto mechanic?
8. ☐ Has the product been installed on the original vehicle on which it was installed at all times?
9. ☐ Is the product unmodified and clean?
10. ☐ Is the reason for return a legitimate product defect?

If the answer to all these questions is YES, please contact our Customer Service Department at (562) 907-7757. You will be given a Returned Goods Authorization Number (RGA) valid for 60 days. You will also be asked to ship the product prepaid to our facility. All shipments MUST be (i) prepaid, (ii) include the original invoice or sales receipt, (iii) show the RGA on the outside of the package and (iv) include your name, address, make and model of the vehicle, and a brief description of the claimed defect, including the circumstances under which the defect occurred. If the warranty claim is deemed valid then Hotchkis will estimate shipping costs to return the repaired or replacement part and contact you for payment. Hotchkis's Limited warranty requires that any repaired or replaced product will be returned to the sender excluding the cost of freight. Warranty related inquiries should be sent to the following address:

HOTCHKIS PERFORMANCE, LLC  
C/O CUSTOMER SERVICE  
8633 Sorensen Avenue  
SANTA FE SPRINGS, CA 90670

Hotchkis Performance will not accept product returns without the RGA number, receipt and the information described above. C.O.D. or collect shipments will be refused. Once the returns are received at Hotchkis Performance, we will evaluate the products, verify the sales receipt, and investigate the warranty claim. Any repaired or replaced product will be returned to the sender.

Effective December 1, 2010. This return policy and limited warranty supersedes all previous policy and warranty statements. Policies and warranties are subject to change without notice. Hotchkis Performance is not responsible for printing errors.