

# HOTCHKIS HOTCHKIS SPORT SUSPENSION



## 1309-1811 Impala X-Tend Rear Suspension Package Installation Instructions

Thank you for your purchase. Please call us at (562) 907-7757 if you have any questions regarding your Hotchkis Performance products.

### Lower Trailing Arm Installation

- 1) Place vehicle onto level surface. Block the front tires to prevent the vehicle from rolling.
- 2) Support rear of car on jack stands and remove rear wheels.
- 3) Place floor jack under differential and lift-up slightly taking the tension away from trailing arm bolts - be sure not to lift vehicle off of jack stands.
- 4) Remove the lower rear shock bolts.
- 5) Remove both lower shock studs from the rear end brackets.
- 6) Lower rear end with the floor jack until you can remove the rear springs from the vehicle.

**NOTE: KEEP THE FLOOR JACK UNDER THE CAR DURING THE COMPLETE REMOVAL AND INSTALLATION PROCEDURE.**

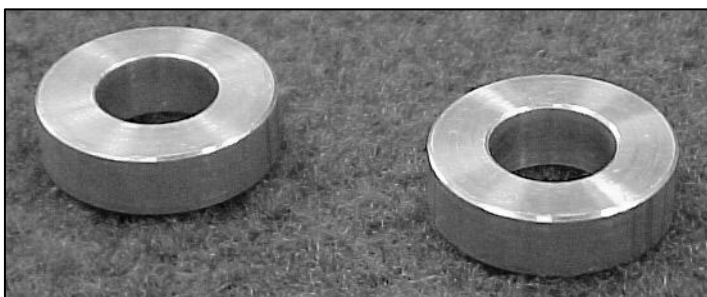
**CAUTION- DO NOT REMOVE BOTH TRAILING ARMS AT THE SAME TIME OR THE AXLE WILL ROTATE AND THE TRAILING ARM INSTALLATION WILL BECOME MUCH MORE DIFFICULT.**

- 7) Only work on one trailing arm at a time.
- 8) Jack up the rear end till you can easily remove the rear trailing arm bolt.
- 9) Then, remove the front trailing arm bolt using a socket with an extension- place the socket through the outer hole in the frame to loosen the nut. Caution – be careful not to drop the bolt into the frame – if you do then remove the bolt through the large hole on the underside of the frame.
- 10) Remove the stock trailing arm from the vehicle.
- 11) Clean the brackets with either sandpaper or emery cloth.

- 12) Apply a thin layer of chassis grease to faces of bushings before installation.
- 13) Install HP trailing arms with the grease fittings facing down and the sway bar mounting holes toward (offset) the rear of the car.
- 14) Install the new trailing arm by locating the front bolt first.
- 15) The trailing arm should then pivot smoothly on the chassis.
- 16) Pivot the arm and install the rear bolt. You may have to pry on the rear end to install the longer arm, since the new Hotchkis arm is  $\frac{1}{2}$ " longer than stock.
- 17) Once installed, torque all four bolts to 70 ft./lbs.
- 18) Install the rear sway bar using the supplied bolts.
- 19) Torque sway bar bolts to 35 ft./lbs.
- 20) Repeat procedure for other lower control arm.

**NOTE: This is a really good time to replace the rear shock absorbers!**

- 21) Jack up the rear end until the lower shock studs line up with the brackets.
- 22) Take the two supplied aluminum shock spacers and install between the shock and the rear end bracketry.



- 23) Tighten the shock nuts.
- 24) Reinstall the wheels and torque to factory specifications.

### ***ADJUSTMENT OF THE PINION ANGLE USING THE HOTCHKIS ADJUSTABLE UPPER CONTROL ARMS***

- 1) Once it has been determined that the pinion angle in your vehicle needs adjustment, you will then need to decide if that angle must be adjusted up or down.
- 2) To accomplish this, remove one stock upper control arm and measure the distance between the mounting holes. **(from center to center)** Write this measurement down!  
**\*NOTE - The Hotchkis adjustable arms are pre-set at  $\frac{1}{2}$ " longer than stock upper arm center to center length. One rotation (360deg.) of the female end, will equal approx.  $\frac{1}{2}$ deg. One half of a rotation (180deg.) of the male end will equal approx.  $\frac{1}{4}$ deg.**
- 3) If the pinion angle needs to be adjusted **downward**, the upper arm hole-to-hole distance must be **shorter** than it currently is in the car.
- 4) The Hotchkis adjustable arms can be **shortened** 3 turns shorter or  $\frac{7}{32}$ " or .218". If a shorter arm is required,  $\frac{1}{4}$ " of the threaded portion can be ground.
- 5) If the pinion angle needs to be adjusted **upward**, the upper arm hole-to-hole distance must be **longer** than the current distance.
- 6) The Hotchkis adjustable arms can be **lengthened** 10 turns or  $\frac{1}{2}$ " or .500"

**IMPORTANT! There MUST be a minimum of  $\frac{1}{2}$ " of thread engagement into the head for maximum strength!**

**IMPORTANT! The jam-nut MUST be tight before usage. Then, re-torque jam-nut after first use.**



## Hotchkis Performance LLC Return Policy & Limited Warranty

Effective January 1, 2009 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.

### 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 of its products. 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:

- **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?**
- **Is the product appropriate to your application?**
- **Did you carefully and thoroughly read the instructions provided along with the product?**
- **Do you have the original invoice or sales receipt?**
- **Are you the original purchaser?**
- **Was the product properly installed by a qualified, licensed auto mechanic?**
- **Has the product been installed on the original vehicle on which it was installed at all times?**
- **Is the product unmodified and clean?**
- **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 inquires should be sent to the following address:

HOTCHKIS PERFORMANCE, LLC  
C/O CUSTOMER SERVICE  
12035 BURKE ST. SUITE 13  
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 January 1, 2009. 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.