MetalCloak
Installation Instructions

PRODUCT: **TJ/LJ 6” Rear Long Travel Upgrade Kit**

REV: D | 12-01-2015| II-7152

READ INSTRUCTIONS IN FULL BEFORE INSTALLATION.

QUESTIONS? CALL 916-631-8071 M-F 7:00 AM – 5:00 PM PST

The MetalCloak experience includes the ease of installation of our products. We design for most contingencies, but installation may be different based on different Jeep condition, configuration and/or year.

We are continually trying to improve our products and instructions – please help us by providing feedback and pictures if you find any part of the instructions that do not match your particular Jeep or are not easily understandable.

If you have any difficulties at all, please give us a call. Thank you and enjoy your MetalCloak Products!

IMPORTANT NOTE: We use Stainless Steel Hardware where possible. Therefore, a tube of Silver Anti-seize is provided and should be used on all bolts—only a small amount is needed.

WARRANTY INFORMATION: This article is sold without warranty expressed or implied. No warranty or representation is made as to this products ability to protect the user from injury or death. The user assumes that risk. The effectiveness, warranty and longevity of this equipment are directly related to the manner in which it is INSTALLED, USED and/or MAINTAINED. THE USER ASSUMES ALL RISK. By purchasing this product and opening the packaging, purchasers expressly acknowledge, understand and agree that they take, select and purchase these MetalCloak products from Armored Works, LLC, its affiliates and distributors and agents as is and with all faults. The entire risk as to the quality and performance of these MetalCloak products is with the purchaser. Working on your vehicle can be a dangerous activity. If you are unsure of what you are doing, please leave mechanical or safety critical work to a skilled mechanic. We take no responsibility for the incorrect use and/or installation of MetalCloak products.

Section 1: Tools & Notes on Installation

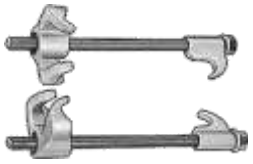
Tools Required: This list is the recommended tools for ease of installation. Other versions of the same tool can be used. For example, Allen Wrenches instead of Allen Drive Sockets.

Socket & Ratchet Wrench

16mm Socket 18mm Socket
19mm Socket 21mm Socket
24mm Socket 3/4" Socket
1/2" Socket

Welder

Coil Compressor
(Optional)



Electric Cut-off Disc & Grinder

HOW TO USE THIS GUIDE: The installation guide contains ALL steps for installation. Please read and follow the instructions in order of each page top to bottom, and left to right.
Jeep Model: Instructions may apply to multiple Jeep models, but are labeled separately where appropriate (i.e. TJ vs. LJ).
Options: Because of the number of component options we offer, these instructions may contain steps that will not match your particular configuration. You can skip these steps.
Images: Pictures are provided and parts are labeled throughout the instructions. Each text box contains guidance based on the pictures next to it. The text will refer to alphabetical labels (A, B, etc.) found in the images.
Installation Notes: Terms may be used in the body of the instructions that you may not be familiar with, if you have any questions feel free to contact us at the number below, or email techhelp@metalcloak.com
QUESTIONS: Any questions or comments about the instructions? Call us at 916-631-8071 M-F 7:00 AM – 5:00 PM PST.

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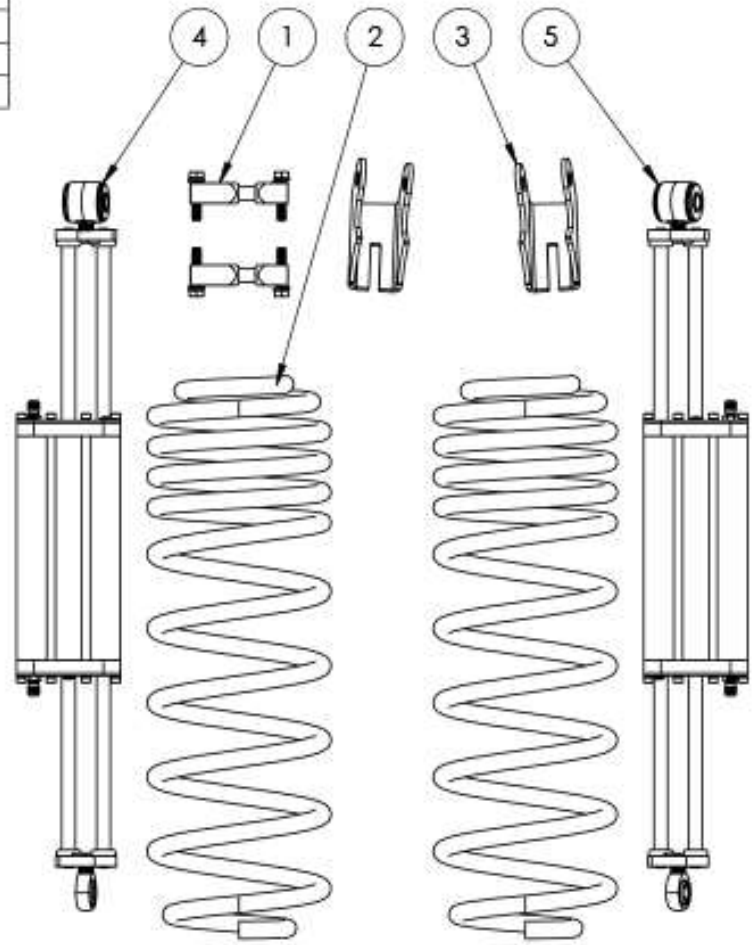
Section 2: Product Components

DC-0001 REV A

SHEET 1 OF 1

ITEM	PART NUMBER/DESCRIPTION	QTY
1	7017 BAR PIN ELIMINATOR KIT, TJ UPPER REAR	1
2	7063 DUAL RATE COIL SPRING SET, 6.0IN TJ LJ REAR	1
3	7023 SHOCK MOUNT KIT, LOWER REAR TJ-LJ	1
4	1313 TJ 13IN 6PAK ALIGNED REAR DRIVE	1
5	1314 TJ 13IN 6PAK ALIGNED REAR PASS	1

REPLACE 7017 WITH 7029 WHEN STOCK IS DEPLETED



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DO NOT SCALE DRAWING

METAL CLOAK
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PART NUMBER DESCRIPTION

7159 LONG TRAVEL UPGRADE SYSTEM, 6.0IN TJ-LJ REAR

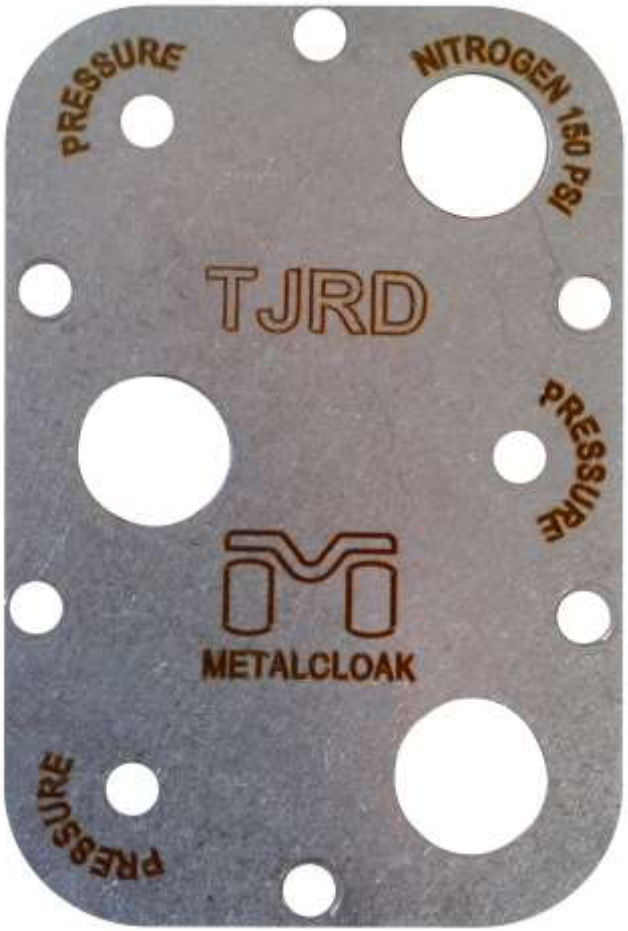
Section 3: Installation Instructions

Important Note: *MetalCloak does not recommend powder coating your True Dual Rate Coils. The baking process in powder coating can, in some cases, cause the metallurgical properties of the coils to be changed, resulting in the loss of the lift properties of the coils. As such, the process of powder coating the coils will void any warranty stated or implied in relation to the coils.*

Important note: *To install lift components you will need to fully 'droop' your suspension in the front and rear (though not at the same time). We strongly recommend that the vehicle be placed on an automotive lift and that all appropriate safety precautions be taken to secure the vehicle while it is off the ground. Always use the necessary axle stands (or equivalent) to support the axle when the suspension components are disconnected for safety, and to ensure the integrity of your suspension system during the installation process.*

Important Note: *All shocks are marked on the top shock plate to identify the shocks corresponding location.*

TJF – Front Shocks
TJRD – Rear Driver Side Shock
TJRP – Rear Passenger Side Shock



Step 5: Disconnect Rear Stock Shock

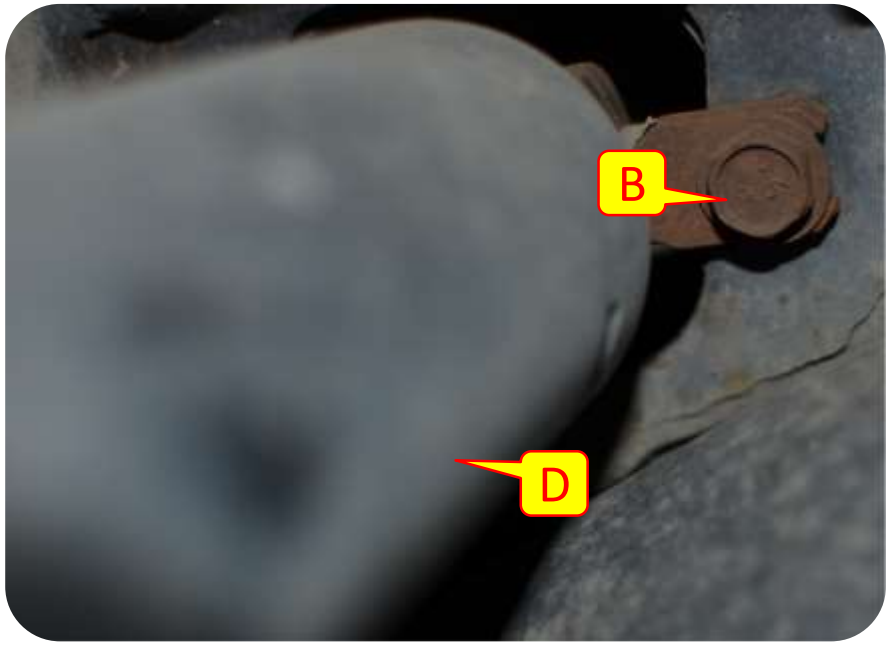
A. Lift Jeep and place jack stands under the front axle before disconnecting anything.

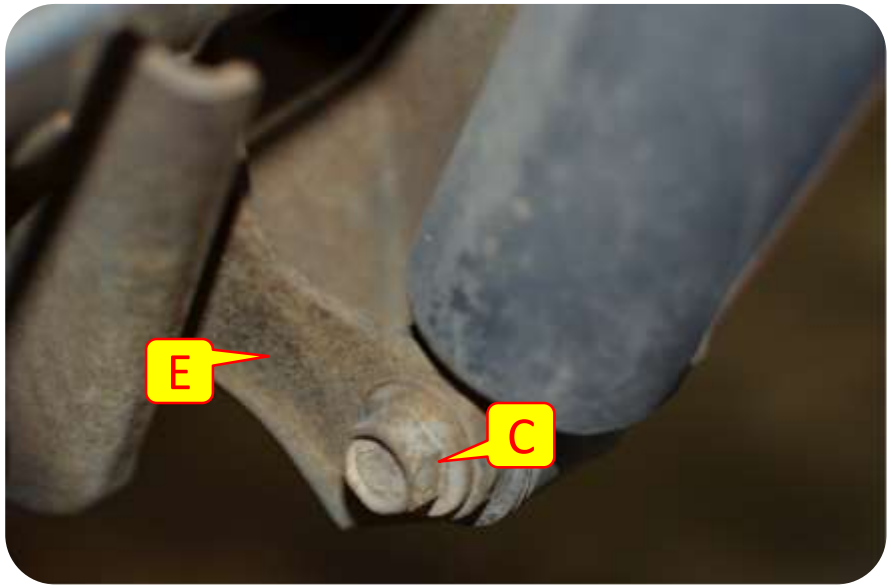
B. To disconnect the Rear shocks use a 19MM (3/4”) socket and wrench to remove the stock nut on top of the upper shock mount tower.

C. Use a 16MM (5/8”) socket and wrench to remove the stock nut and bolt from the lower shock mount bracket located on the axle.

D. Remove rear shocks.

E. You will need to use a Cut-off Disc or Grinder to remove the stock shock mounts from the axle. Be sure to grind any welds flush to make room for the replacement Lower Shock Mount.





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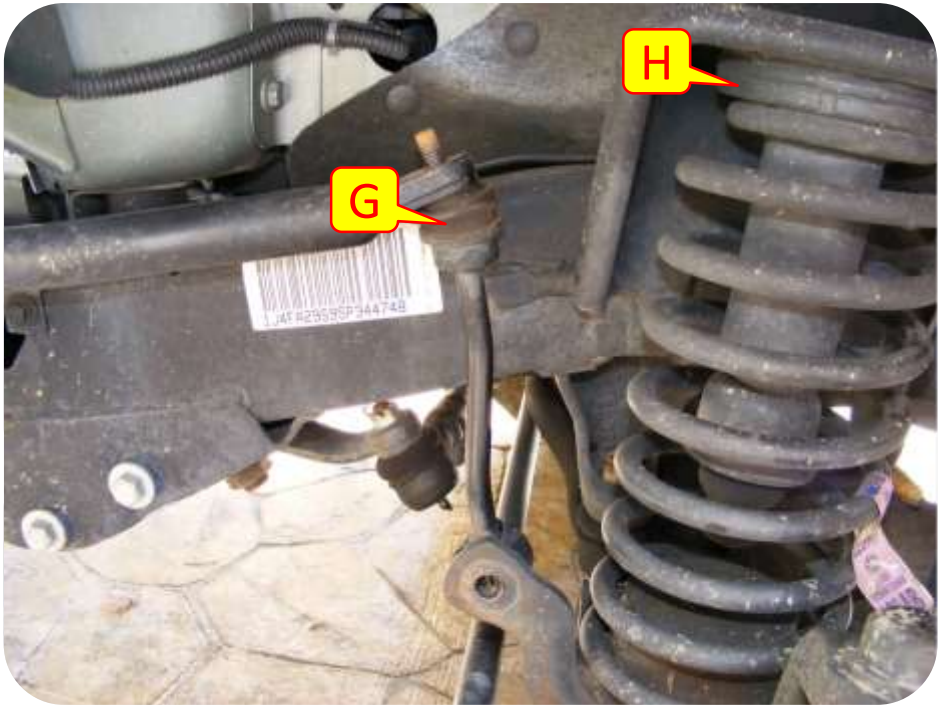
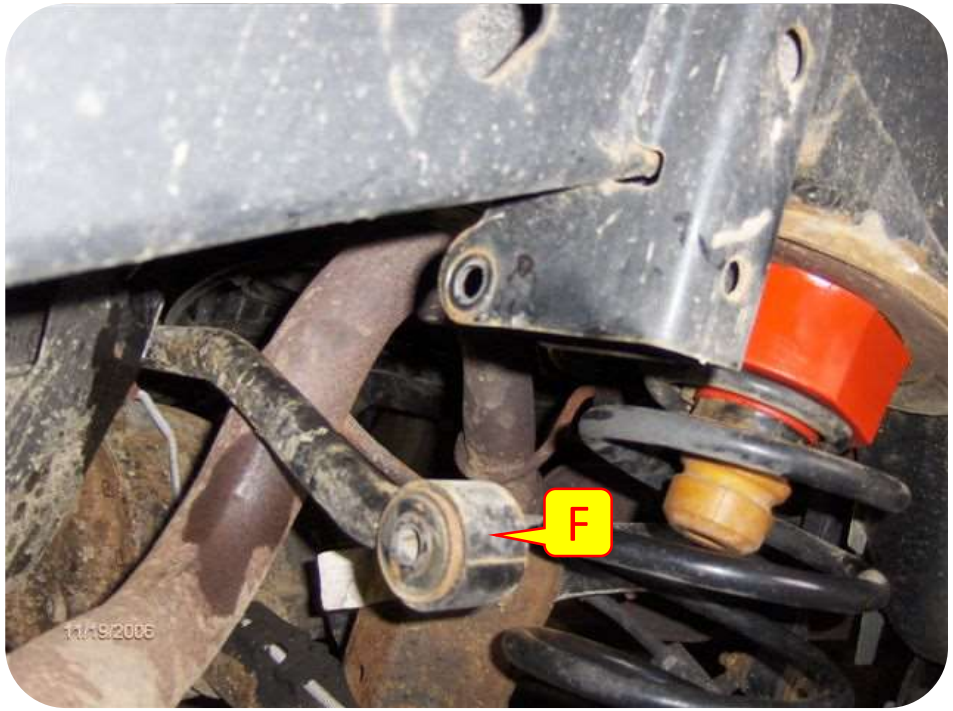
Step 6: Disconnect Stock Components

F. Disconnect track bar at the frame using a 21mm socket.

G. Use the two 18mm wrenches or socket to unbolt the lower bolt of the sway bar end link. To disconnect the sway bar end links from the axle.

H. Remove stock coil.





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Step 7: Install Front Coils

I. If the axle does not “droop” enough to allow the coil to be put in place a coil compressor can be used to compress the coil to allow fitment.

J. Install Front Dual Rate Coils with the tightly wound coils oriented downward.

K. Slip the bottom of the coil onto the coil base on the axle.

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Step 8: Install Lower Shock Mount

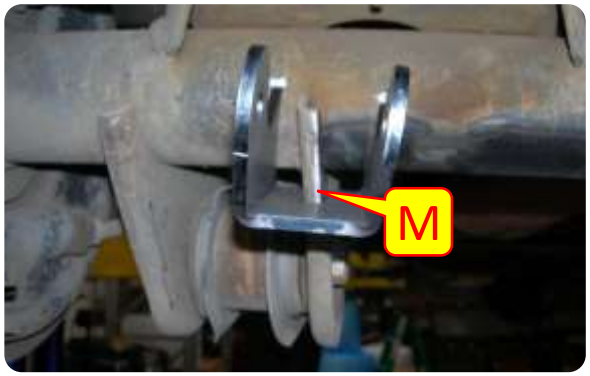
L. You will need to use a Cut-off Disc and/or Grinder to remove the stock shock mounts from the axle. Be sure to grind any welds flush to make room for the replacement Lower Shock Mount.

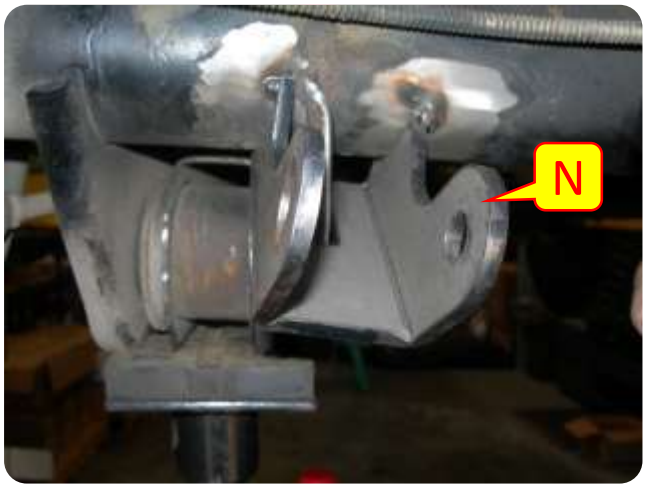
M. Align the Lower Shock Mount. The slot in the part centers on the inner side of the lower control arm bracket on the axle. You may need to grind the stock bracket a little to make the Shock Mount fit.

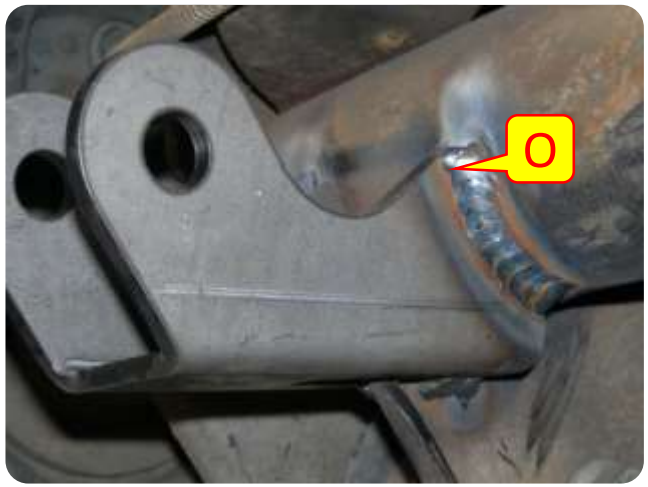
N. To properly clock the Lower Shock Mount, turn the Mount on the axle until the top of the rear mounting position is level with the bottom of the axle *(when the axle is at ride height)*.

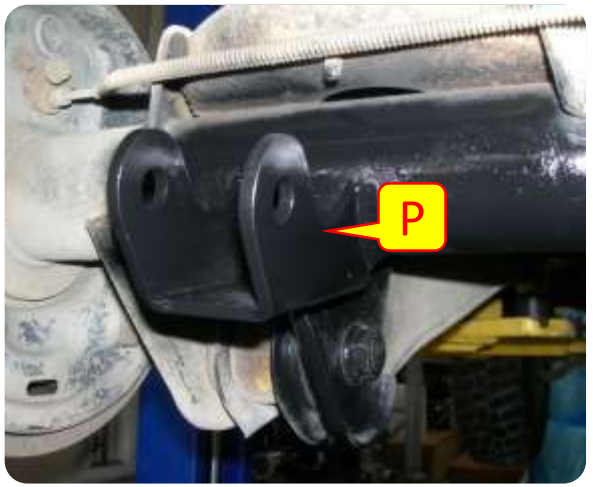
O. Weld the bracket in position.

P. As always, we recommend that you paint all exposed metal to prevent rust.









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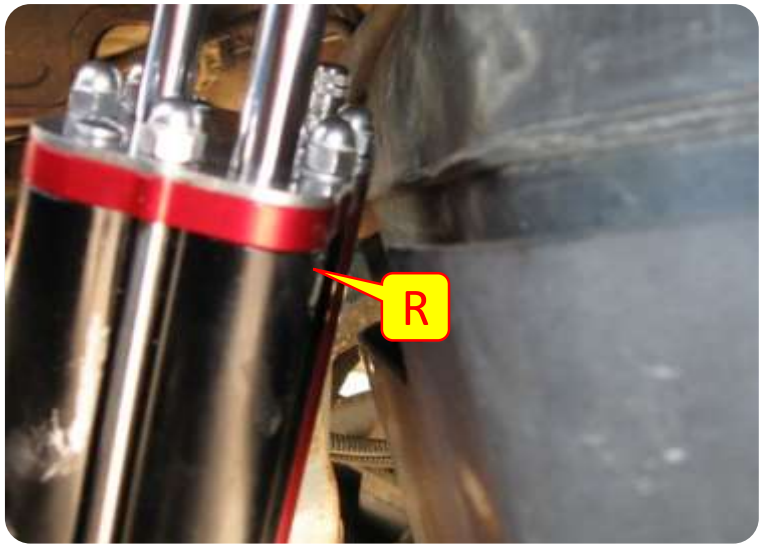
Step 9: Install MetalCloak 6Pak Shocks

Q. Install the bushing rod end using the stock hardware.

R. When properly installed the shocks will roughly parallel to the corners of the gas tank skid, with the reservoirs pointing toward the center of the JEEP. Depending on the fit of your shocks you may find it necessary to trim the stock gas tank skid. Check this fit carefully before driving the vehicle, especially with aftermarket gas tank skids, to ensure you are not rubbing.

Note: *For added clearance, trim the stock coil bucket so that it is flush with the rear of the axle. Paint exposed metal.*



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Section 3: Installation Instructions

Step 10: Install Front Upper Bar Pin Eliminator

S. Install the Bar Pin Eliminator in the upper 1/2” rod end of the Shock, and use the provided hardware. Tighten bar pin eliminator bolts using a 1/2” socket. Repeat Shock installation on other side.

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