



PRODUCT: LJ Upper Rear Long Arm Control Arms

REV: A | 02-15-2018 | II-7100

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



This is an advanced suspension install for experienced technicians; If you are not competent with advanced automotive mechanics, cutting, drilling, and welding it is recommended to have this system installed by a MetalCloak Authorized Installer.

Safety Warning: *Suspension systems or components that enhance the off-road performance of a vehicle may cause it to handle differently on or off-road than it did from the factory. Care must be taken to maintain control of modified vehicles during sudden maneuvers. Failure to drive the vehicle safely may result in serious injury or death to driver and passengers. MetalCloak recommends always wearing a safety belt, driving safely trying to avoid sudden maneuvers. As with any vehicle maintenance is required to keep it operating safely. Thoroughly inspect your vehicle before and after every off-road use.*

Installation Warning: *MetalCloak recommends that certified technicians perform the installations of MetalCloak products. These instructions only cover the installation of our products and may not include factory procedures for disassembly and reassembly of factory components.*

Read instructions from start to finish and be sure all parts are present before disassembling the vehicle. These instructions are only guidelines for installation and in no way meant as definitive. The installer is responsible to insure that the vehicle is safe for use after performing modifications.

Slip yoke eliminator and CV driveshaft is required for this Long Arm System.

Exhaust modifications are required for this Long Arm System.

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

Tape Measure



Grinder

Safety Glasses



Drill Bits

Drill



Socket Set

Angle Finder



Pitman Arm Puller

Gas Welder



HOW TO USE THIS GUIDE: The installation guide should be used as a reference 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.

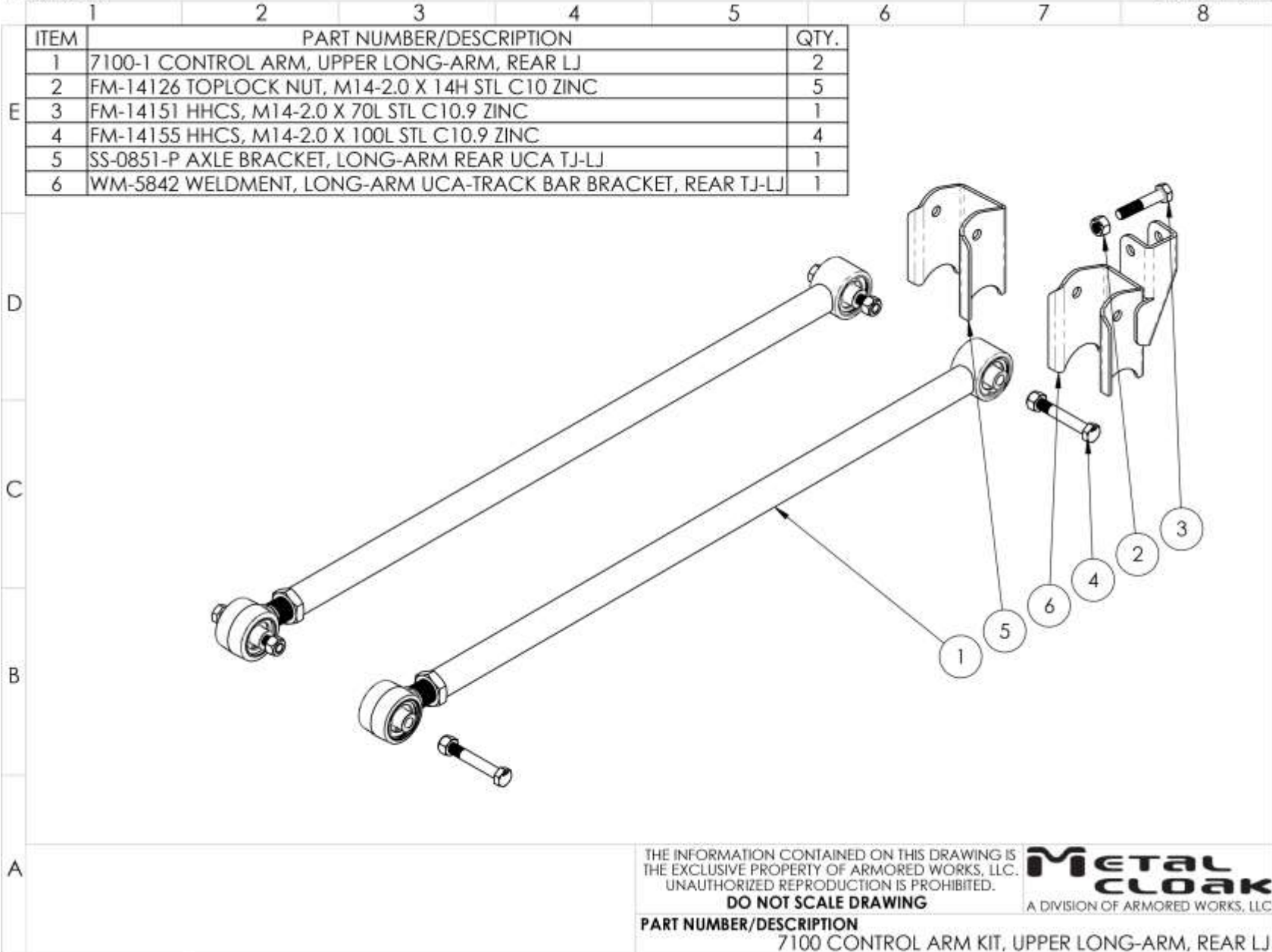
Installation Notes: Terms may be used in the body of the instructions that you may not be familiar with, if you have any questions feel free to contact us at the number below, or email techhelp@metalcloak.com

QUESTIONS: Any questions or comments about the instructions? Call us at 916-631-8071 M-F 7:00 AM – 5:00 PM PST.

Section 2: Product Components

DC-0001 REV A

SHEET 1 OF 2



Section 3: Installation Instructions



Step 1: Rear Factory Control Arm Brackets

Note: *Factory control arms should already be removed and rear axle should be properly supported by stands.*

Section 3: Installation Instructions

Step 1: Rear Factory Control Arm Brackets

- A. Remove upper factory rear control arm brackets from axle.

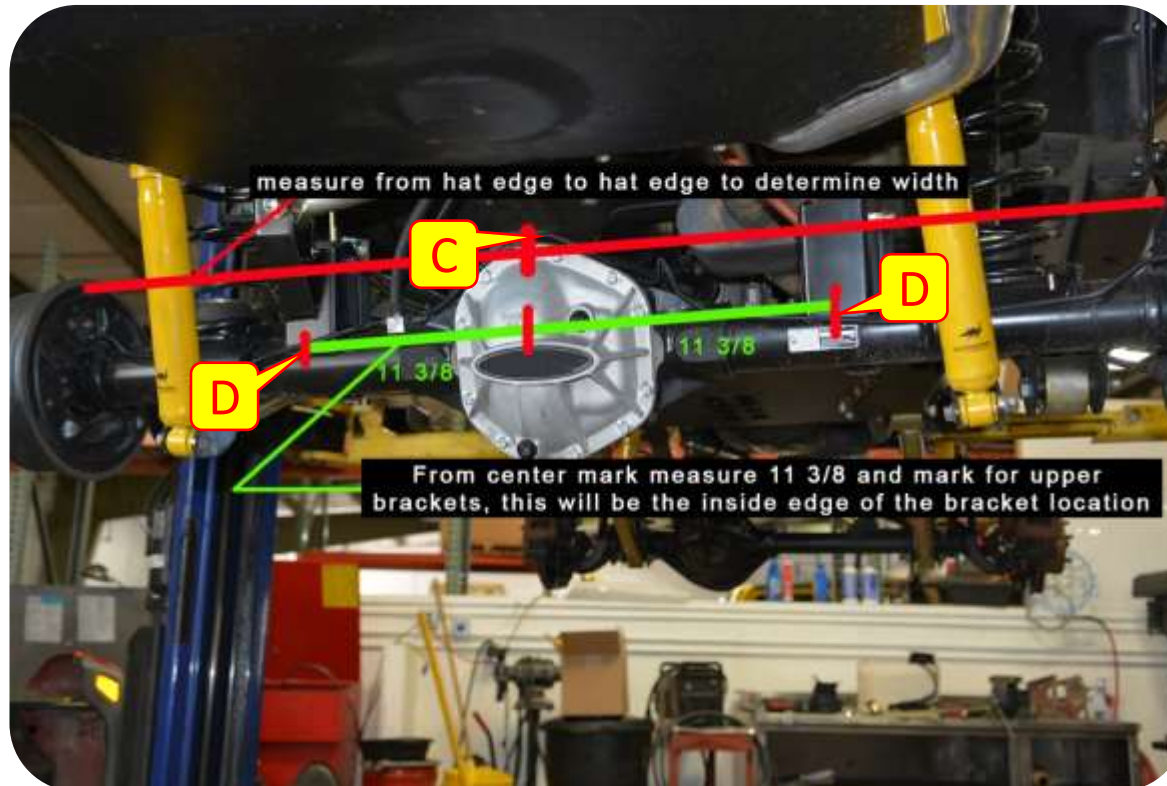


IMPORTANT NOTE: THE LOWER BRACKETS REMAIN ON THE AXLE! DO NOT REMOVE THE LOWER BRACKETS!

Section 3: Installation Instructions

Step 2: Installing Rear Control Arm Brackets

- B. Remove factory rear track bar.
- C. Measure axle width to find axle center and mark.
- D. From the axle center mark use a tape measure to measure $11\frac{3}{8}$ " out to both driver and passenger sides from the center and mark (*this will be the placement for the inside edge of the MetalCloak replacement axle brackets*).



Note: *The differential may not be the actual center.*

Section 3: Installation Instructions



Step 2: Installing Rear Control Arm Brackets



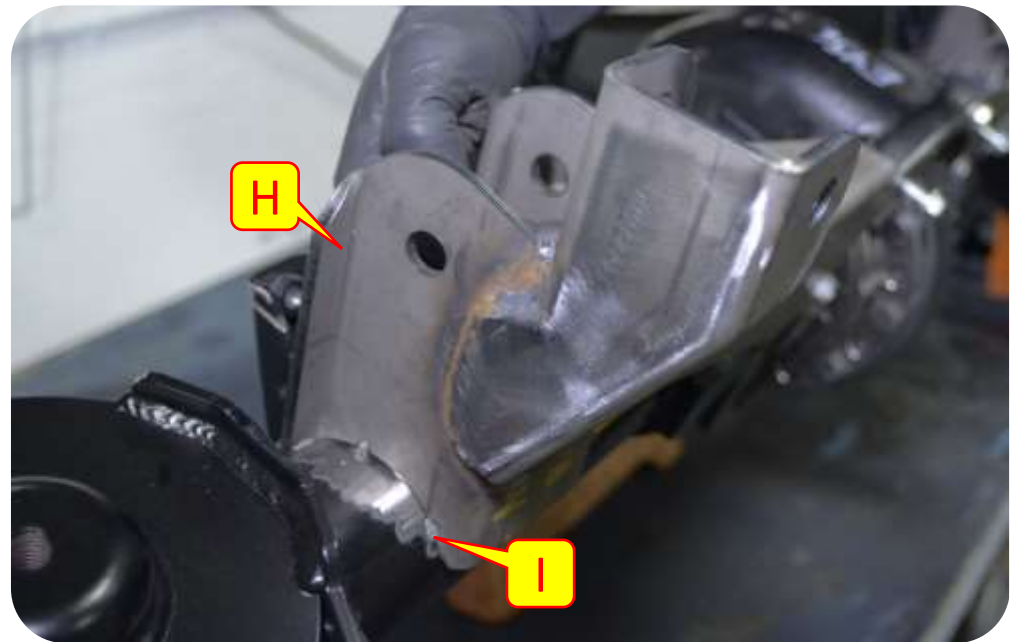
- E. Temporarily place the MetalCloak replacement axle brackets onto the mark made on step D and mark bracket location and remove replacement axle brackets.
- F. Remove any surface coating on axle to prepare for welding.

Section 3: Installation Instructions

Step 2: Installing Rear Control Arm Brackets



- G. Set the pinion of the axle to be exactly horizontal using an angle finder.
- H. Center the axle brackets at the previously marked locations.
- I. Using the angle finder rotate axle brackets 11 degrees towards the pinion and tack the brackets into place (*be sure the pinion is still horizontal before tacking*).



Section 3: Installation Instructions

Step 3: Installing Rear Control Arms

- J. Preset the MetalCloak long arm control arms. The rear lower control arms should be set to 43 ½" and the upper rear control arms should be set to 41" for reference.
- K. Loosely attach rear upper and lower control arms to the axle with provided hardware.
- L. Attach rear fixed side of track bar to axle side bracket.
- M. Install rear drive shaft.



Section 3: Installation Instructions

Step 3: Installing Rear Control Arms

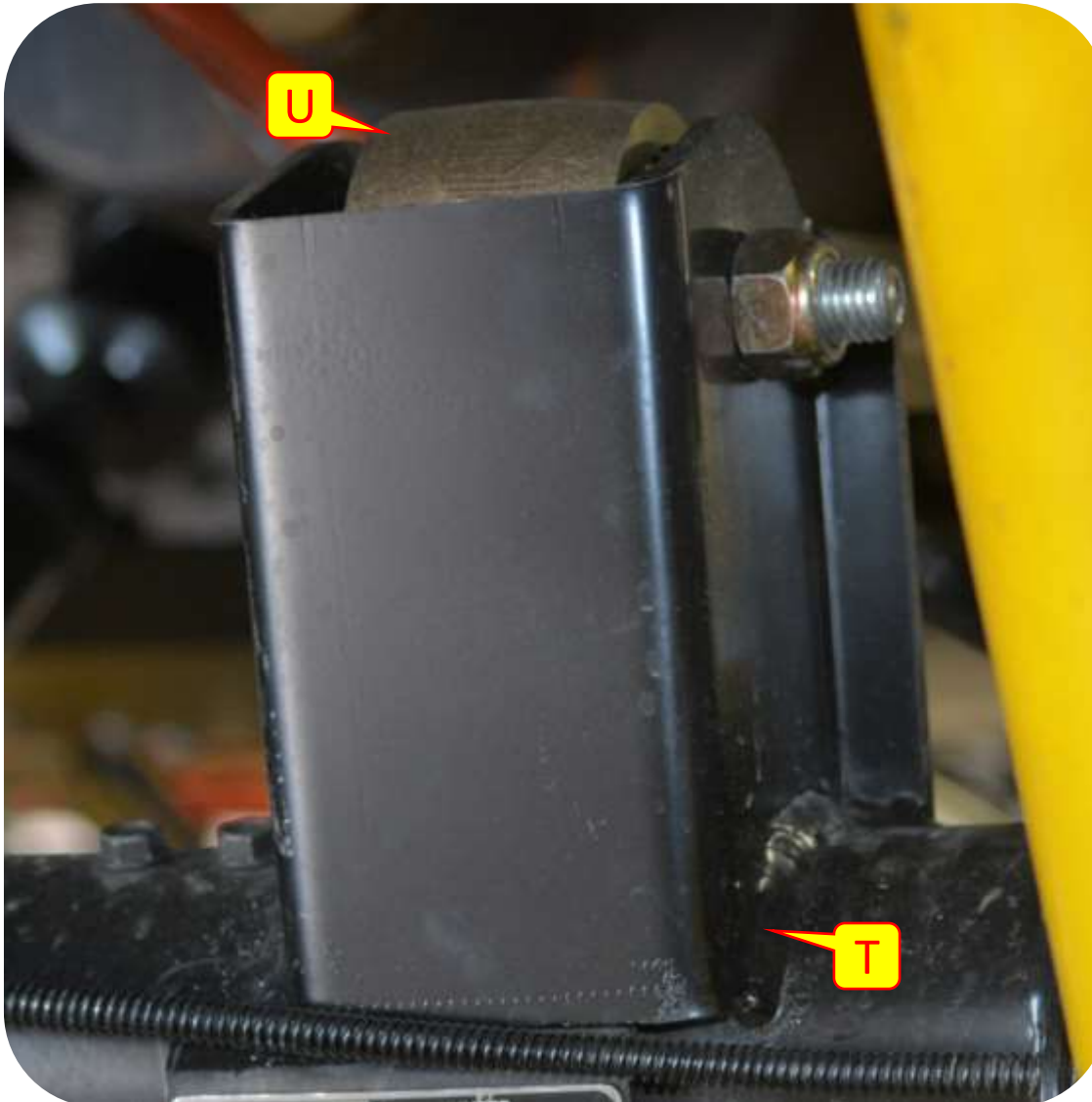
- N. Remove stands and lower Jeep onto the ground.
- O. Center vehicle over rear axle. Measuring carefully using like points on each side of the vehicle until centered.
- P. Adjust the frame side of the rear track bar to fit into the factory track bar bracket on the frame and bolt into place.
- Q. Adjust the upper control arm lengths to adjust to the correct pinion angle.
- R. When the control arm lengths have been adjusted re-lift the Jeep and support with stands.



Section 3: Installation Instructions



Step 3: Installing Rear Control Arms



- S. Remove bolts holding the rear control arms in the axle brackets and remove control arms.
- T. Weld brackets into place.
- U. Re-install the rear control arms back into axle brackets with provided hardware.

Note: Heat from welding may damage Duroflex Joints. Disconnect the rear control arms prior to welding on brackets and wait for welds to cool.

Section 3: Installation Instructions



Step 10: Tighten all hardware

Lower Jeep and Tighten ALL hardware.

