



Installation Instructions



PRODUCT: Control Arms

REV: E | 02-03-2016 | II-7105

**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/Wrench
18mm Socket/Wrench
21mm Socket/Wrench



1-1/2" Wrench
1-7/8" Wrench
(or Large Adjustable Wrench)

Socket Extension



Retaining Ring Pliers

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.

Section 1: Tools & Notes on Installation



Pre-Install 1: Assemble your Duroflex Joints.

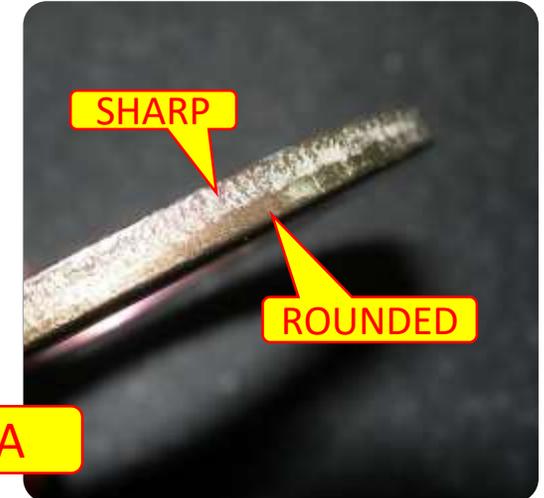
Note: MetalCloak Control Arms come pre-assembled and greased. These instructions are for optional periodic maintenance. If you have just received your MetalCloak control arms you will not have to disassemble your control arms.

Note: The 2-5/8" diameter Duroflex bushings come in two different widths; the 2-5/16" wide bushings go in the rear upper arms and the 2-5/8" wide bushings go in both of the lower arms.

- A. Install a retaining ring and washer on one side of the duroflex housing. Be sure the sharp edge of the ring and washer are oriented outward from the center of the Housing.
- B. Use the provided Synthetic Silicon/Teflon Lubricant to lightly coat the outside of the Duroflex Bushing, paying special attention to partially filling the outside diameter grooves.

Note: Once a year the bushings should be disassembled and fresh lubricant applied. Use of any other lubricant may seriously impact the life and performance of the Duroflex joints, and will void the MetalCloak warranty.

- C. Press the Bushing into the Housing, and then install the Washer and Retaining Ring on the second side.

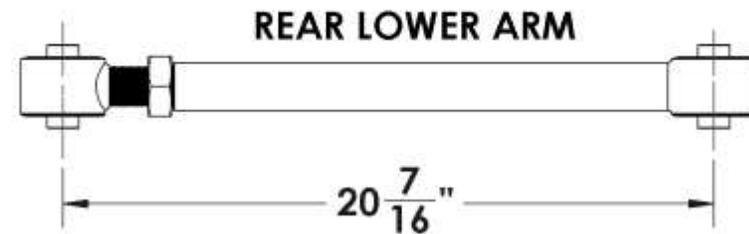
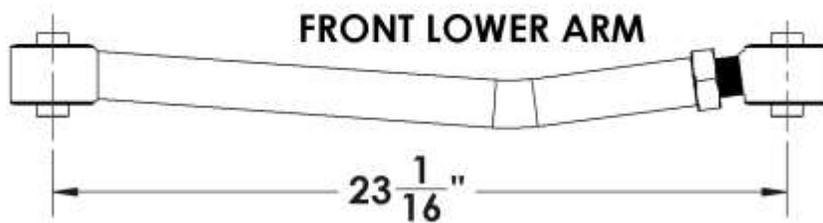
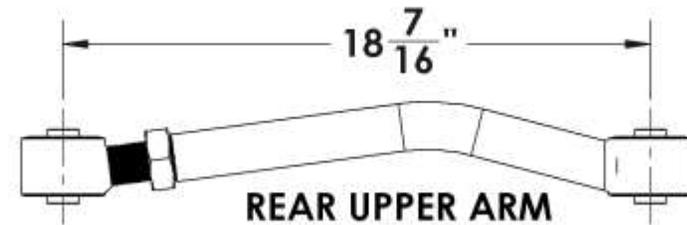
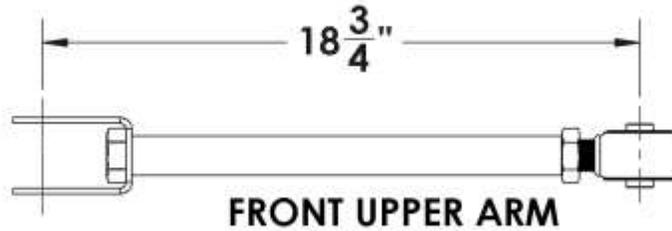


Section 1: Tools & Notes on Installation



Pre-Install 2: Set the length of the Control Arms.

Use the image below to identify and pre-set the lengths of your Control Arms. Hand tighten the Lock Nuts, for now.



		Front Control Arms		Rear Control Arms	
Castor Angle		Lower	Upper	Lower	Upper
Factory Control Arms	Stock	22 5/8"	18 3/4"	19 3/4"	17 7/16"
MetalCloak 2.5 - 3.5" Lift	5 Degrees	23 1/16"	18 3/4"	20 7/16"	18 7/16"

Section 2: Product Components



DC-0001 REV A

SHEET 1 OF 1

ITEM	PART NUMBER/DESCRIPTION	QTY.	BIN
1	FS-08125 HHCS FLANGE, 0.5-13 X 3.25L STL G8 ZINC	1	-
2	FS-08127 NYLOCK FLANGE NUT, 0.5-13 X 0.56H STL GF ZINC	1	C42
3	FS-16121 JAM NUT, 1.0-14 X 0.55H STL G5 ZINC	2	-
4	FS-20182 JAM NUT, 1.25-12 X 0.53H STL G5 GOLD ZINC	6	-
5	SS-1020 RETAINING WASHER, 10GA X 2.12 DIA	24	
6	SS-1023 RETAINING WASHER, 1.87 DIA	4	
7	SS-1030-K DUROFLEX BUSHING, 2.63D X 2.32L X .57ID	4	
8	SS-1031-K DUROFLEX BUSHING, 2.63D X 2.62L X .57ID	8	
9	SS-1032-K DUROFLEX BUSHING, 2.25D X 2.0L X .50ID	2	
10	SS-1034 FORGED 2.63IN DUROFLEX SPUD, STRAIGHT	2	
11	SS-1035 FORGED 2.63IN DUROFLEX SPUD, 7.5DEG ANGLE	4	
12	SS-1039 FORGED 2.25IN DUROFLEX SPUD, STRAIGHT	2	
13	SS-1050 INT RET RING, 2.13 BORE YEL ZINC	18	
14	SS-1051 INT RET RING, 1.87 BORE YEL ZINC	2	
15	WM-5004 WLDMNT, LOWER REAR ADJ CONTROL ARM JK	2	
16	WM-5005 WLDMNT, UPPER REAR ADJ CONTROL ARM JK	2	
17	WM-5006 WLDMNT, LOWER FRONT ADJ CONTROL ARM JK	2	
18	WM-5014 CLEVIS JOINT, UPPER CONTROL ARM JK	2	

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PART NUMBER/DESCRIPTION 7105 DUROFLEX CONTROL ARM KIT, JK

Metal Cloak
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Section 3: Installation Instructions



IMPORTANT NOTE: *To install lift components you will need to fully 'droop' your suspension in the front and rear (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.*

Section 3: Installation Instructions

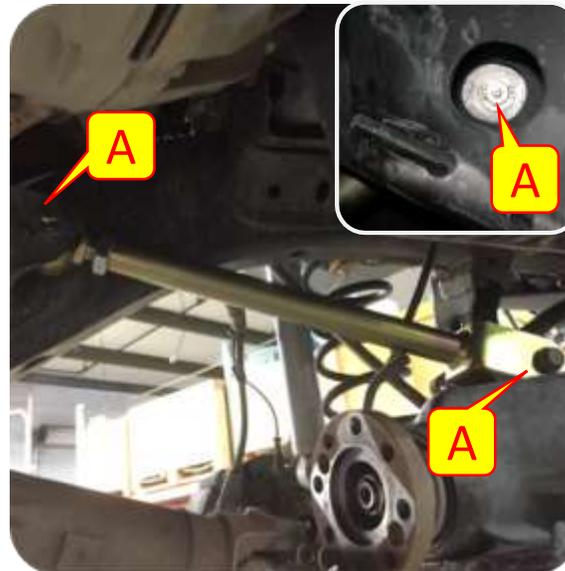


BEFORE YOU START: Replacing the stock control arms is a very straight-forward procedure, consisting of un-bolting the stock arms and reinstalling the MetalCloak control arms. You may need to unbolt other components (shocks, sway-bar links, etc.) to get enough droop out of your suspension to remove or re-install the arms. Be aware of items like brake lines or electrical locker wires so as not to stress these components as the suspension droops.

The following steps are important notes on orientation and installation, but not every step is covered (some basic knowledge is assumed). The order in which you replace the arms is not critical, but we do recommend that you swap them in pairs (i.e. both front uppers, then both rear lowers, etc.) as this maintains maximum stability of the axles during installation.

Step 1: Front Upper Arms

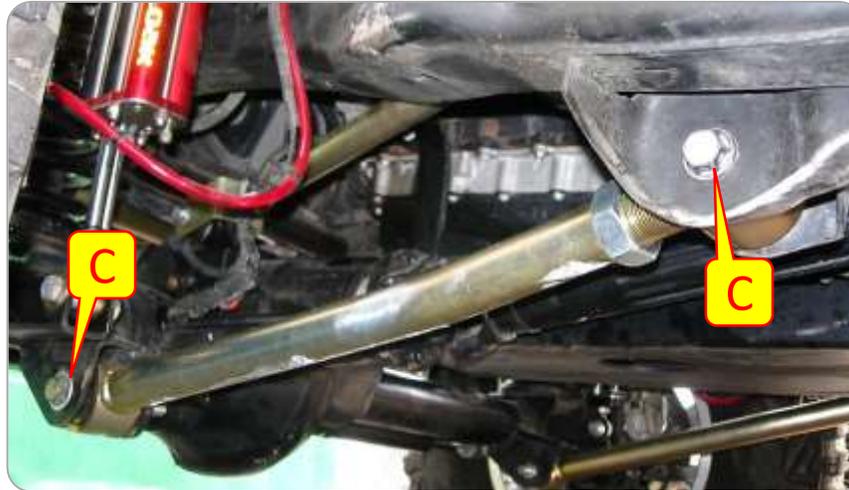
- A. Use an 18mm socket & wrench to remove the stock bolts. You will need a socket extension to access the head of the upper bolt inside the frame.
- B. The exhaust on the passenger side of some models interferes with removal of the upper bolt. Cut the stock bolt and replace it with the ½-13 x 3 ¼" flange hex head bolt and ½"-20 hex flange nut provided, install bolt from the outside of frame and the nut inside the frame.



Section 3: Installation Instructions

Step 2: Front Lower Arms

- C. Use a 21mm socket and wrench to remove the stock hardware and control arms; re-use this hardware to install the MetalCloak front lower control arms.
- D. Install the control arms so that the short bend (with the locknut) is in the rear, and the arm angles inboard to provide tire turning clearance.



Step 3: Rear Control Arms

- E. Use a 21mm socket and wrench to remove the stock hardware and control arms; re-use this hardware to install MetalCloak rear control arms. The LockNuts should be towards the front, at the frame mount for both upper and lower control arms.
- F. The MetalCloak rear upper arm should be oriented so that the bend in the arm angles inboard to provide tire clearance.

