



PRODUCT: TJ/LJ/YJ/CJ BUMPER END CAPS

REV: A | 7-14-14 | II-2100

**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.

Phase 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



7/32" Allen Drive Socket
5/16" Allen Drive Socket
3/8" Allen Drive Socket



9/16" Crescent and/or Box Wrench
3/4" Crescent and/or Box Wrench
15/16" Crescent and/or Box Wrench



9/16" Hex Drive Socket
3/4" Hex Drive Socket
15/16" Hex Drive Socket

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 call us at 916-631-8071 M-F 7:00 AM – 5:00 PM PST, or email techhelp@metalcloak.com

HOW TO USE THIS GUIDE: The installation guide contains ALL steps for installing your bumper. Please read and follow the instructions in order of each page top to bottom.

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.

TJ/LJ vs. YJ: The MetalCloak Frame-Built Bumper system works with both TJ/LJ Wranglers (97-06) and YJ Wranglers (87-96). In the instructions, you will see sections for each type of Jeep. Please follow the appropriate section for your model Jeep.

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.

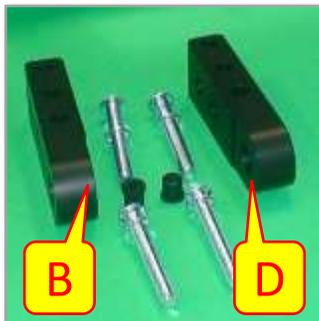
QUESTIONS: Any questions or comments about the instructions? Call us at 916-631-8071 M-F 7:00 AM – 5:00 PM PST.

Phase 2: Pre-Assembly of Bumper

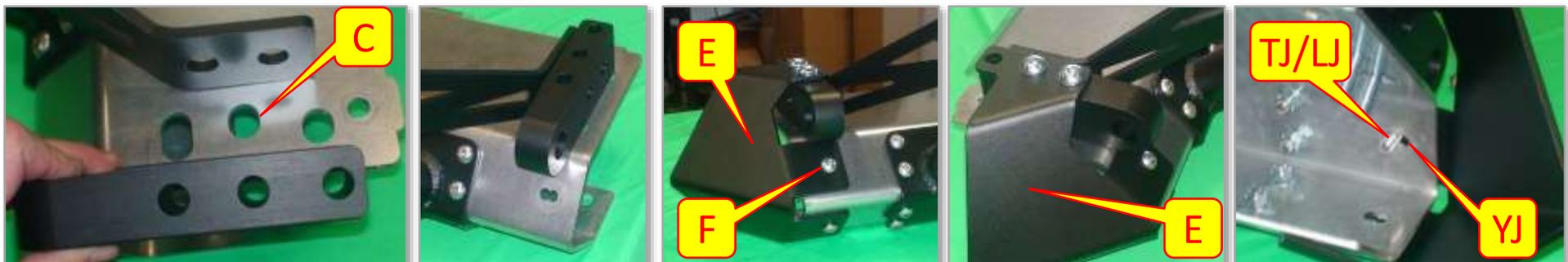
IMPORTANT NOTE: The Frame-Built™ Bumper System is designed to work with both the TJ-LJ Wrangler and YJ Wrangler. For this reason some of the holes on the Bumper Base will not be used during the installation and assembly process, dependent upon the model of your Jeep. On the front angled faces at both ends of the Bumper Base there are four holes shaped like the number 8 (A). When assembling Bumper Caps (next step) to the Bumper Base the inside portion (TJ/LJ) of the holes shaped like the number 8 are used to mount TJ-LJ Bumper Caps and the Hi-Mount Shackle Mounts. Alternatively the outside portion (YJ) of the holes shaped like the number 8 are used to mount YJ Bumper Caps and the Hi-Mount Shackle Mounts.



Step 1: Assemble Hi-Mount Bumper Caps and Hi-Mount Shackles



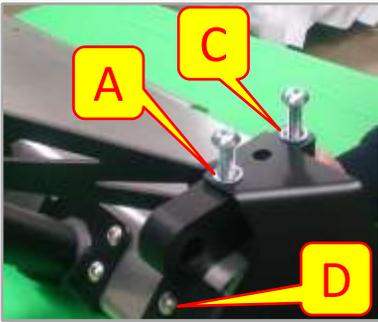
Place Hi Mount Shackles (B) into position on the top surface of Bumper Base aligning the 3 oval holes (C) on the Bumper Base with the 3 holes in Hi-Mount Shackles (B). Recessed surface (D) on Hi-Mount Shackle should face toward the center of the Jeep. Position Bumper Caps (E) as shown locating components so the three holes on the Bumper Base, Hi-Mount Shackles, and Hi-Mount Bumper Caps align. Use 3/8"-16 X 1" Socket Head Cap Screws (F), 3/8" Washers and 3/8"-16 Nylock Nuts to assemble Hi-Mount Bumper Caps (E) to the front angled faces of the Bumper Base through the holes shaped like the number 8; hand tight only at this time. *REMEMBER: (TJ/LJ) inside portion of hole (YJ) outside portion of hole.*



Phase 2: Pre-Assembly of Bumper

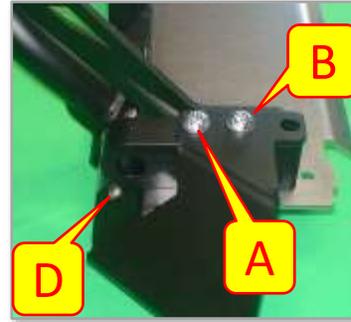
Step 1: Assemble Hi-Mount Shackles and Hi-Mount Bumper Caps (continued)

YJ OWNERS: Position top bumper mounting bolts



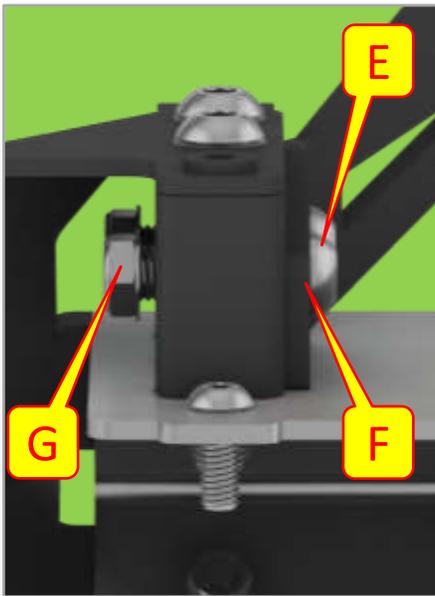
Place the 1/2"-13 X 3 1/2" Socket Head Cap Screws with 1/2" Lock Washers provided through the front most hole(A) and back most hole(C) of the Bumper Base, Upper Shackle Mounts and Bumper Caps.

TJ-LJ OWNERS: Position top bumper mounting bolts



Place the 1/2"-13 UNC X 3 1/2" Socket Head Cap Screws with 1/2" Lock Washers provided through the front most hole(A) and middle hole(B) of the Bumper Base, Upper Shackle Mounts and Bumper Caps.

YJ-TJ-LJ OWNERS: Position Mid-Stinger Support Hardware



Assemble Mid-Stinger Support Bracket to Hi Mount Shackle using 1/2"-13 X 2 1/2" Socket Head Cap Screws (E), 1/2" Lock Washer (F) and 1/2"-13 Nylock Jamb Nuts (G). Leave 1/2"-13 Nylock Jamb Nuts LOOSE (G) at this time. These will be tightened after the bumper has been installed on the Jeep.

Phase 2: Pre-Assembly of Bumper

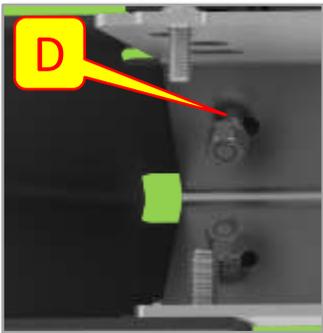
Step 2: Assemble Bumper Caps [No Hi-Mount Shackles]

Place Bumper Cap in positions shown. Re-read Step 3 of Phase 2 now... including **“IMPORTANT NOTE”** at top of that page. Locate components so that the three holes on the Bumper Base(A) and Bumper Caps(B) align.



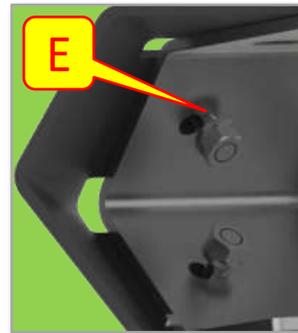
Mid-Stinger Support Flanges(C) will mount on top of Bumper Cap and align with the same three holes. Mid-Stinger Support Flanges use the ½” Oversize Washers provided.

YJ OWNERS: Position top bumper mounting bolts



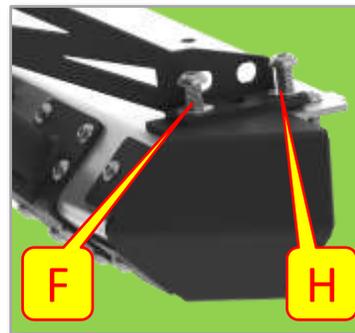
Use 3/8”-16 x 1” Socket Head Cap Screws, 3/8” Washers and 3/8”-16 Nylock Nuts to assemble Bumper Caps to Bumper Base through the holes shaped like the number 8; hand tight only . YJ uses the OUTSIDE(D) portion of holes shaped like the number 8.

TJ-LJ OWNERS: Position top bumper mounting bolts

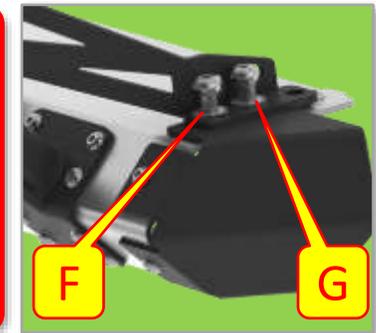


Use 3/8”-16 x 1” Socket Head Cap Screws, 3/8” Washers and 3/8”-16 Nylock Nuts to assemble Bumper Caps to Bumper Base through the holes shaped like the number 8; hand tight only . TJ/LJ uses the INSIDE(E) portion of holes shaped like the number 8.

Place the ½”-13 x 1” Torx Bolts from stock bumper through the front most hole(F) and back most hole(H) of the Bumper Base and Bumper Caps.



Place ½”-13 x 1” Torx Bolts from stock bumper through the front most hole(F) and middle hole(G) of the Bumper Base and Bumper Caps .



Phase 3: Enjoy your TJ/LJ/YJ/CJ BUMPER END CAPS



Remember to post your pic of your Frame-Built Bumper on your favorite forum and at [Facebook.com/metalcloak](https://www.facebook.com/metalcloak).

BITE BACK