



## PRODUCT: JL Wrangler Sector Shaft Brace

REV: B | 07-12-2022 | II-7690

**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

21mm Socket  
42mm Socket



21mm Box Wrench  
3/4" Box Wrench

5/16" Allen Wrench  
3/16" Allen Wrench



1/8" up to 11/16" Drill Bits

Drill



**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).

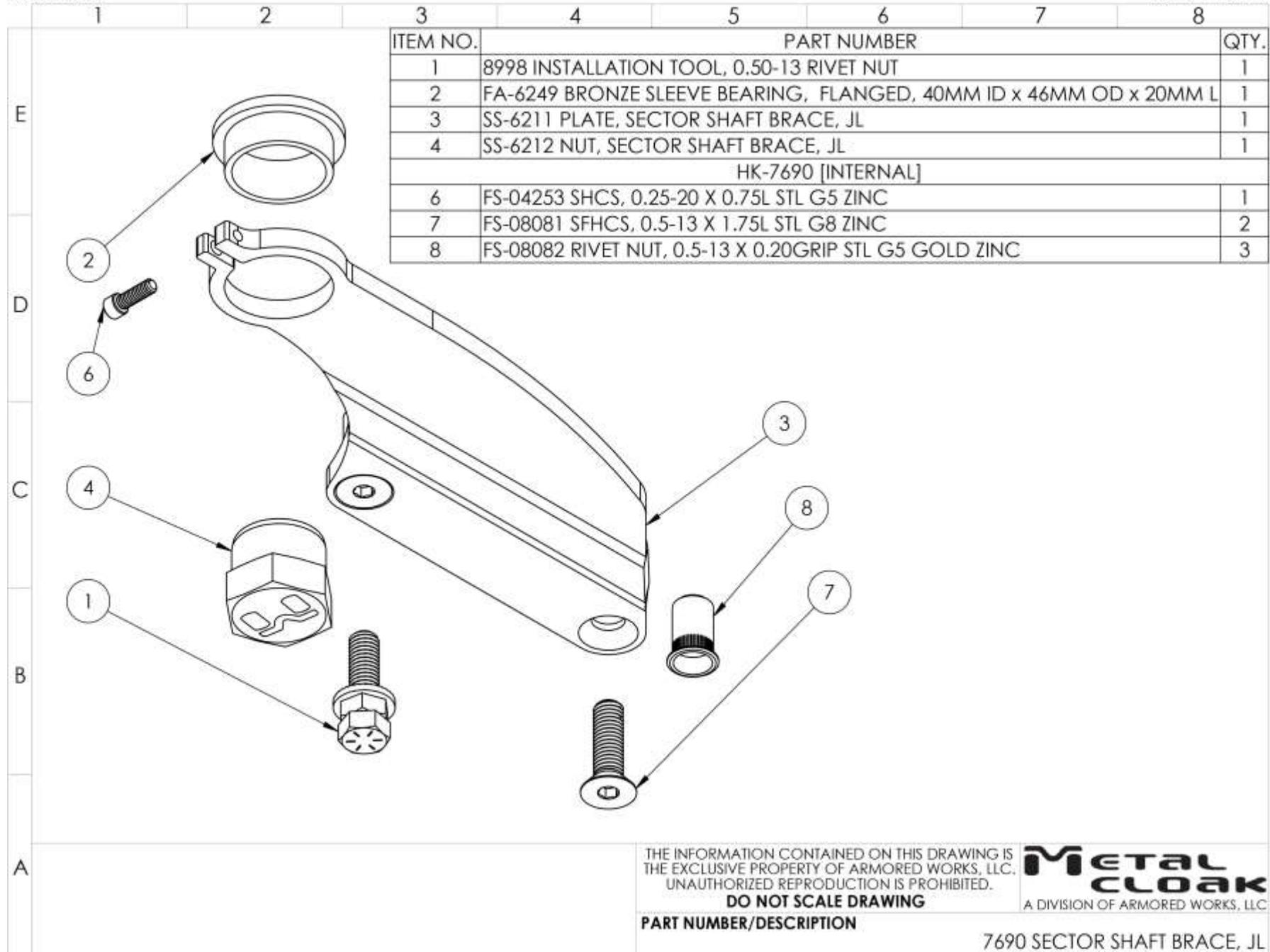
**Options:** Because of the number of component options we offer, these instructions may contain steps that will not match your particular configuration. You can skip these steps.

**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](mailto: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



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**METALCLOAK**

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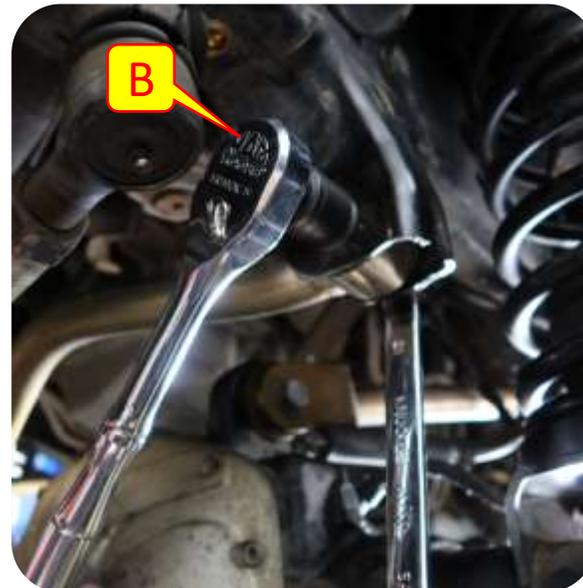
**PART NUMBER/DESCRIPTION**

7690 SECTOR SHAFT BRACE, JL

## Section 3: Installation Instructions

### Step 1: Component Removal

- A. Start by turning wheels all the way to the passenger side.
- B. Remove the track bar using a 21mm socket and wrench.
- C. Remove the pitman arm nut using a 42mm socket, leave the pitman arm installed.

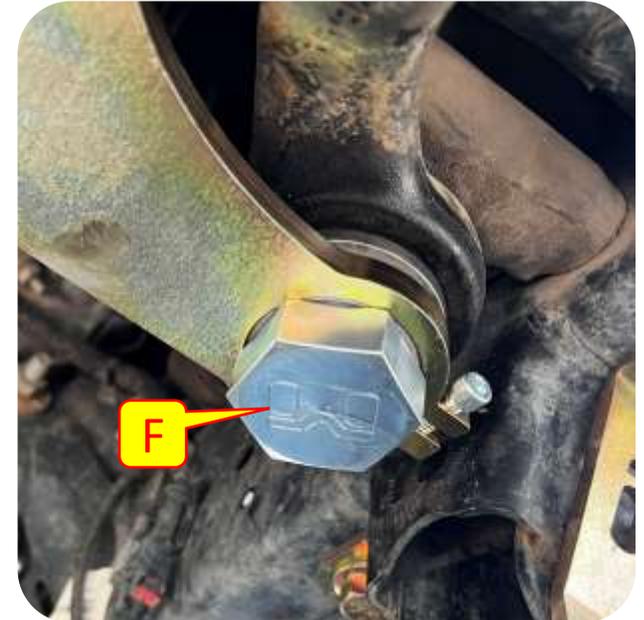
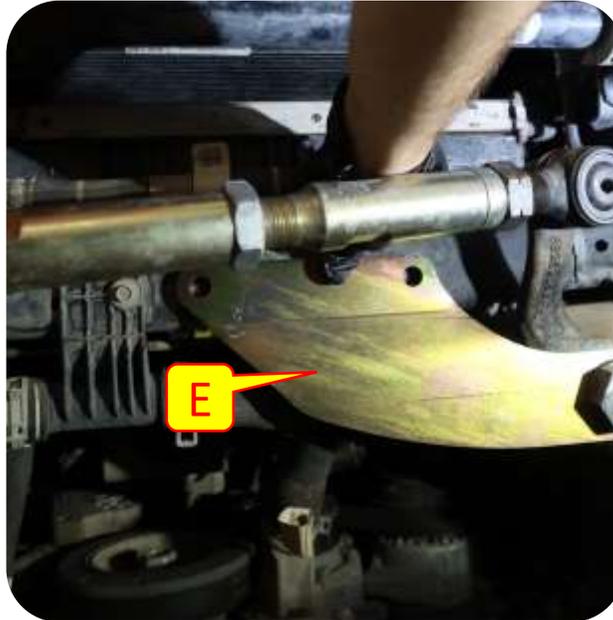


## Section 3: Installation Instructions

### Step 2: Sector Shaft Bracket Preparation

**Note:** If installing the sector shaft bracket onto a diesel JL Wrangler or JT Gladiator install the bronze bushing with the flange on the underside of the bracket.

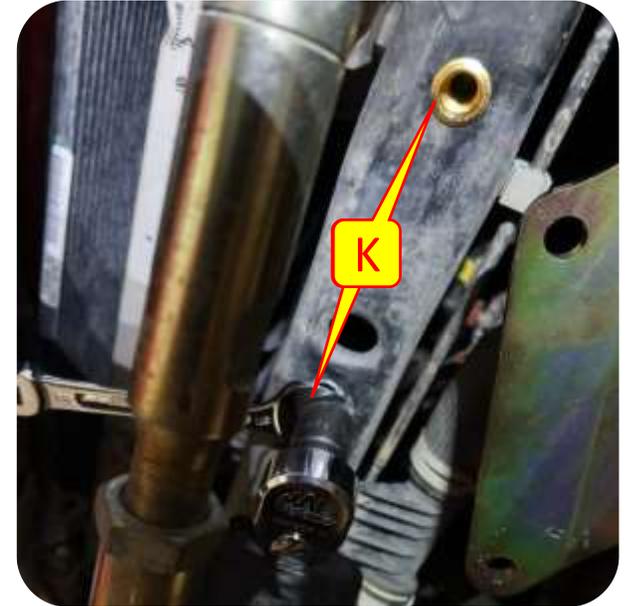
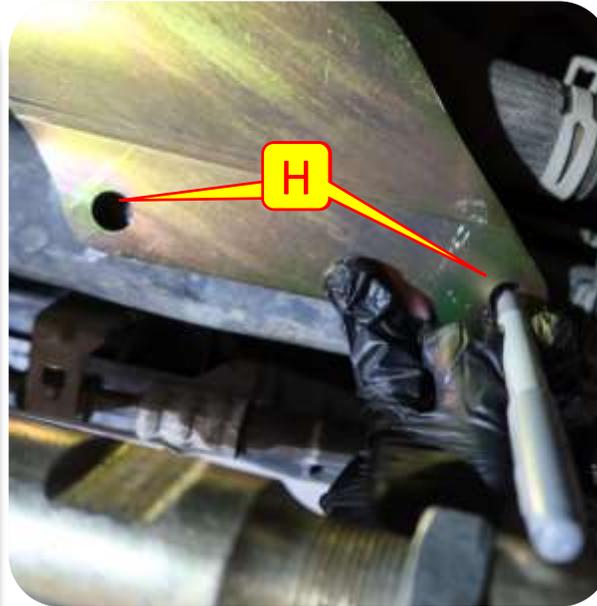
- D. Install the bronze bushing so that the flange rests on top of the reinforcement plate.
- E. Place the reinforcement plate over sector shaft with flange (*with bushing on the topside*).
- F. Install the supplied pitman arm nut through the bore of the bronze bushing and onto the sector shaft hand tight.
- G. Place reinforcement plate onto the bottom of the core support, leaving at least 1/8" space between the plate and pitman arm.



## Section 3: Installation Instructions

### Step 2: Sector Shaft Bracket Preparation

- H. Mark the hole locations where the reinforcement plate meets the core support.
- I. Remove the pitman arm nut and reinforcement plate.
- J. Drill the marked hole locations starting with a small drill bit and increase in size until you've reached an 11/16" size drill bit.
- K. Place the rivet nuts inside the drilled-out holes and install them using the installation tool provided (or other installation tool if you have one).



## Section 3: Installation Instructions

### Step 3: Sector Shaft Bracket Installation

- L. Install reinforcement bracket with bushing and loosely install mounting hardware into the rivet nuts.
- M. Add red Loctite into the pitman arm threads and install the pitman arm nut tight using a 42mm socket. Torque to 184 ftlbs.
- N. Tighten down the hardware in core support using a 5/16 Allen (*57ftlbs*).
- O. Install pinch bolt into the reinforcement bracket and tighten down using a 3/16 allen wrench (*76inlbs*).
- P. Cycle the steering and verify smooth operation as well as clearance between the plate and pitman arm.

