



METALCLOAK

INSTALLATION INSTRUCTIONS

PRODUCT: YJ ARCHED & OVERLINE TUBE FENDERS

REV: D | 7-14-10 | II-2211

READ INSTRUCTIONS IN FULL BEFORE INSTALLATION.

QUESTIONS? CALL 916-631-8071 M-F 8:00 AM – 5:00 PM PST

These instructions are for both the 87-90 carbureted YJ and the 91-96 fuel injected model. Though the flares are identical, there will be slight differences in the reinstallation of stock components, as well as the modification of the battery tray. Take care to follow the correct instructions concerned these steps.

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



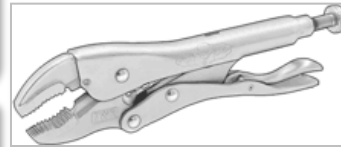
5/32" Allen Drive Socket or Wrench
7/32" Allen Drive Socket or Wrench



5/8" Crescent and/or Box Wrench
7/16" Crescent and/or Box Wrench
10mm Crescent and/or Box Wrench
13mm Crescent and/or Box Wrench
15mm Crescent and/or Box Wrench



13mm Hex Drive Socket



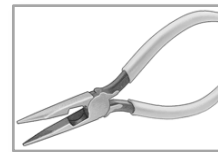
Vice Grips



Flat Head Screwdriver



8mm Nut Driver



Needle Nose Pliers

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 8:00 AM – 5:00 PM PST, or email techhelp@metalcloak.com

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

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.

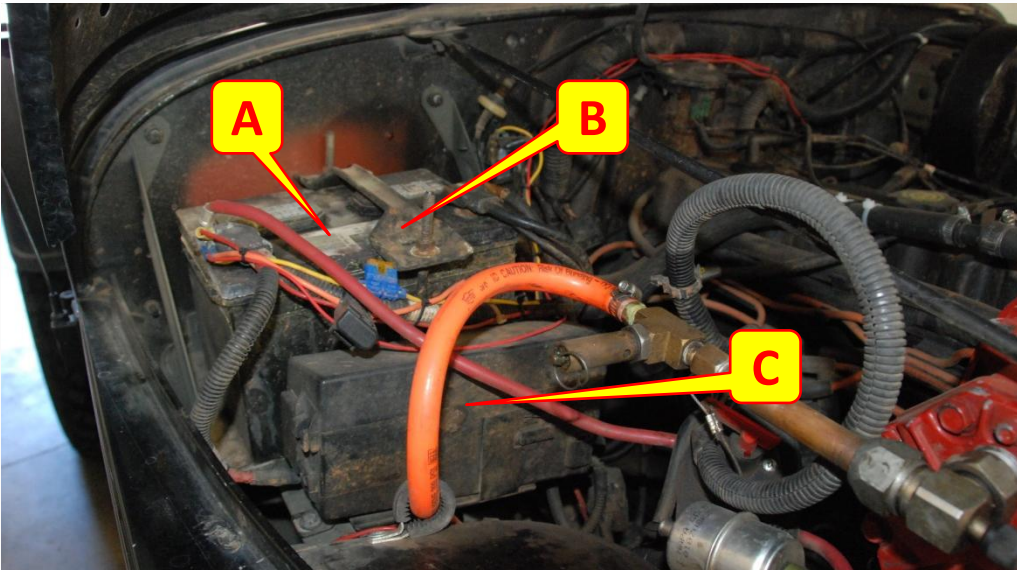
QUESTIONS: Any questions or comments about the instructions? Call us at 916-631-8071 M-F 8:00 AM – 5:00 PM PST.

While we design and plan for most contingencies, there are occasions the equipment under your hood may be different based on different configurations and years. In anticipation of such a contingency, our inner fender wells are made of aluminum, so it will be easy for you to take a standard household drill and punch any necessary holes into the fender well. We ask that you provide feedback and send pictures if you find any part of our instructions that do not match your particular Jeep. And if you have any difficulties at all, please feel free to give us a call. Our instructions can only be as good as the feedback we receive from our growing list of customers.

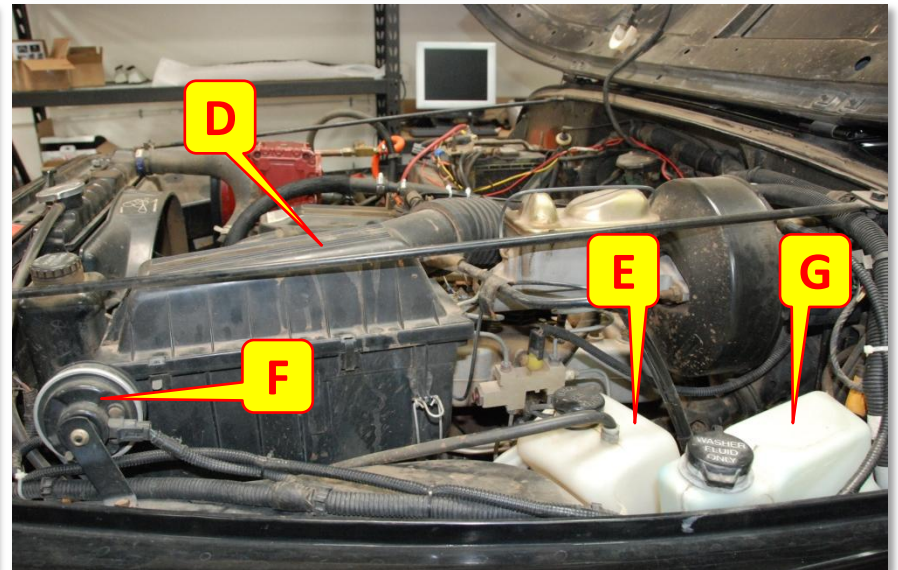
Phase 1: JEEP Preparation

Step 1: Remove Factory Equipment

Locate the Battery(A) and the Positive and Negative terminals. Loosen and remove the Positive Terminal BEFORE removing the Negative Terminal. Loosen battery hold-down Bracket(B). Carefully remove battery and set aside on a flat surface. Remove the fuse box(C)

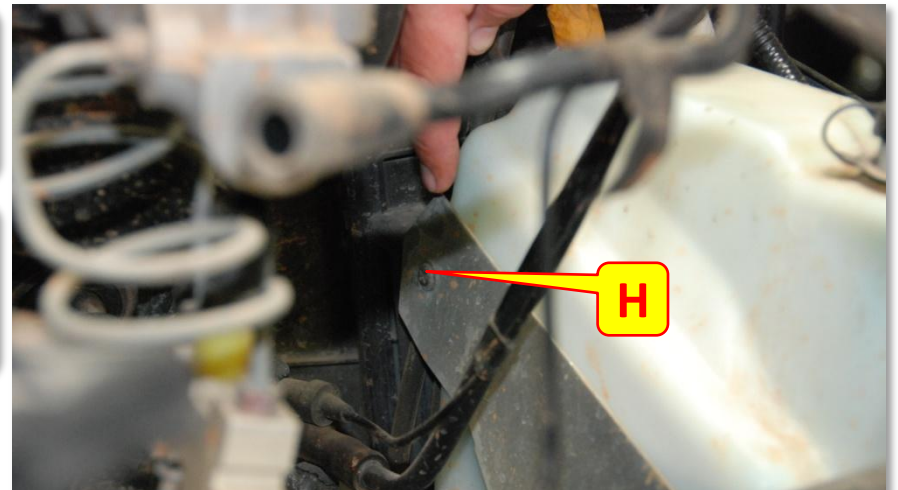


Remove all components attached to inner fender well including air intake and intake bracket (D), radiator coolant(E), horn(F), battery tray, washer reservoir(G), and then washer reservoir bracket(H)



Although many inner fender well components will be remounted using supplied hardware, keep all stock hardware throughout installation.

Carbureted YJ owners will notice a difference in the location and presence of components in the inner fender well. Simply remove all components and save all stock hardware.



Phase 1: JEEP Preparation

Step 2: Remove Stock Fenders

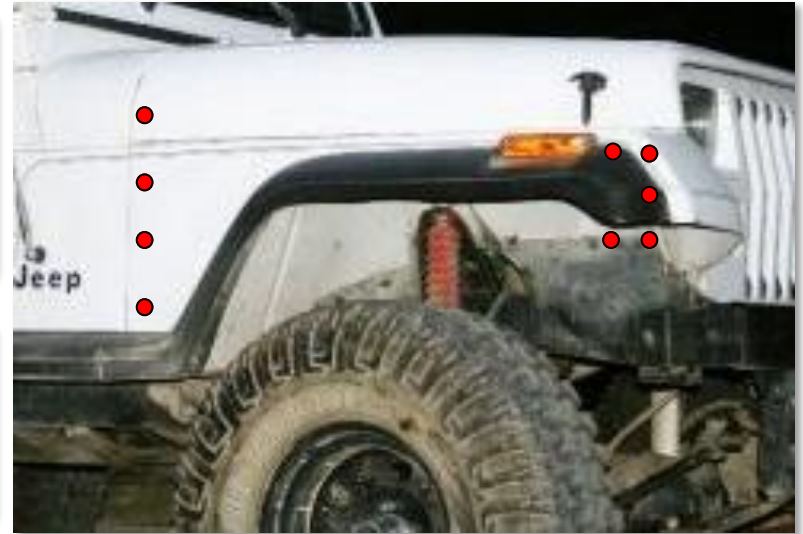
Unbolt and remove lower fender tubes. (2 tubes per side; tubes will not be re-used)



Unbolt and remove fenders using a 13mm socket. There should be 19 bolts total for each fender

● 13mm Bolts

Save **ALL** Hardware throughout installation for installation of your new MetalCloak Fenders



Step 3: Remove Battery Tray and Modify

Remove battery tray from jeep. Save ALL clips/bolts for reinstallation

87-90 Carbureted Owners

Trace outer rim of battery tray and cut to size.



91-96 Fuel Injected Owners

Measure $\frac{1}{2}$ " from the top hole and draw straight cut line. Cut tray bracket to size.



With the fenders now removed, remove the air filter mount from stock fender. With a $\frac{3}{16}$ " bit, drill out three rivets from stock fender and remove the bracket. Bracket will be reinstalled with supplied hardware

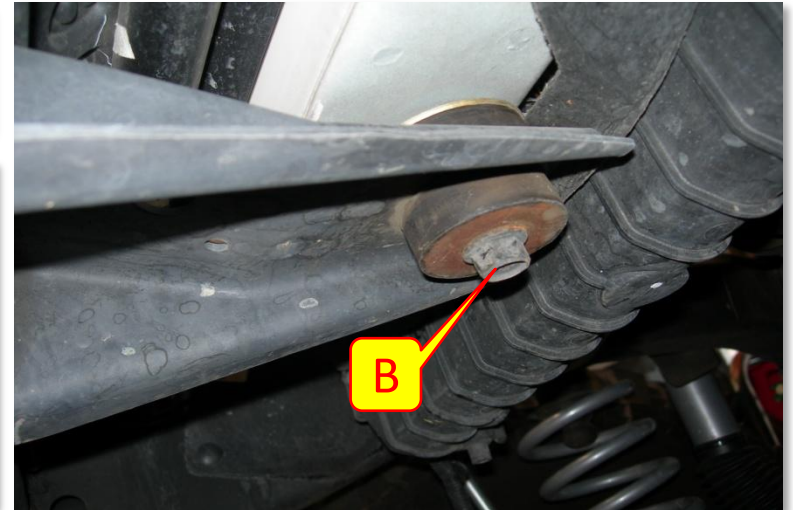
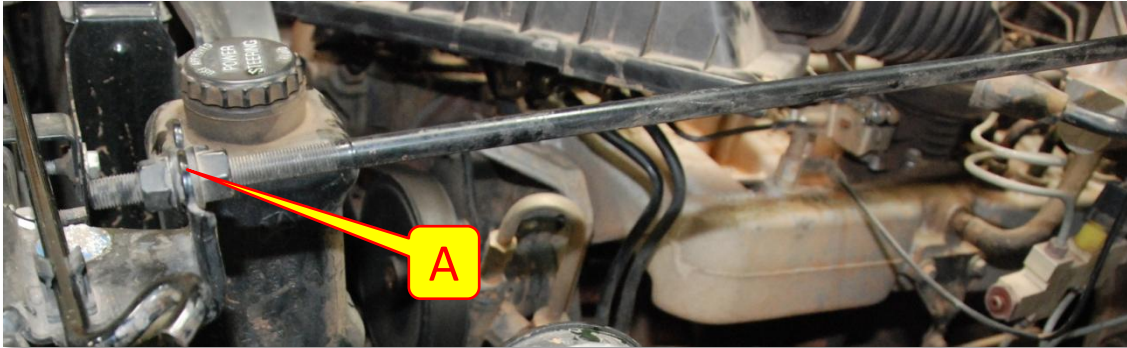
▲ Rivets



Phase 1: JEEP Preparation

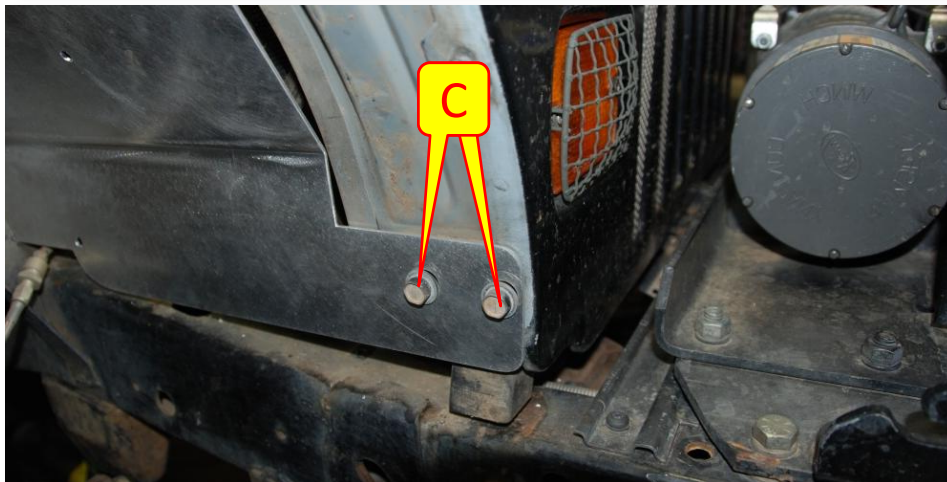
Step 4: Loosen Grill

Loosen 3 grill mounting points(A). The last bolt(B) is on the center of the grill on the bottom

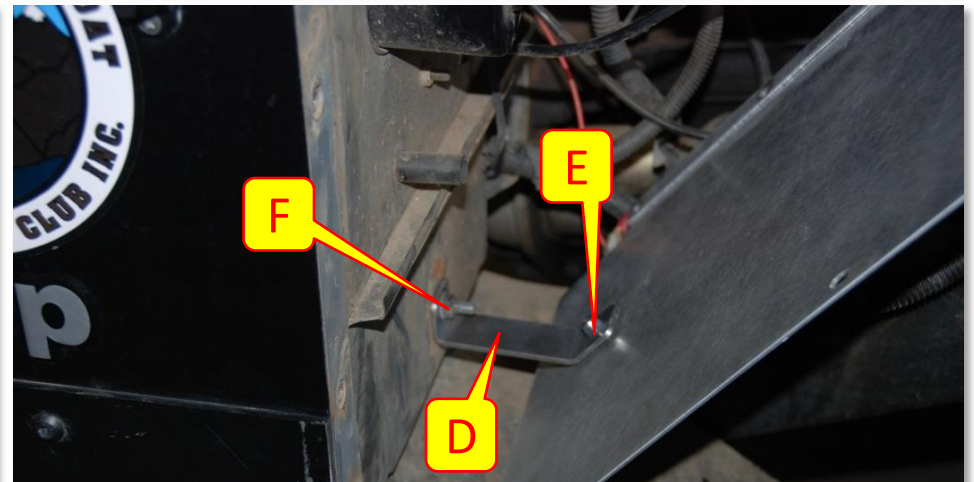


Step 5: Mount MetalCloak Inner Fender Wells

Install the MetalCloak inner fender wells by threading the two front grill bolts(C) using the original hardware. Snug these two bolts up but DO NOT full tighten



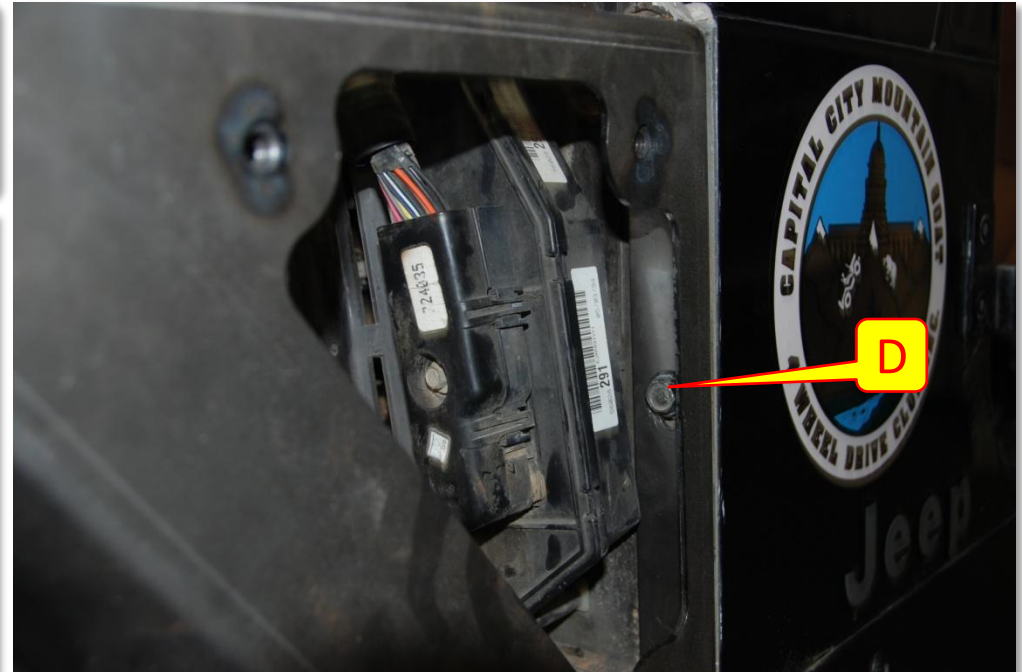
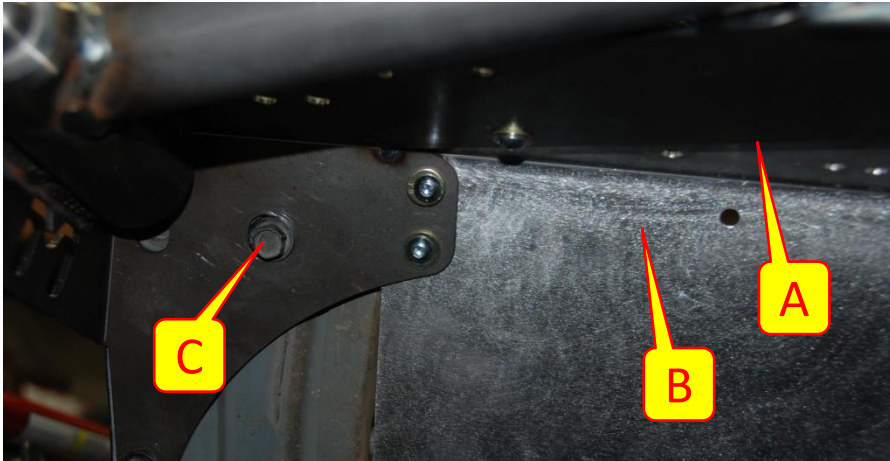
Mount the rear support bracket(D) to the inner fender using the supplied 1/4" hardware(E). Slide support bracket over protruding screw from jeep body and secure using stock hardware (F)



Phase 2: Installation of Fenders

Step 6: Install MetalCloak Fenders

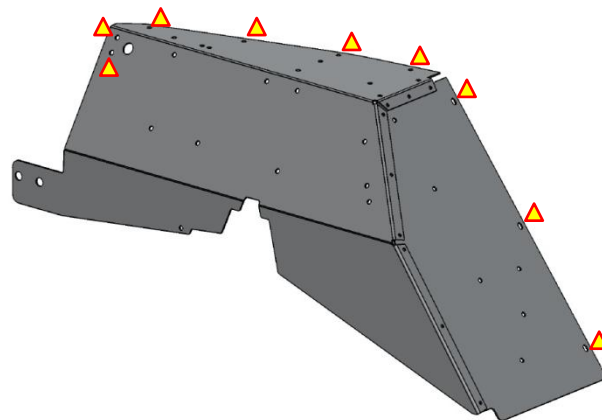
- Mount fender frame(A) under fender wall(B)
- Use one grill bolt(C) and one tub bolt(D) to hold in place
- Insert remaining fender bolts but DO NOT fully tighten yet.



Step 7: Attach Fender Wall to Fender Frame

Using the supplied ¼" hardware (9 sets per side) attach the fender wall to the fender frame. Inset screws on the underside when attaching.

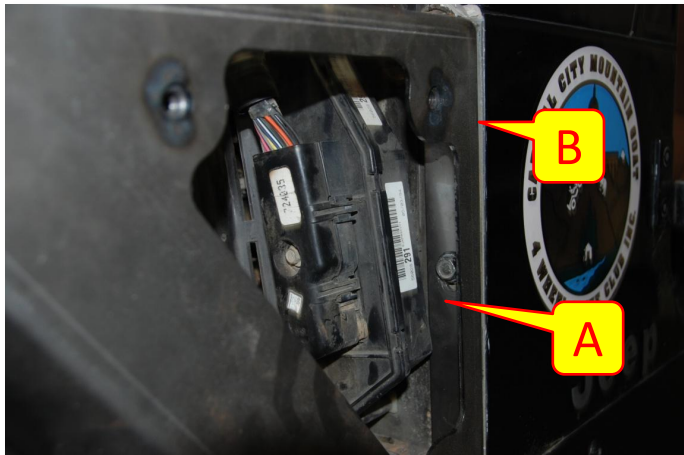
▲ Bolt locations



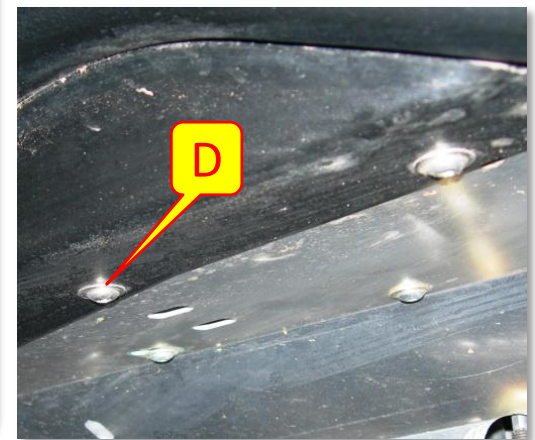
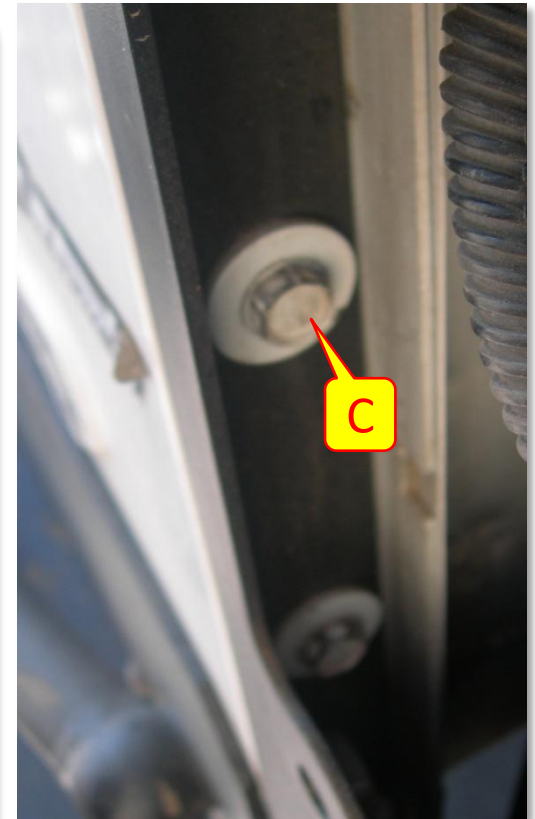
DO NOT tighten yet

Phase 2: Installation of Fenders

Step 8: Align and Tighten Fenders

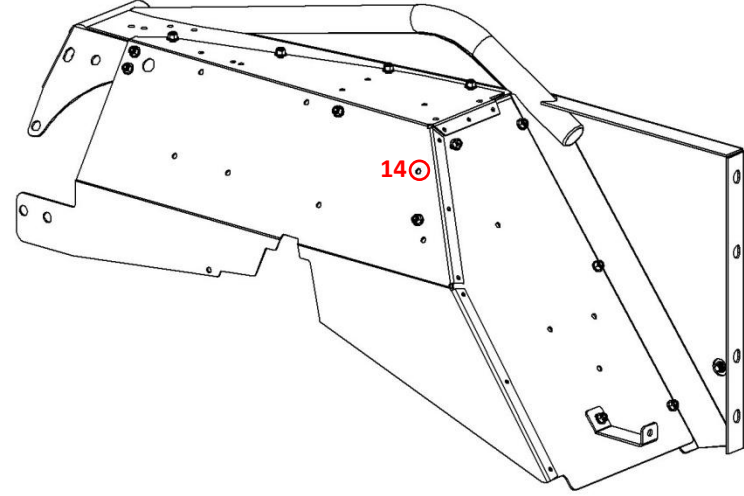
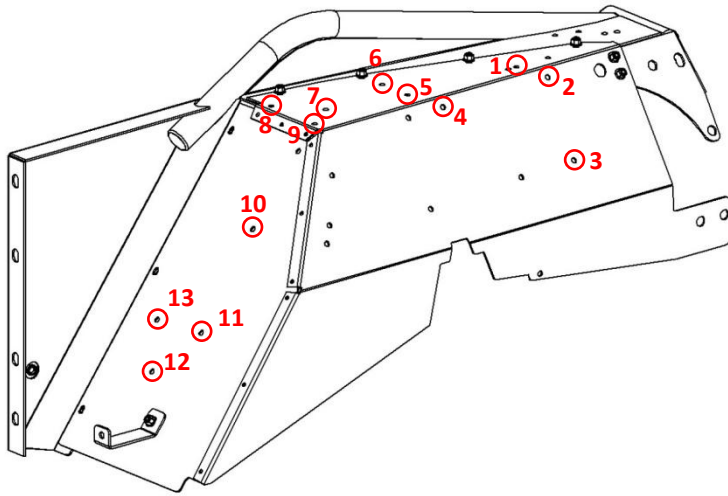


- A. Tighten the tub bolts(A) so that the fender frame can still move but is not loose(B).
- B. Fully tighten one of the center tub bolts(C).
- C. Line up the side of the fender with the side of the tub and then tighten the other center bolt.
- D. Once both center bolts are tight, tighten the top and bottom tub bolts.
- E. At this time tighten the button head cap screws(D) that hold the inner fender to the fender frame.
- F. Push down on one side of the grill(E) so that the fender's grill mount on that side touches the frame, then tighten the front fender frame bolts.
- G. Push the front of the inner fender(F) towards the engine to maximize room between it and the sway bar, then tighten the front inner fender bolts.
- H. Tighten grill mounts (two on top of grill, one on bottom underneath center of grill).
- I. Repeat steps "A-H" on the other side.



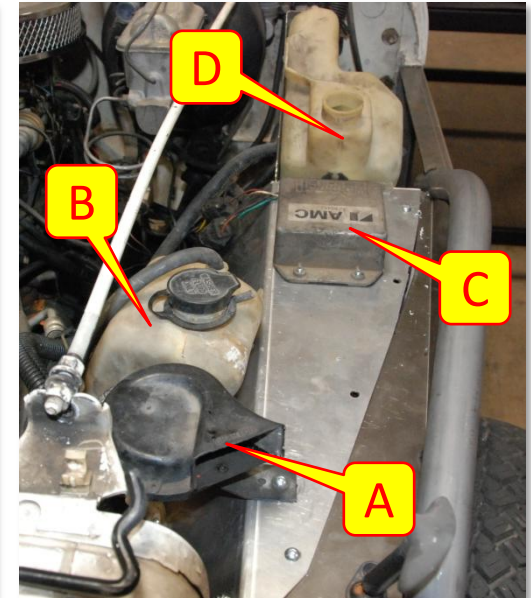
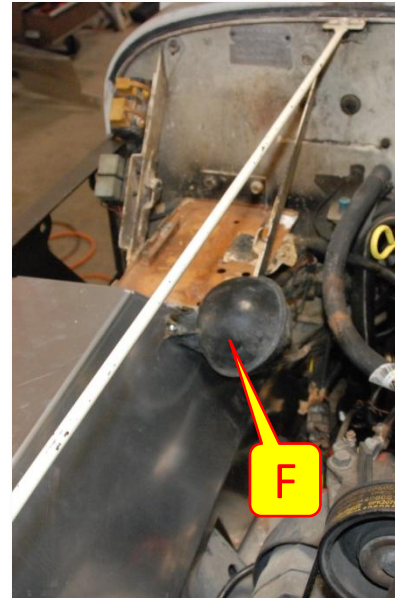
Phase 3: Reinstall Factory Components **1986-90 ONLY**

Step 9: Remount Factory Components (1991-97 Fuel Injected owners see next page)



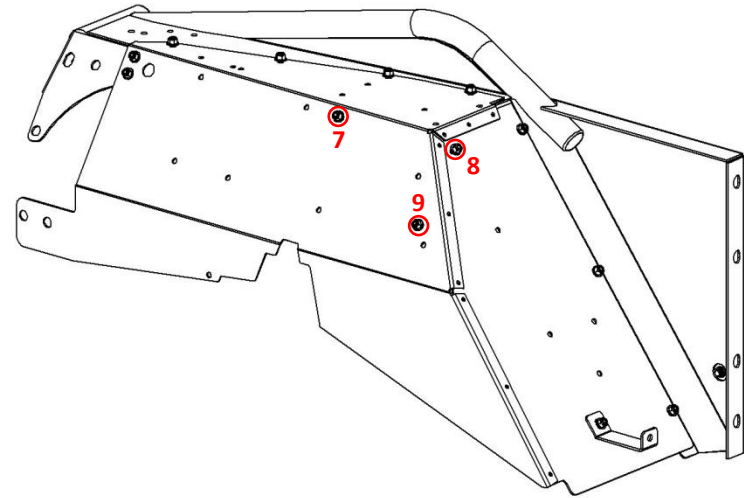
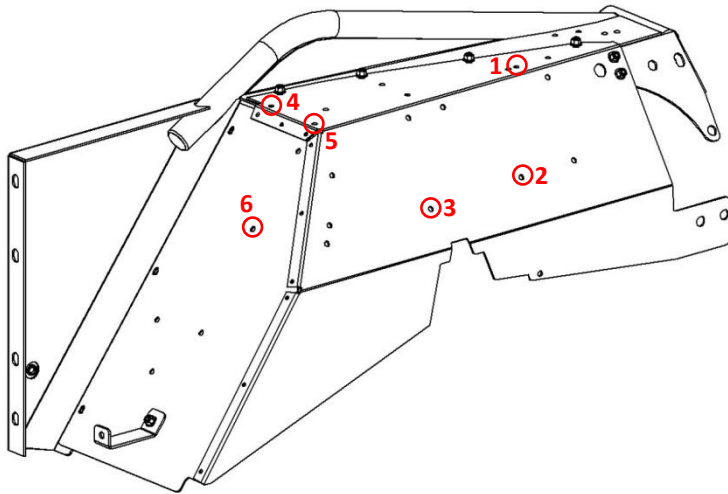
Remount factory components to fender wells using supplied ¼" hardware.

- a) Horn (hole 1)
- b) Coolant (holes 2-4)
- c) Computer (5-7)
- d) Windshield Fluid Bracket(holes 8-10) Bracket tabs may need to be bent to fit MetalCloak Fender Wells. Mount fluid reservoir to bracket using stock hardware.
- e) Charcoal Canister Bracket (holes 11-13) (under windshield fluid bracket)
- f) Vacuum Chamber (Hole 14)



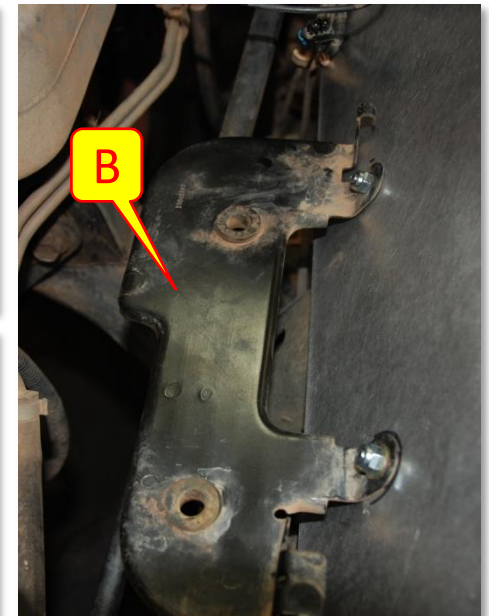
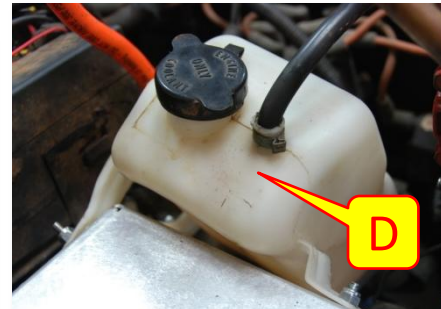
Phase 3: Reinstall Factory Components 1991-97 ONLY

Step 9: Remount Factory Components (1987-90 Carbureted owners see previous page)



Remount factory components to fender wells using supplied ¼" hardware.

- Horn (hole 1)
- Air Filter bracket (holes 2-3) Mount air filter to bracket using stock hardware
- Windshield Fluid Bracket(holes 4-6) Bracket tabs may need to be bent to fit MetalCloak Fender Wells. Mount fluid reservoir to bracket using stock hardware
- Coolant Reservoir (7-9) **NOTE:** hose may need to be repositioned.
- Optional: Depending on your jeep configuration, you may have additional components (AC, etc). The extra bolt holes provide locations for these components or for a different configuration than the one shown

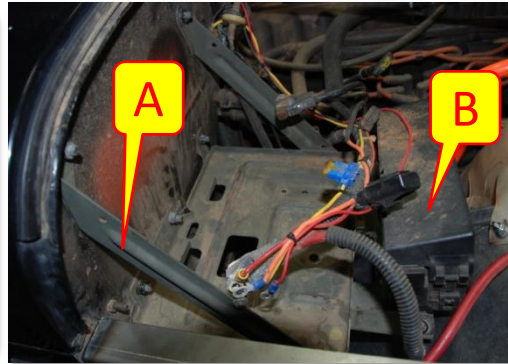


Phase 3: Reinstall Factory Components

Step 10: Reinstall Battery

Reinstall Battery Bracket and Fuse Box

- A. Mount battery bracket(A) using original hardware
- B. Mount fuse box(B) using original hardware



Reinstall Battery

- A. Place battery on battery tray
- B. Secure battery using factory bracket
- C. Reconnect negative battery cable and then positive.

Step 11: Install Access Panel and Hood Latches

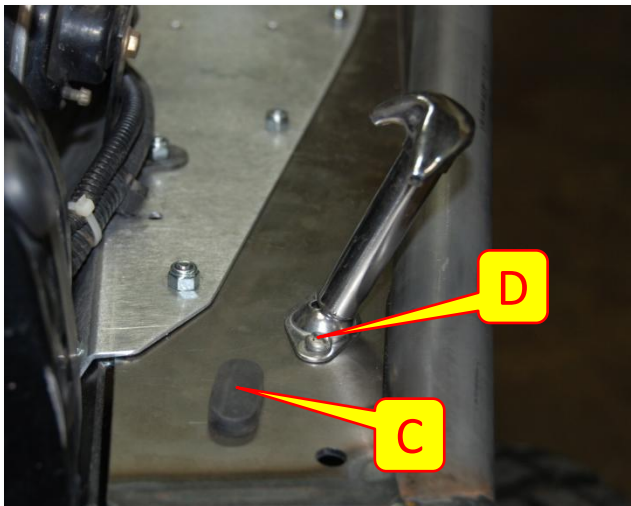
Insert Hood Latches

- A. Insert rubber stops(C) and pull snug with pliers
- B. Mount and bolt down hood latches(D). Be sure to adjust before tightening

Clean Up

- A. Fasten all loose wires with zip ties
- B. Tighten grill mounts
- C. Send us some pictures of your final install

Enjoy your new MetalCloak Fenders!
We'd love to hear any questions or comments you have about our product.
(916) 631-8071 M-F 8-5



| | | | | | | | | |
|---|------|--|---|-------------------------|-----|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | ITEM | PART NUMBER/DESCRIPTION | | | QTY | <div>NOTES:</div> <div>1) USE ANTI-SEIZE ON ALL STAINLESS STEEL FASTENERS</div> | | |
| | 1 | WM-0107 WELDMENT, FENDER YJ | | | 1 | | | |
| | 2 | WM-0107-P WELDMENT, FENDER YJ | | | 1 | | | |
| E | 3 | WM-0108 WELDMENT, FENDER WELL YJ | | | 1 | | | |
| | 4 | WM-0108-P WELDMENT, FENDER WELL YJ | | | 1 | | | |
| | 5 | CP-0130 BRACKET, FENDER WELL-TUB YJ | | | 2 | | | |
| | 6 | FA-0011 SBHCSCREW, .25-20x.75L 18-8 SS | | | 29 | | | |
| | 7 | FA-0010 HEX NYL LOCKNUT, .25-20 (.31 H) 18-8 SS | | | 31 | | | |
| | 8 | FA-0008 WASHER, .28ID X .62OD X .051TH 18-8 SS SAE | | | 60 | | | |
| | 9 | FA-0004 SCKT BTN SCREW, .375-16x.75L 18-8 SS | | | 4 | | | |
| | 10 | FA-0030 SBHCSCREW, .25-20 x 1L 18-8 SS | | | 1 | | | |
| D | | | | | | | | |
| C | | | | | | | | |
| B | | | | | | | | |
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| A | | | | | | | | |
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| REVISION | | [B][DHP][06/09/10] | | PART NUMBER DESCRIPTION | | 2211 FENDER, ASSEMBLY, YJ | | |