



PRODUCT: TJ/LJ ARCHED & OVERLINE TUBE FENDERS

REV: F | 09-10-20 | II-2210-2214

READ INSTRUCTIONS IN FULL BEFORE INSTALLATION.

QUESTIONS? CALL 916-631-8071 M-F 8:00 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



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

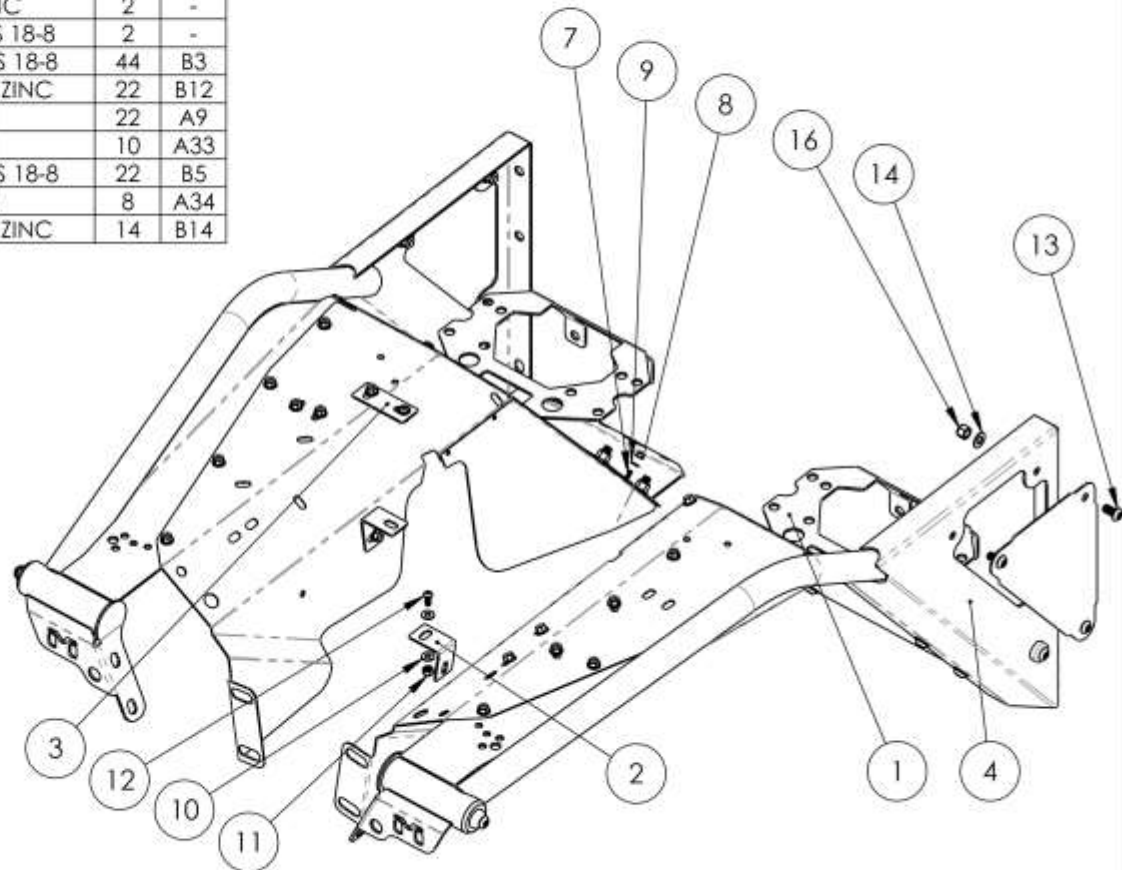
Installation Notes: Terms may be used in the body of the instructions that you may not be familiar with, if you have any questions feel free to call us at 916-631-8071 M-F 8:00 AM – 5:00 PM PST, or email techhelp@metalcloak.com

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.

ITEM	PART NUMBER/DESCRIPTION	QTY.	BIN
1	CP-0026 BATTERY MOUNT, FENDER TJ-LJ	2	
2	CP-0027 AIRBOX ANGLE BRACKET, FENDER TJ-LJ	2	A51
3	CP-0030 AIRBOX FLAT BRACKET, FENDER TJ-LJ	1	A52
4	WM-0007 WELDMENT, FENDER TJ-LJ	1	
5	WM-0007-P WELDMENT, FENDER TJ-LJ	1	
			HK-2210
7	FS-01018 SFHCS, 8-32 X 0.75L SS 18-8 PLAIN	2	-
8	FS-01019 NYLOCK NUT, 8-32 X 0.23H STL GF ZINC	2	-
9	FS-03020 WASHER, 0.19ID x 0.44OD X 0.04TH SS 18-8	2	-
10	FS-04003 WASHER, 0.28ID X 0.63OD X 0.05TH SS 18-8	44	B3
11	FS-04005 NYLOCK NUT, 0.25-20 X 0.31H STL GF ZINC	22	B12
12	FS-04021 SBHCS, 0.25-20 X 0.63L SS 18-8 PLAIN	22	A9
13	FS-06001 SBHCS, 0.38-16 X 0.75L SS 18-8 PLAIN	10	A33
14	FS-06004 WASHER, 0.41ID X 0.81OD X 0.05TH SS 18-8	22	B5
15	FS-06010 SBHCS, 0.38-16 X 1.0L SS 18-8 PLAIN	8	A34
16	FS-06030 NYLOCK NUT, 0.38-16 X 0.45H STL GF ZINC	14	B14



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DO NOT SCALE DRAWING

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A DIVISION OF ARMORED WORKS, LLC

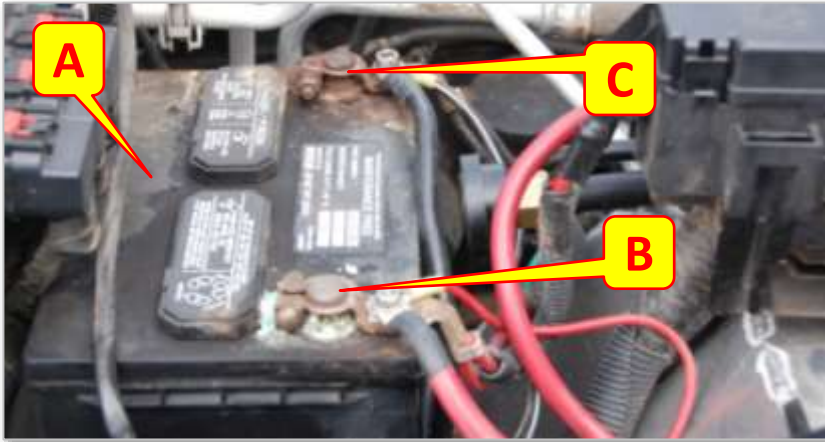
PART NUMBER/DESCRIPTION

2210 FENDER, ASSEMBLY TJ-LJ

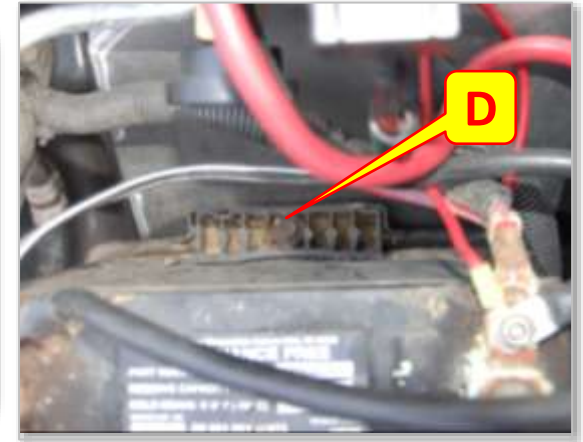
	1	2	3	4	5	6	7	8	
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		HK-2210				A50			
D	6	FS-01018 SFHCS, 8-32 X 0.75L SS 18-8 PLAIN			2	-			
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Phase 1: JEEP Preparation

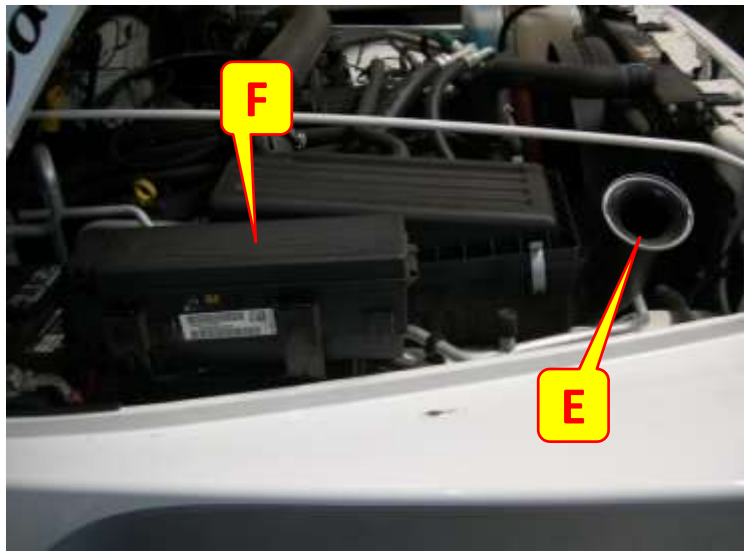
Step 1: Remove Battery.



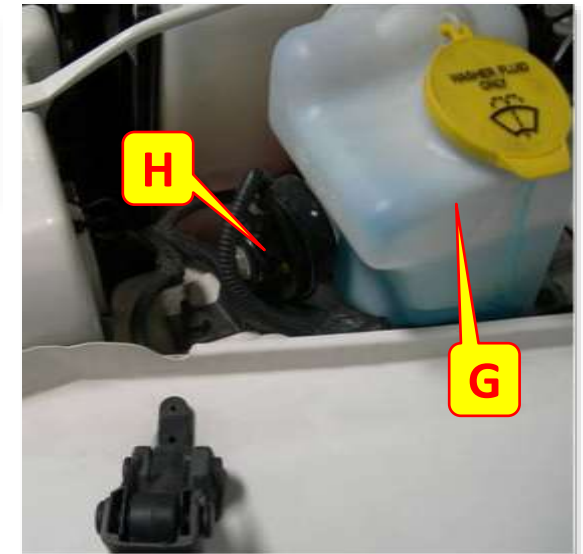
Locate the Battery(A) and the Positive(B) and Negative(C) terminals. Loosen and remove the Negative Terminal BEFORE removing the Positive Terminal. Loosen battery hold-down Bracket (D). Carefully remove battery and set aside on a flat surface.



Step 2: Remove Factory Equipment



Remove all components attached to inner fender well including air intake(E), fuse box(F), washer reservoir(G), and horn(H)



Phase 1: JEEP Preparation

Step 3: Remove Stock Fenders

Unbolt and remove fenders using a 13mm socket. There should be 14 bolts total for each fender

- 13mm Bolts

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

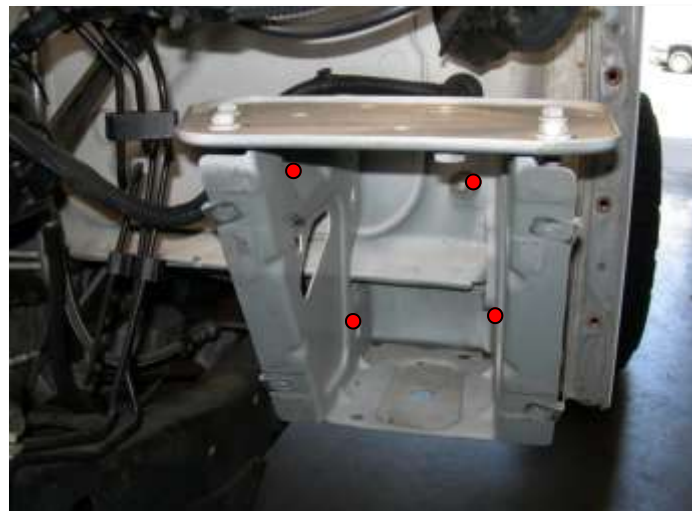


Step 4: Remove Battery Tray

Unbolt battery tray top from the mounting bracket. There should be 4 bolts. The battery tray also has a sensor in it that needs to be disconnected before removal.

Unbolt battery tray mounting bracket. There should be two bolts and two nuts. Repeat on other side of Jeep

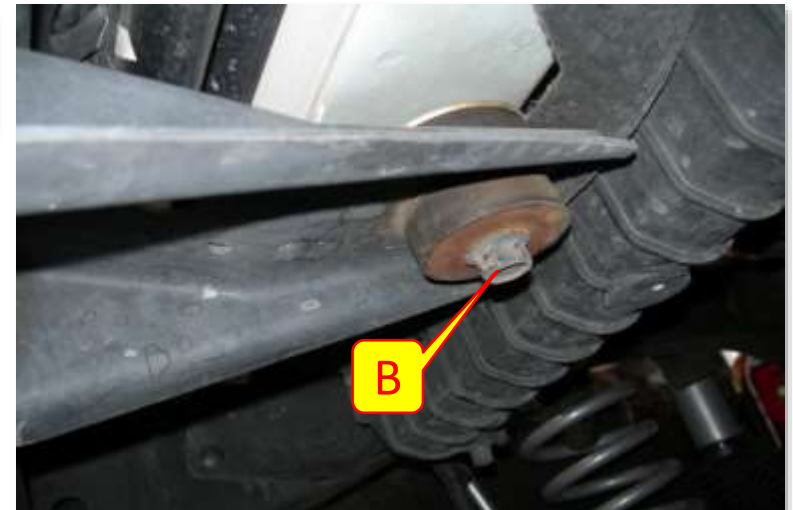
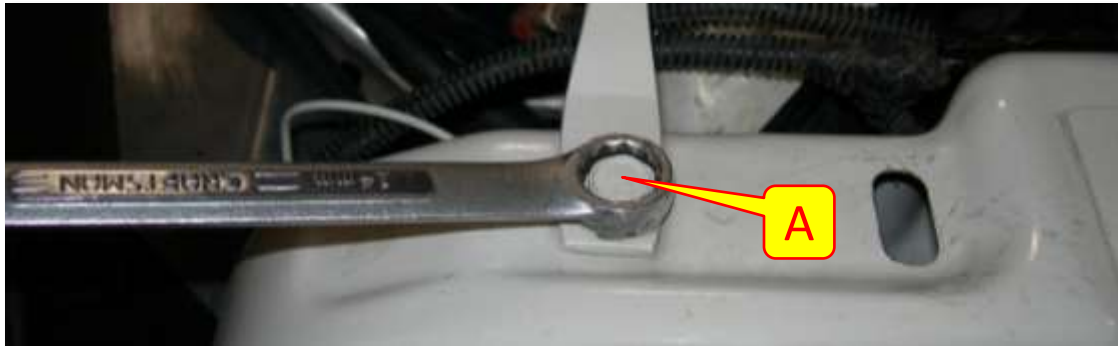
Use a flat head screw driver to remove clips from the battery and accessory tray. Save all clips, bolts, and top plates for installation of new fenders.



Phase 1: JEEP Preparation

Step 5: Loosen Grill

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



Step 6: Mount black box and MetalCloak Battery Tray

Bolt black vacuum box (C) to passenger battery tray using supplied hardware (D)



Install clips for passenger bracket(E) (driver side is a mirror image). Install MetalCloak battery tray(F) and accessory tray using **factory** mounting hardware. DO NOT fully tighten bolts. DO NOT install tray tops.

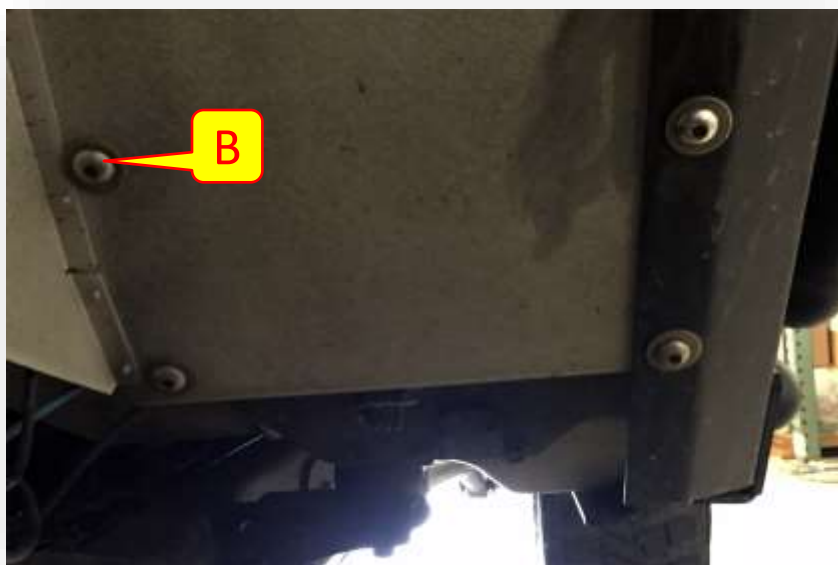
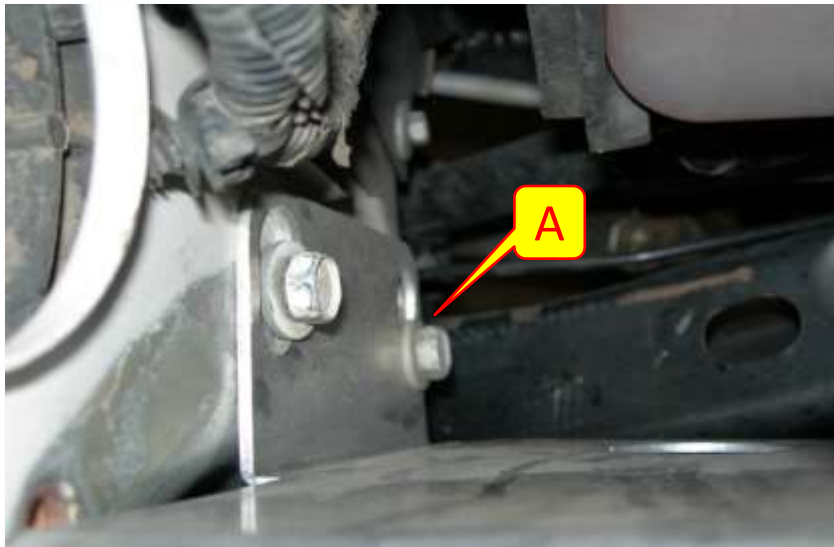


Phase 2: Installation of Fenders

Step 7: Install MetalCloak Inner Fenders

Install the inner fender by threading the front bolts(A) first, then the rear(B) inside using provided hardware. **DO NOT tighten yet.**

- Mount fender frame under fender liner (C)
- Use on grill bolt(D) and one tub bolt(E. behind panel) to hold in place before installing remaining bolts
- Once all frame bolts are in, bolt the remaining two bolts through the liner to the battery bracket.



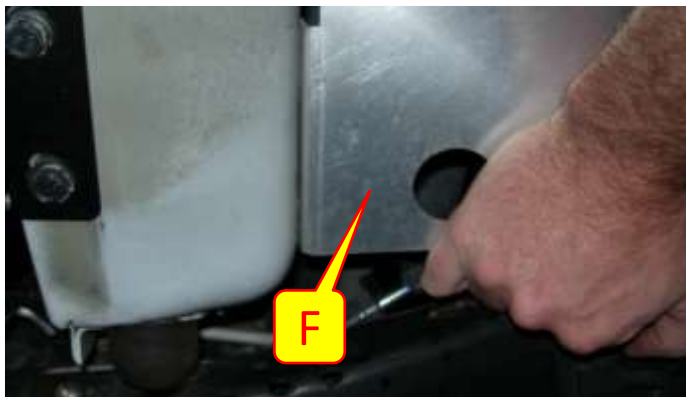
Open supplied hardware pack. Remove 4 small button head cap screws and 4 washers. Insert screws(F) and washers into the underside of the fender frame to bolt the frame to the liner. **DO NOT tighten yet.**



NOTE: Once the inner fender well is lined up it may touch the hard brake lines on the driver side. This is ok as the lines are flexible and little movement should be needed

Phase 2: Installation of Fenders

Step 8: Align and Tighten Fenders



1. Tighten the tub bolts(A) so that the fender frame can still move but is not loose(B).
2. Tighten one of the center tub bolts(C).
3. Line up the side of the fender with the side of the tub and then tighten the other center bolt.
4. Once both center bolts are tight, tighten the top and bottom tub bolts.
5. At this time tighten the button head cap screws(D) that hold the inner fender to the fender frame.
6. Tighten battery/accessory tray top bolts and bottom bolts
7. Tighten bolts that hold the inner fender and fender frame to the battery and accessory brackets.
8. 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.
9. 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.
10. Repeat steps "A-I" on the other side.

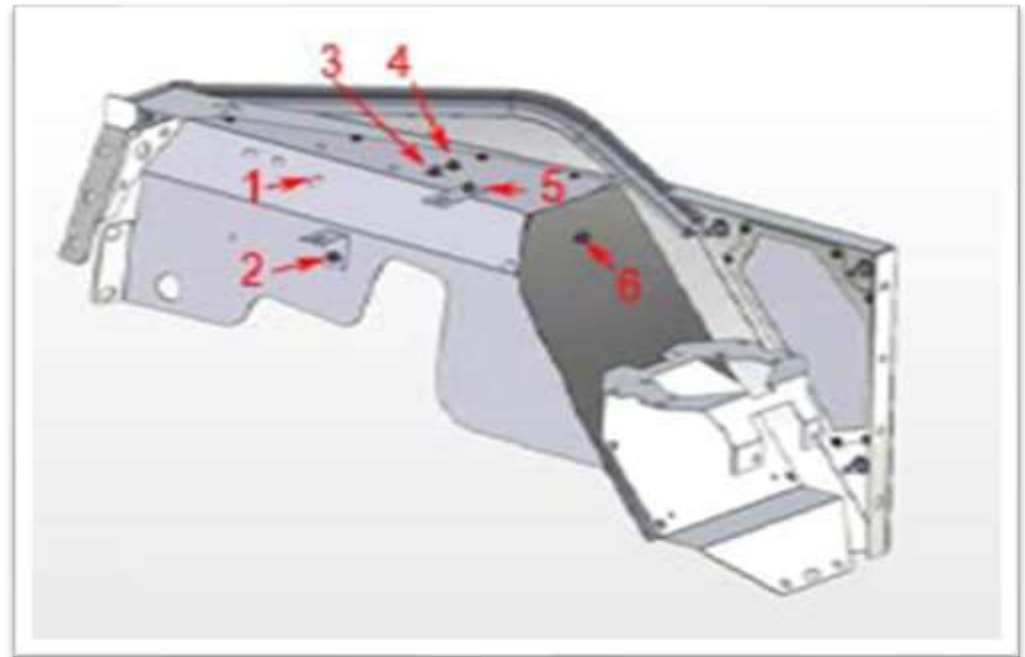


Phase 2: Reinstall Factory Components

Step 9: Remount Passenger Side Factory Components

Remount Fuse Box

- A. Use a flat head screw driver to remove fuse box from mounting bracket
- B. Mount Bracket(C), using supplied hardware, to inner fender using holes 3, 4, and 6
- C. Once Bracket is mounted, remount fuse box to bracket



Remount the Air Intake.

- A. Remove the top of the intake box and the filter from the lower portion.
- B. Mount the straight bracket to the bottom of the intake box on location A (A).
- C. Remove the metal spacer from bolt in location B (B).
- D. Use supplied hardware to bolt intake box to inner fender holes 1, 2, and 5
- E. Note: Hole 1(B) will mount at an angle. This is okay.

Finished look with both the air intake and the fuse box mounted to the fender

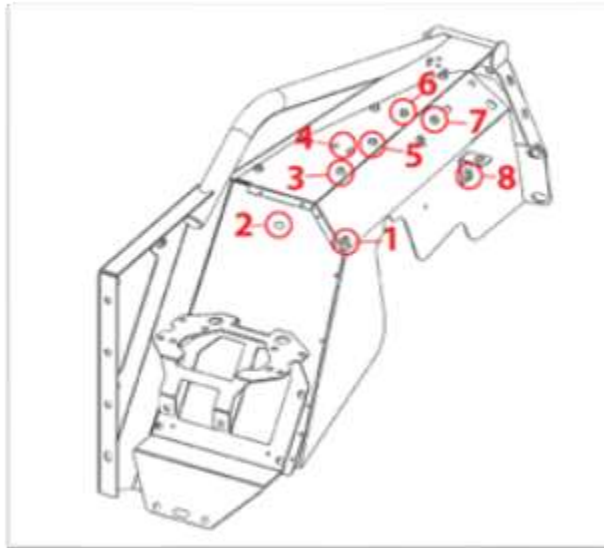


Phase 2: Reinstall Factory Components

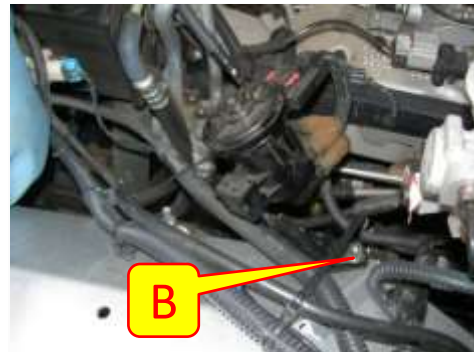
Step 10: Reinstall Driver Side Components

Remount Charcoal Canister & Vacuum Center.

- Route horn, light, and windshield washer wires under vacuum center and Evaporation Canister
- Bolt down charcoal canister to inner fender using holes 2 and 4
- Use pliers to bend two of the three cruise control vacuum center brackets to fit on holes 1 and 3.
NOTE: Some jeeps will only have two bracket "legs"
- Bolt brackets into fender well(A).
- In a TJ with no cruise control, mount bracket to hole 1(B).



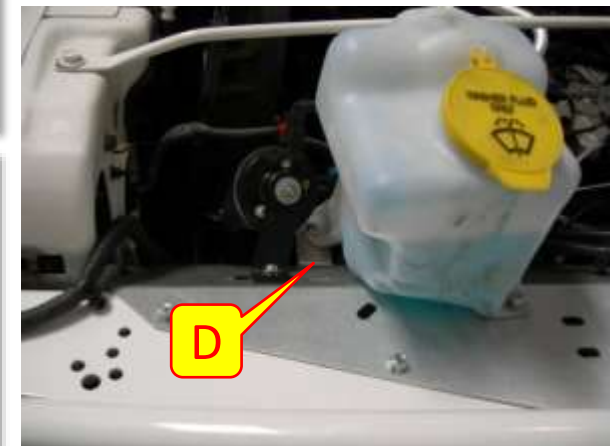
IMPORTANT: Your TJ may be equipped with an additional computer(C). If so, you will need to drill extra holes for mounting. Please call us at 916-631-8071 if you have any questions.



Remount Horn. Horn bracket mounts at hole 7. Bracket(E) may need slight bending to fit as shown.

Remount Washer Fluid Tank.

- Mount supplied bracket to inner fender hole 8(D)
- Cut off plastic tab under washer fluid tank
- Route washer wires under bracket
- Bolt washer fluid tank to hole 5 and the remaining hole on the bent bracket

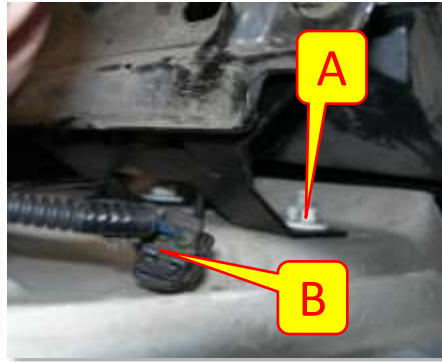


Phase 2: Reinstall Factory Components

Step 11: Reinstall Battery

Reinstall Battery/Accessory Trays

- A. Bolt battery tray to tray bracket on passenger side(A).
- B. Reconnect sensor(B)
- C. Bolt accessory tray to accessory tray bracket



Reinstall Battery

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

Step 12: Install Access Panel and Hood Latches

Install Access Panel

- A. You can install the Access Panel inside or outside fender.
- B. Place all three large button head cap screws and nuts in corners
- C. Tighten nuts finger tight prior to fully tightening.



Insert Hood Latches

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



Clean Up

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



(916) 631-8071 M-F; 8am-5pm

Phase 2: Reinstall Factory Components

Final Note: How to Fix Your Hood if it Rubs on the MetalCloak Fenders

On some TJ/LJ's the hood may rub against the fender. This is caused by the variability of the hood manufacture combined with our design to maximize tire clearance.

Note: The following illustrates an easy fix.

What to Do:

Together with a friend, place your hands together and gently push at the exact point on the hood where the rubbing occurs as seen in Figure A & B.

Push in about 1". The hood will flex back out and provide the 1/4" of clearance needed as seen in Figure C.

Pushing in the center of the hood *may* cause the rear of the hood to flare out. This is easily remedied by pressing firmly in at the point shown in Figure D.

