Installation Instructions
VI-COWL
Product Number: VC2900
2016 - 2017 DODGE 2500

SAFETY

Your safety and the safety of others is very important.

- In order to help you make informed decisions about safety, we have provided installation instructions and other information.
- These instructions alert you to potential hazards that could hurt you or others.
- Please do a job safety analysis (JSA) before each task to identify potential hazards for your situation and remove/protect against them.
- You must use your own good judgment, and take your time.

Read and understand all safety precautions and instructions before installing this product.

THIS PRODUCT IS FOR OFFROAD USE ONLY. ALL LIABILITY FOR INSTALLATION AND USE RESTS WITH THE OWNER.

CARELESS INSTALLATION AND OPERATION CAN RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE.

Injury hazard

Failure to observe these instructions could lead to severe injury or death.

- ❑ **Always** remove jewelry and wear eye protection.
- ❑ **Always** use appropriate and adequate care in lifting components into place.
- ❑ **Always** insure components will remain secure during installation and operation.
- ❑ **Always** wear safety glasses when installing this kit
- ❑ **Always** use extreme caution when cutting and trimming during fitting.
- ❑ **Always** tighten all nuts and bolts securely per installation instructions.
- ❑ **Always** perform regular inspections and maintenance on mounts and related hardware.

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Overview

Congratulations on your new purchase of the Fab Fours Vi-Cowl Accessory.

Your Vi-Cowl was designed in 3-D from digitized data, CNC laser cut, fabricated, and powder coated… all in the U.S.A. Enjoy the fit and finish of a Vi-Cowl from Fab Fours, Inc.

WARNING: This product was designed to be used with the 16-17 Dodge 2500 only.

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I.Tools Required

- 3/16” Allen Wrench
- Open End Wrench
- Socket Set and Ratchets
- Scissors
- Drill Bit – ¼”
- Blue Painters Tape
- Knife
- Pick or Small Flat Head Screwdriver

II.Factory Vehicle Prep

a. Apply Blue tape on each side of the hood and fender. Mark the tape with a straight-line perpendicular with the hood and fender body seam. Use a knife to cut the tape along the same seam.

Note: Step one is recommended to assist you in realignment of the hood during reassembly.

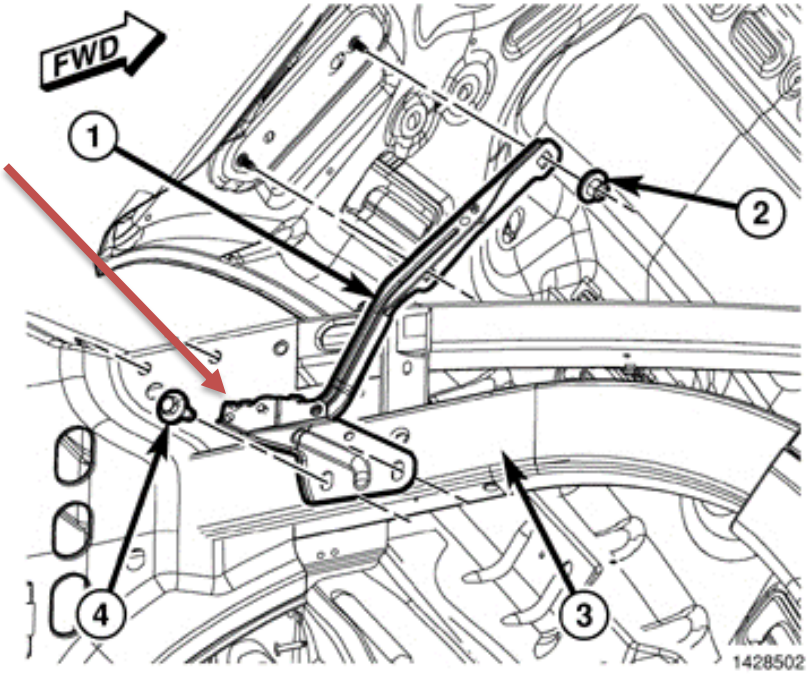


Fig 1

b. Loosen the four nuts that secure the hood to the upper hood hinge bracket, so they can be removed by hand as shown in **Fig 1** labeled **(2)**.
c. Disconnect any electrical connections and washer fluid lines if your vehicle is equipped.
d. With a friend on the other side, support the hood and fully remove the hood bolts and remove the hood.

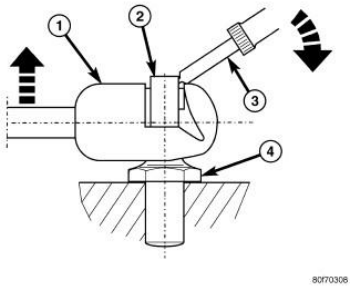


Fig 2

e. Using a small pick or screwdriver, pry out on the metal spring clip shown in **Fig 2** Labeled **(2)**. Pull the air spring head **(1)** away from the ball stud **(4)** while the spring clip is pulled away. Disconnect the air spring from the bracket only, leave attached to frame rail. Rotate forward out of the way.

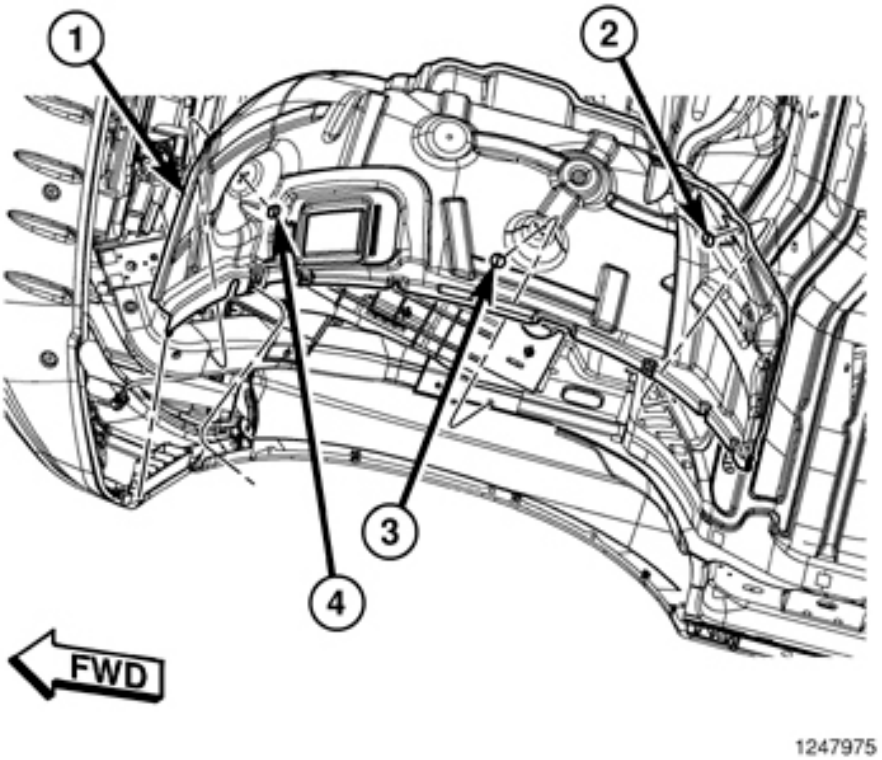


Fig 3

f. Remove the wheelhouse splash shield by removing the plastic push pins from inside the wheel well as shown in **Fig 3** labeled **(2,3,4)**.

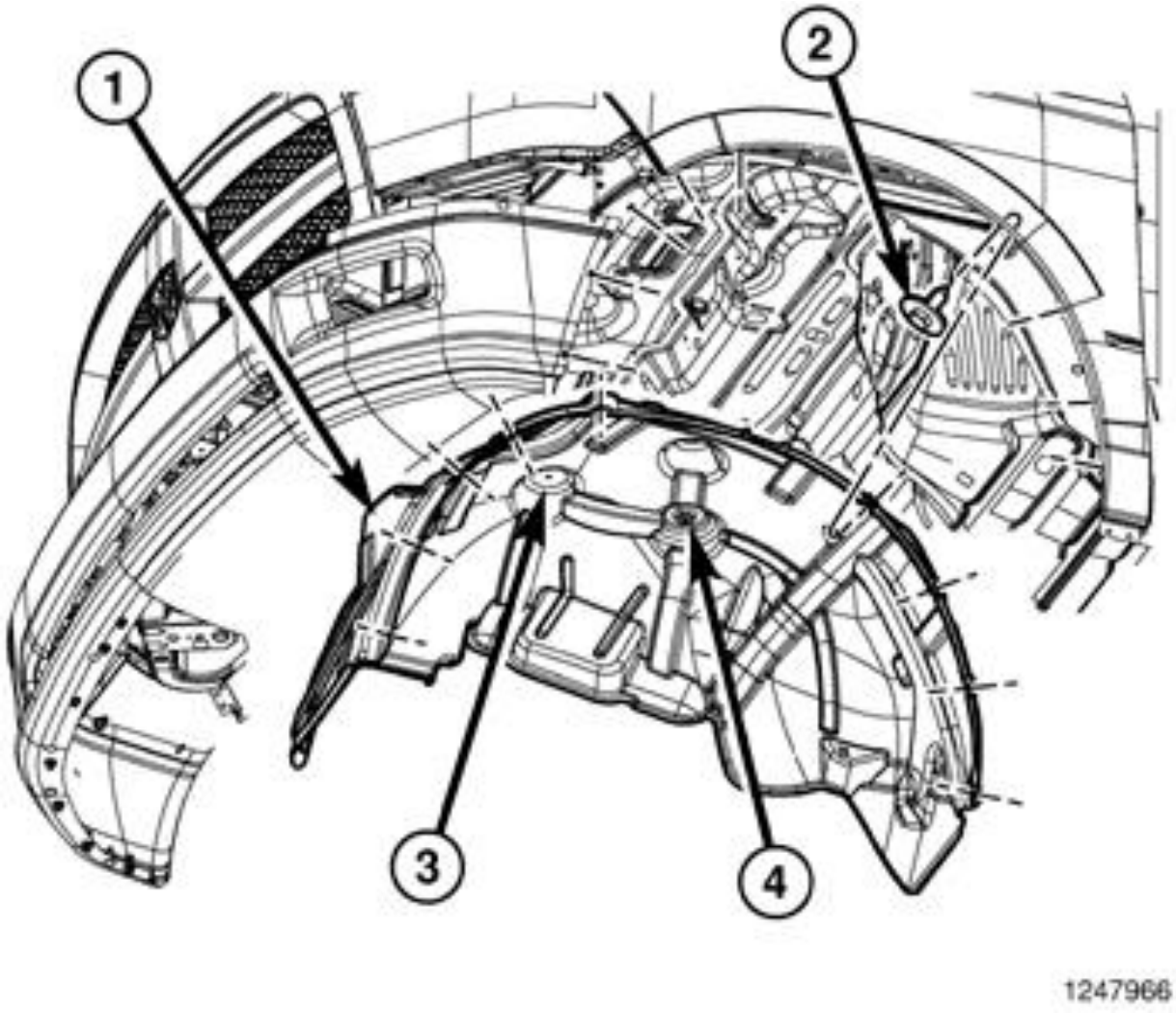


Fig 4

g. Remove the screws from the upper middle of splash shield as shown in **Fig 4** and labeled **(2,3,4)**.
h. Unclip the splash shield from the fender and remove from vehicle.

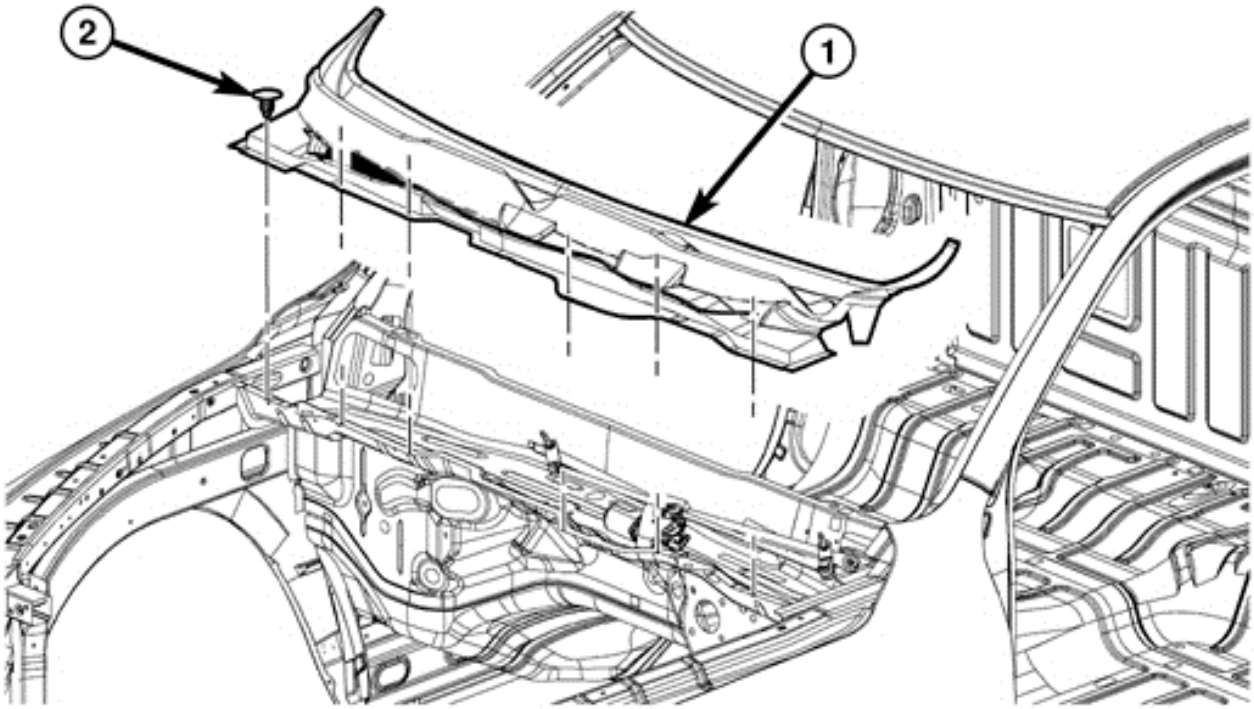


Fig 5.

i. Remove the 6 plastic retainers as shown in **Fig 5** labeled **(2)**.
j. Remove the wiper arms.
k. Unclip the wiper cowl from the windshield by sliding the cowl down along the windshield until its loose from the glass.
l. Remove the cowl and set aside for trimming.
m. Remove the single bolt that secures the fender to the hood hinge bracket near the windshield indicated by the red arrow in **Fig 1**.
n. Remove and save the two bolts labeled (4) from **Fig 1**. Its easier to access the two bolts from up through the wheel well and behind the fender.
o. Set the OEM hood hinge bracket aside, it won't be used again.

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III.Wiper cowl modification

a. Both ends of the cowl need to be trimmed so that the ViCowl brackets clear the cowl in the down position.

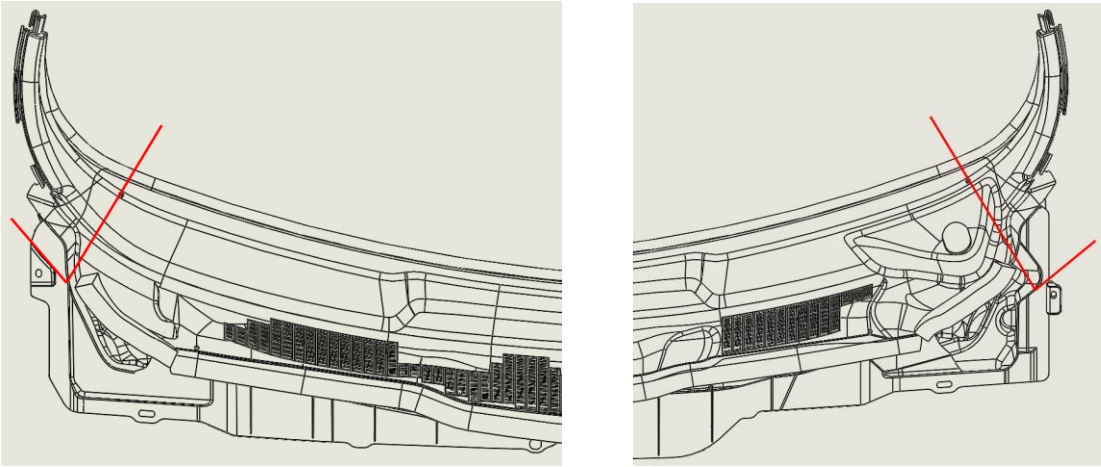


Fig 6

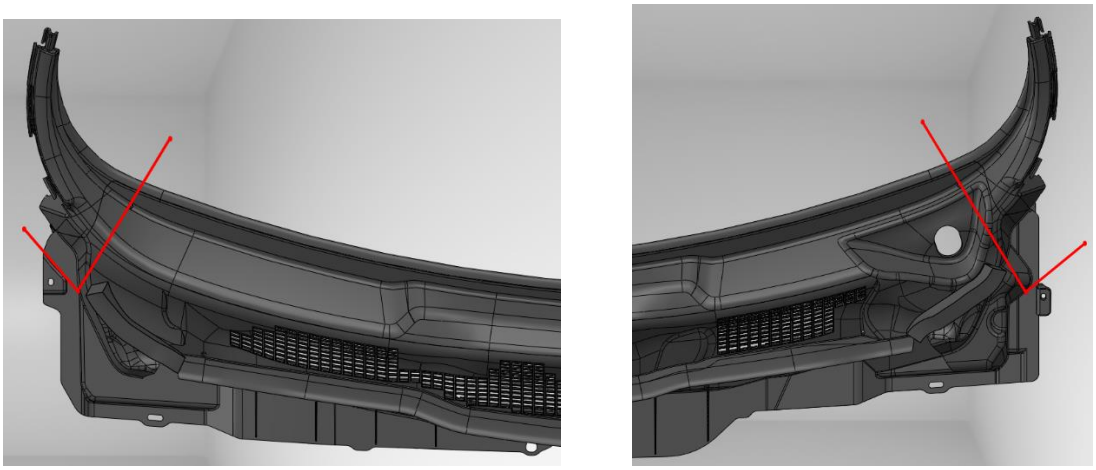


Fig 7

b. Trim off the areas indicated by the red line in **Fig 6 & 7** on both sides of the cowl.

Note: some minor additional trimming may be needed in areas marked to cut.

IV.Fab Fours hood hinge installation

Note: Both driver side and passenger side brackets install the same way.

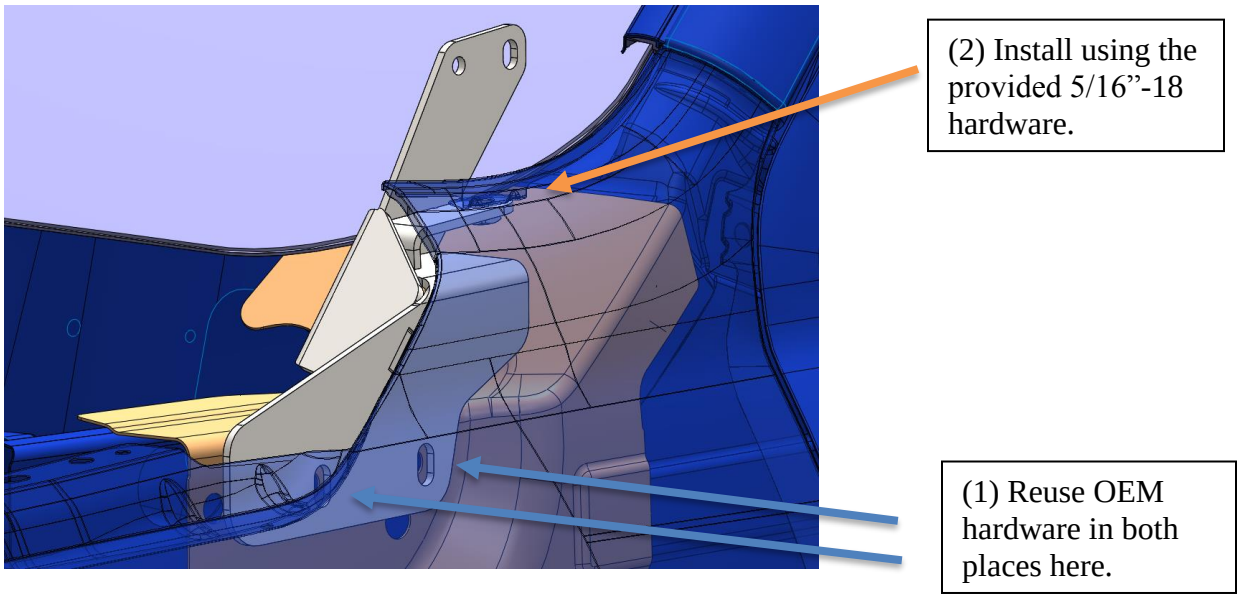


Fig 8

a. Position the driver side bracket as pictured in **Fig 8**.
b. Loosely install the two factory bolts as shown in **Fig 8** item **(1)**.
c. Install the outer 5/16”-18 zinc bolt, zinc lock washer and zinc flat washer.
d. Fully tighten down the 5/16”-18 bolt.
e. Repeat the same procedure for the passenger side bracket.

Caution: The Fab Fours VC2900 brackets contain the same adjustability as the OEM counterparts. This may lead to wiper interferences with the ViCowl arms if the brackets are set too low or rotated to far to the windshield. Be sure to check for wiper clearance after the arms are fully tightened at the top bracket hole but before and Riv-Nuts are marked and drilled into the factory fenders. Push driver side arm tight to fender at Riv-Nut location and turn on wipers to check. Some readjustment of the hood brackets may be necessary followed by hood realignment.

Note: do not fully tighten down the two factory bolts on the lower bracket yet, these bolts will be tightened down after the hood has been reinstalled and final adjustments have been made.

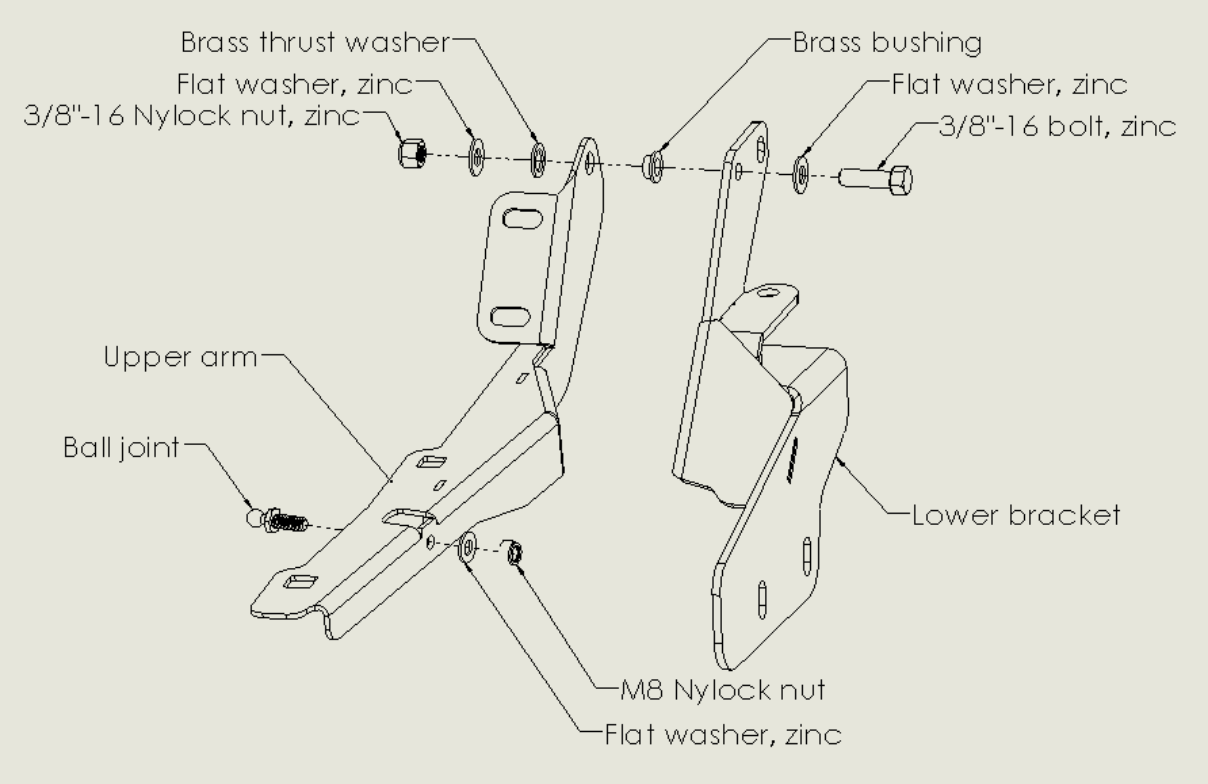


Fig 9

f. Press install the brass bushing into the upper hole in the Upper arm as shown in **Fig 9**.
g. Insert the 3/8”-16 bolt with washer and thrust washer into the brass bushing as shown in **Fig 9** forming the upper arm sub assembly.
h. Insert the upper arm sub assembly into the front bracket hole with washer and 3/8"-16 Nylock nut.
i. Holding the upper arm and bolt stack tight to the lower bracket, tighten the Nylock nut being carful that the trust washer doesn’t pop out from the brass bushing.

V.Hood Installment

a. With a friend, lift the hood onto the upper arm of the hood bracket and install the four factory nuts hand tight.
b. Align the upper arm with the missing paint marks made under the hood from the factory brackets. This will get you close as the Fab Four brackets have identical profile.
c. Lower the hood slowly and check for uniform hood gap.
d. Adjust as needed.

e. After the hood looks aligned, fully tighten down the four factory bolts on the lower hinge brackets by means of reaching up under the fender in the wheel well.
f. Slowly raise the hood just enough to reach in with a ratchet and fully tighten down the four factory bolts securing the hood.
g. Raise the hood fully and reconnect the gas assist springs on the ball joint on the hinge upper arm.

Note: be mindful of how high you raise the hood while making adjustments to alignment. It is possible that the hood will shift without your knowledge if hood is raised too high.

VI.ViCowl Pre-Assembly

Note: It's highly recommended that all projection weld nuts are chased with the appropriate taps to clean out any powder coat or foreign debris prior to assembly. Tap sizes needed to do this are ½"-13, and ⅜"-16

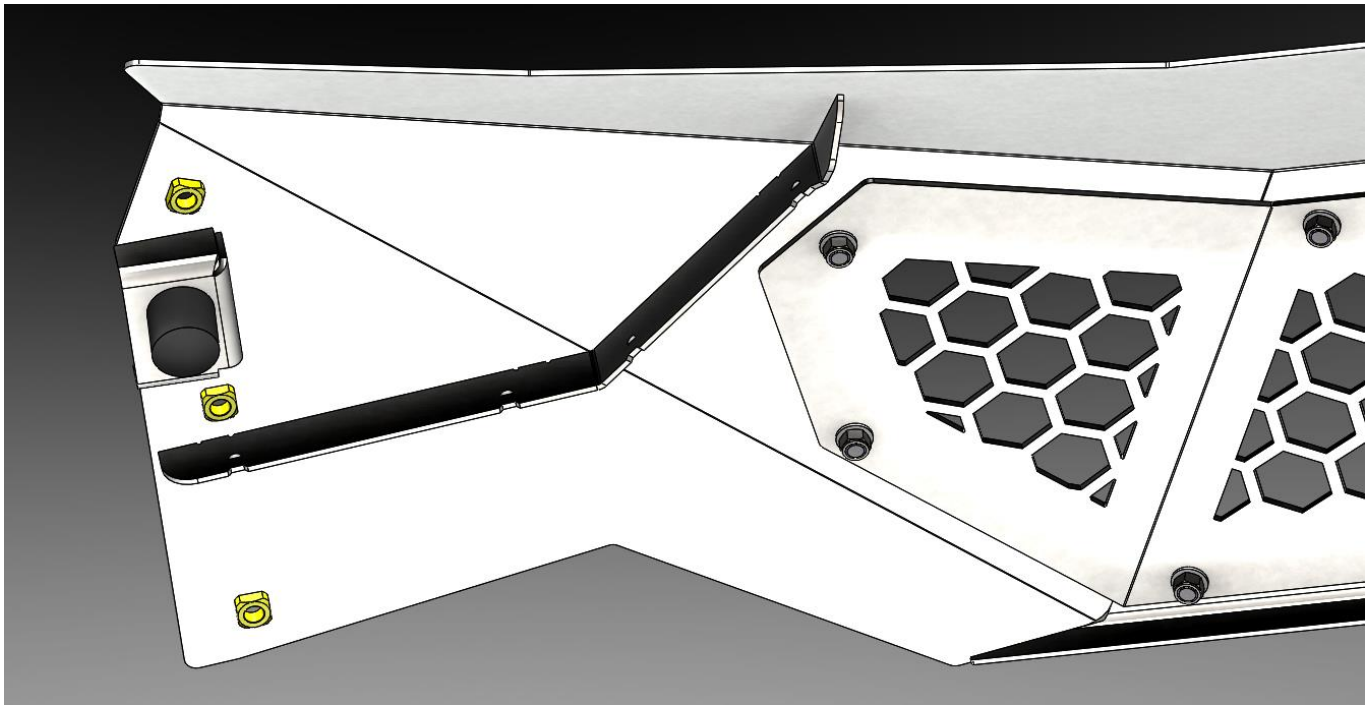


Fig 10

a. Install and hand tighten the rubber bumpers and ½" flat washers to the visor as shown in **Fig 10**.
b. Install loosely the Visor trim (or light insert if purchased) into the back of the visor using the provided 5/16"-18 stainless steel bolts, rubber bonded washer, flat washer, and 5/16"-18 Nylock nut.

Note: The rubber bonded washer is used on the outside surface of the visor to reduce any powder coat wear marks what would otherwise be created using regular flat washers and visible if bolts are moved due to reassembly of visor with light insert.

c. Fully tighten all visor trim hardware

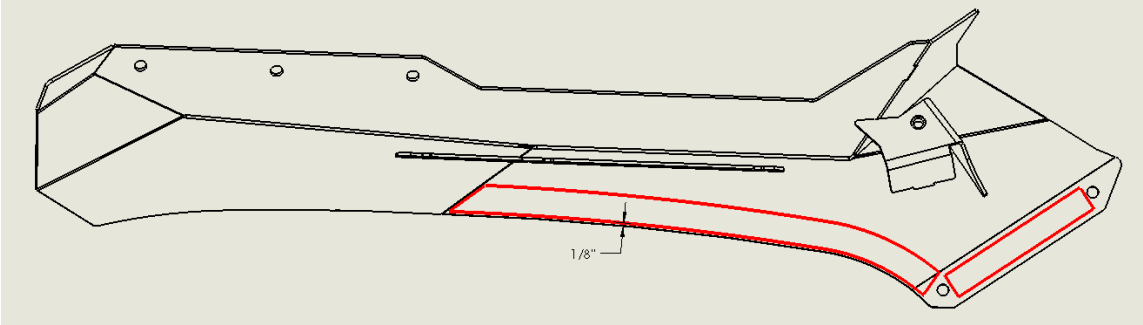


Fig 11

d. Install the 1" neoprene rubber strip to the inside of both arms as shown in **Fig 11** highlighted in red.

Note: leave about a ⅛" reveal on the edge of the arms. This will ensure the rubber strip doesn't shift or show after installation.

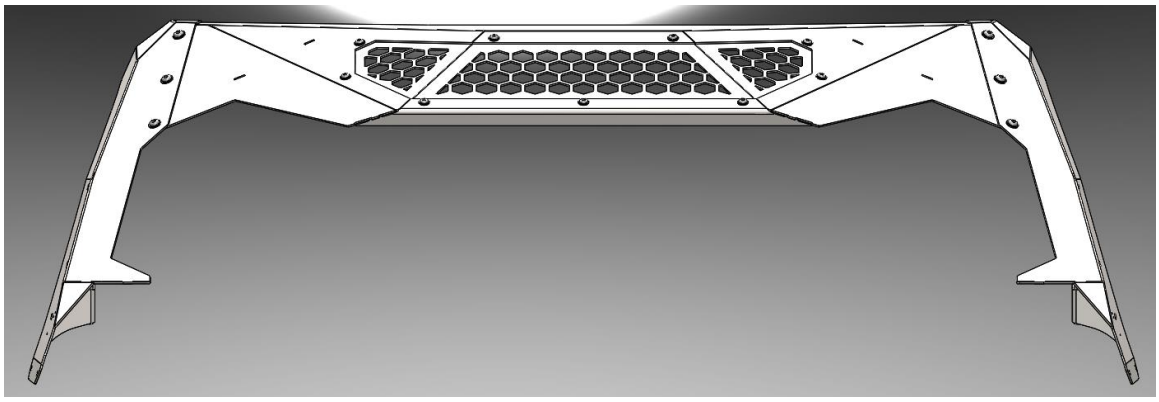


Fig 12

e. Loosely install both ViCowl arms to the visor using the provided ⅜"-16 stainless steel bolts and rubber bonded washers as shown in **Fig 12**.

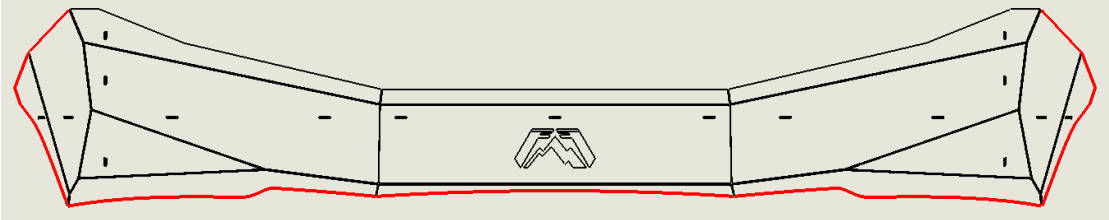


Fig 13

f. Install the edge seal with adhesive onto the leading edge of the cowl as shown in **Fig 13** by the highlighted red line.

Note: don't stretch the seal as you apply it to the Cowl. This will ensure it doesn't pull away from the sheet metal later.

g. Trim the edge seal for fit and finish
h. The ViCowl is now prepped for install.

VII. ViCowl Installation

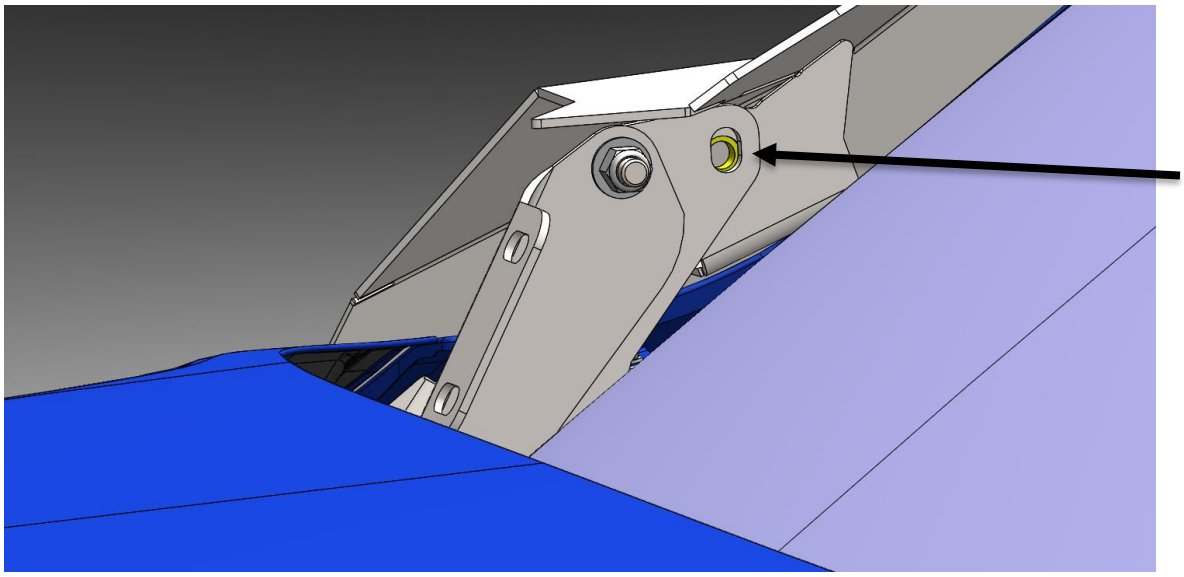


Fig 14

a. With a friend on the other arm, lift the upper ViCowl assembly up over the hood and behind the radio antenna and slowly lower the arms into position. The arm mounting bracket rest to the outside of the lower hinge and lined up with the rear bolt hole as shown in **Fig 14**.
b. Loosely install the ⅜"-16 hex bolt, zinc lock washer, and zinc flat washer through the lower hinge bracket and into the arm securing the ViCowl from falling lower on the vehicle as indicated in Fig 12 with the black arrow.
c. Check for fit and fully tighten down both arms to the hinge brackets.

Note: the slot in the bracket is for ease of installation of the bolt only. The bolt should be seated at the bottom of the slot when fully tightened. Failure to do so could result in a smaller gap between the arm and cowl when installation is complete. Fig 14 shows the yellow projection nut at bottom of slot as it should be.

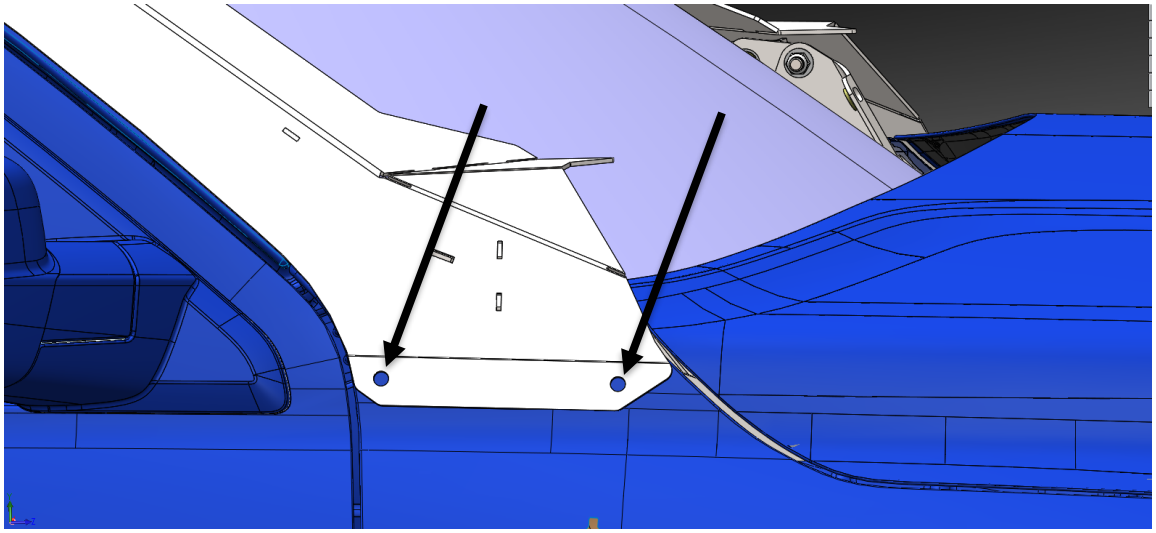


Fig 15

d. Mark the two Rivnut hole locations as indicated in **Fig 15** by the black arrows and on both driver and passenger arms.

Note: A high degree of accuracy is needed when marking the Rivnut locations. The four Rivnuts constitute a majority percentage of the mounting strength of the upper ViCowl to the vehicle. A hole center punch is recommended followed by incremental pilot holes to the finish hole size of the included 17/32" drill bit. You will have trouble lining up all three bolt holes per side if Rivnuts are misplaced.

e. Remove the upper ViCowl assembly in preparation to drill and install four Rivnuts in the fenders.

f. Use the 1/8” Drill bit to drill pilot holes in all of the marked locations. Be careful to drill directly perpendicular to the side of the Jeep. Be sure to drill the holes to a depth of 7/8”. In some instances this will require drilling through multiple layers of sheet metal.
g. Step up to the ¼” Drill
h. Final drill out the holes with the 17/32”. If available, a sheet metal Uni-Bit or step drill bit can be used after the ¼” Bit.
i. With the expendable tool threaded into the nutsert, insert it into one of the holes making sure that it fits in far enough to flush the collar of the nutsert to rocker panel. (For an exceptional installation coat the knurls of the Nutsert with Loc-tite.)
j. Place the 9/16” Box end wrench on the body of the expendable tool and the 9/16” socket and ratchet on the bolt head on the back side of the tool. See image below.



Fig 16

k. Tighten the bolt into the nutsert until it becomes snug in the rocker panel. DO NOT OVERTIGHTEN CAUSING THE INSERT TO SPIN!

l. Repeat steps “f-k” on the remaining holes.

m. Reinstall the upper ViCowl using steps “a-b”

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n. Install the ⅜"-16 stainless steel button head bolds, rubber bonded washers, and blue Locktight.

o. Fully tighten down all hardware securing the upper ViCowl arms to the hood hinge brackets.

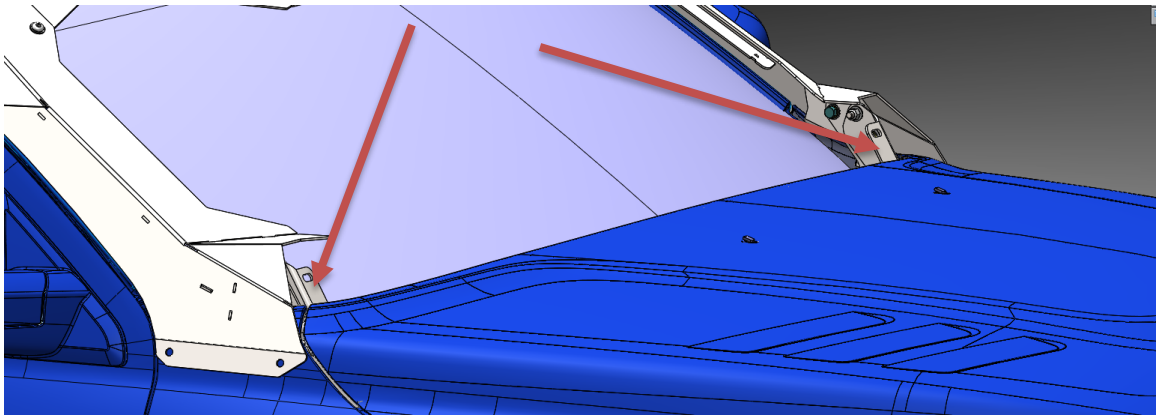


Fig 17

p. With the help of a friend, lift the ViCowl cowl up over the hood and slowly lower it down on the mounting surface as shown in **Fig 17** indicated by the red arrows.

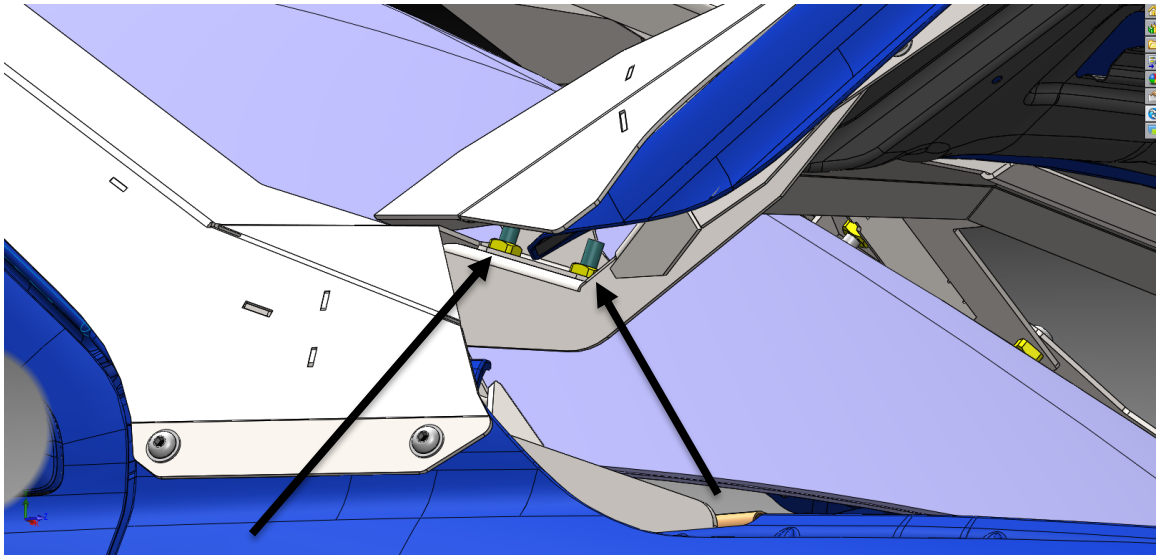


Fig 16

q. Raise the hood slowly and hand tighten the four ⅜"-16 hex head bolts, zinc lock washers, and zinc flat washers securing the Cowl to the hood hinge brackets as shown in **Fig 16** with the black arrows.

r. Lower the hood and check for centering and adjust if necessary.

s. Raise the hood and tighten the rear bolt on both sides first and then the front bolt. The bolt sequence will aid in closing any hood profile gaps that may be visible.

t. Congratulations, the installation is complete.

VIII.Maintenance/Care

- Periodically check and tighten all nuts.
- Stripped, fractured, or bent bolts or nuts need to be replaced.

IX.Contact Information

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