



# 2023+ HD SNORKEL

## GMC & CHEVY

Please visit [www.aev-conversions.com](http://www.aev-conversions.com) to view the most current installation guide for this product.

This is a new product and we want to make sure that you receive the latest and most accurate information based on customer feedback, product revisions, and/or model year updates. We value customer feedback, so we encourage you to contact our Technical Support department if you have any suggestions on how to make the installation of this product easier or if you have any questions regarding the installation of this product. AEV's Technical Support can be reached by email at [tech@aev-conversions.com](mailto:tech@aev-conversions.com) or by giving us a call at (248)-926-0256.

**PLEASE READ BEFORE YOU START**

To guarantee a quality installation, we recommend reading these instructions thoroughly before beginning any work. These instructions assume a certain amount of mechanical ability and are not written nor intended for someone not familiar with auto repair.

**INCLUDED PARTS****QTY****REQUIRED TOOLS**

\*See Exploded BOM (PG. 3-6)

Common Hand Tools

Drill

1/8" Drill Bit

3/8" Drill Bit

3/16" Drill Bit

5/32" Drill Bit

T-15 Torx Bit

1/2" Step Bit

1" Hole Saw

2" Hole Saw

2.5" Hole Saw

Air or Electric Cut-Off Wheel

Air Saw

Center Punch

Deburring Tool

Rivet Tool

Rust Preventer\*

Masking Tape

Black Marker / Pen

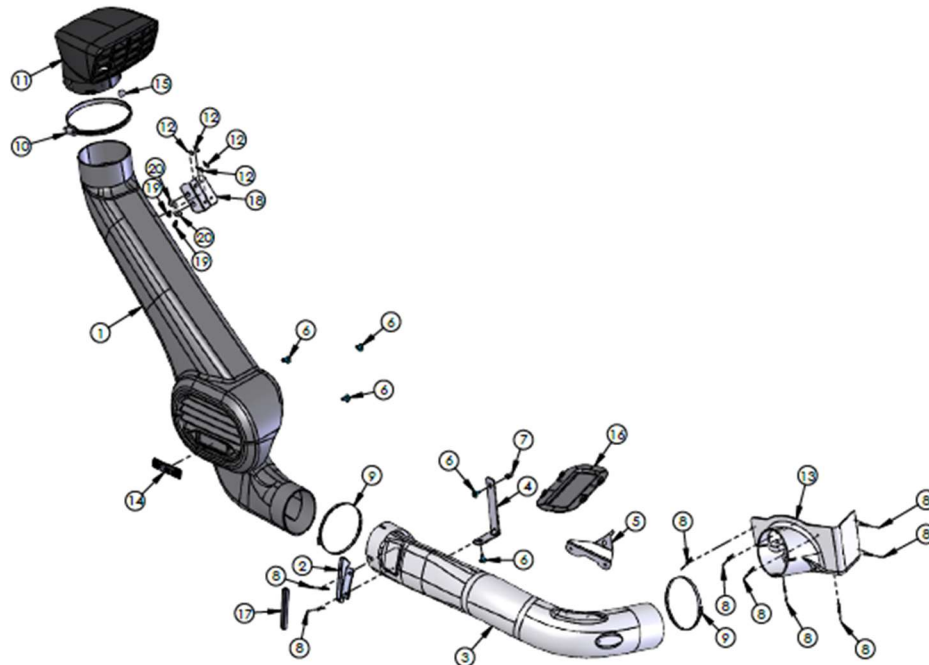
String / Fishing Line

\*(AEV recommends Permatex Rust Treatment 81775)



# EXPLODED BOM

## GMC (DIESEL)

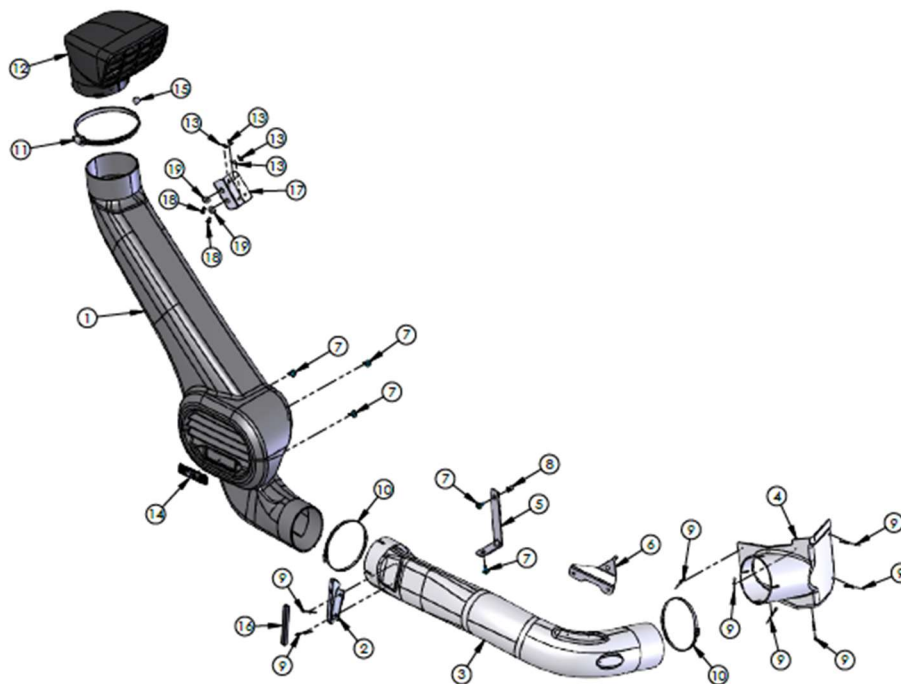


ITEM NO.	PART #	DESCRIPTION	QTY.
1	ATHZ3001AA	MAIN BODY, T1 HD GMC SNORKEL	1
2	ATHZ3000AA	FENDER REINF BRKT, T1 HD GMC SNORKEL	1
3	ATHZ1000AA	CONNECTION TUBE, T1 HD SNORKEL	1
4	ATHZ1003AA	CONNECTION TUBE BRKT, T1 HD SNORKEL	1
5	ATHZ1004AA	HORN RELOCATION BRKT, T1 HD SNORKEL	1
6	11519375	M6 X 1.0 X 16 HEX SCREW AND WASHER ASM	5
7	AEV93019AA	Nut, Rivnut, M6-1.0 - 0.7-4.2	1
8	P-15R25RSL/AA	5/32 x 1/4 aluminum split rivet (.125 - .250 grip range)	9
9	AEV97005AA	CLAMP, MAIN BODY TO AIR BOX, RAM SNORKEL (5IN DIA)	2
10	P-6708N14	HOSE CLAMP, PLASTIC WORM-DRIVE 3" TO 6" ID	1
11	ARMZ2002AA	AIR RAM, RAM SNORKEL	1
12	P-18R525ROB/SS	Rivet, 3/16" x 0.126"-0.25" - S.S.	4
13	ATHZ1002AA	DIESEL AIR BOX ADAPTER, T1 HD SNORKEL	1
14	60406215AB	BADGE, CAST FRONT TUBE (BLACKOUT)	1
15	P-AVO17664	Rivet, ChrT, 5/16" (Hole Dia.) x 11/16" (Head Dia)	1
16	ATHZ1010AA	DIESEL AIRBOX PLUG, T1 HD SNORKEL	1
17	ATHZ1011AA	FENDER REINF FOAM, T1 HD SNORKEL	1
18	ATHZ1015AA	A-PILLAR BRKT (REVERT), T1 HD SNORKEL	1
19	AEV91068AB	Bolt, BHCS, M6-1.0x16 - PS11036-Black	2
20	AEV98027AA	Washer, M6-18 OD - PS5873-Black	2



# EXPLODED BOM

## GMC (GAS)

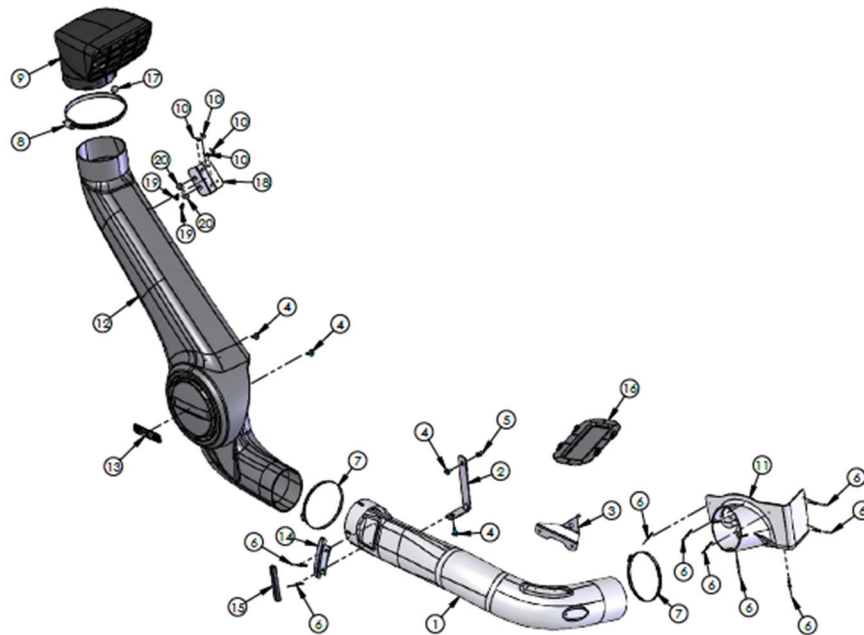


ITEM NO.	PART #	DESCRIPTION	QTY.
1	ATHZ3001AA	MAIN BODY, T1 HD GMC SNORKEL	1
2	ATHZ3000AA	FENDER REINF BRKT, T1 HD GMC SNORKEL	1
3	ATHZ1000AA	CONNECTION TUBE, T1 HD SNORKEL	1
4	ATHZ1001AA	GAS AIR BOX ADAPTER, T1 HD SNORKEL	1
5	ATHZ1003AA	CONNECTION TUBE BRKT, T1 HD SNORKEL	1
6	ATHZ1004AA	HORN RELOCATION BRKT, T1 HD SNORKEL	1
7	11519375	M6 X 1.0 X 16 HEX SCREW AND WASHER ASM	5
8	AEV93019AA	Nut, Rivnut, M6-1.0 - 0.7-4.2	1
9	P-15R25RSL/AA	5/32 x 1/4 aluminum split rivet (.125 - .250 grip range)	8
10	AEV97005AA	CLAMP, MAIN BODY TO AIR BOX, RAM SNORKEL (5IN DIA)	2
11	P-6708N14	HOSE CLAMP, PLASTIC WORM-DRIVE 3" TO 6" ID	1
12	ARMZ2002AA	AIR RAM, RAM SNORKEL	1
13	P-18R525ROB/SS	Rivet, 3/16" x 0.126"-0.25" - S.S.	4
14	60406215AB	BADGE, CAST FRONT TUBE (BLACKOUT)	1
15	P-AVO17664	Rivet, ChrT, 5/16" (Hole Dia.) x 11/16" (Head Dia)	1
16	ATHZ1011AA	FENDER REINF FOAM, T1 HD SNORKEL	1
17	ATHZ1015AA	A-PILLAR BRKT (REVERT), T1 HD SNORKEL	1
18	AEV91068AB	Bolt, BHCS, M6-1.0x16 - PS11036-Black	2
19	AEV98027AA	Washer, M6-18 OD - PS5873-Black	2



# EXPLODED BOM

## CHEVY (DIESEL)

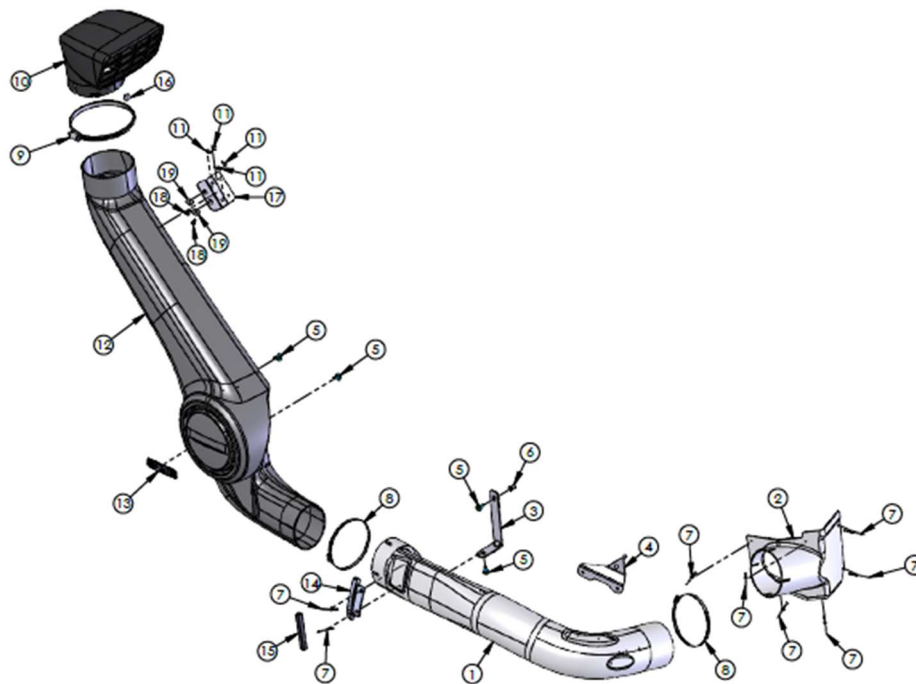


ITEM NO.	PART #	DESCRIPTION	QTY.
1	ATHZ1000AA	CONNECTION TUBE, T1 HD SNORKEL	1
2	ATHZ1003AA	CONNECTION TUBE BRKT, T1 HD SNORKEL	1
3	ATHZ1004AB	HORN RELOCATION BRKT, T1 HD SNORKEL	1
4	11519375	M6 X 1.0 X 16 HEX SCREW AND WASHER ASM	4
5	AEV93019AA	Nut, Rivnut, M6-1.0 - 0.7-4.2	1
6	P-15R25RSL/AA	5/32 x 1/4 aluminum split rivet (.125 - .250 grip range)	9
7	AEV97005AA	CLAMP, MAIN BODY TO AIR BOX, RAM SNORKEL (5IN DIA)	2
8	P-6708N14	HOSE CLAMP, PLASTIC WORM-DRIVE 3" TO 6" ID	1
9	ARMZ2002AA	AIR RAM, RAM SNORKEL	1
10	P-18R525ROB/SS	Rivet, 3/16" x 0.126"-0.25" - S.S.	4
11	ATHZ1002AA	DIESEL AIR BOX ADAPTER, T1 HD SNORKEL	1
12	ATHZ2001AA	MAIN BODY, T1 HD CHEVY SNORKEL	1
13	60406215AB	BADGE, CAST FRONT TUBE (BLACKOUT)	1
14	ATHZ2000AA	FENDER REINF BRKT, T1 HD CHEVY SNORKEL	1
15	ATHZ1011AA	FENDER REINF FOAM, T1 HD SNORKEL	1
16	ATHZ1010AA	DIESEL AIRBOX PLUG, T1 HD SNORKEL	1
17	P-AVO17664	Rivet, ChrT, 5/16" (Hole Dia.) x 11/16" (Head Dia)	1
18	ATHZ1015AA	A-PILLAR BRKT (REVERT), T1 HD SNORKEL	1
19	AEV91068AB	Bolt, BHCS, M6-1.0x16 - PS11036-Black	2
20	AEV98027AA	Washer, M6-18 OD - PS5873-Black	2



# EXPLODED BOM

## CHEVY (GAS)



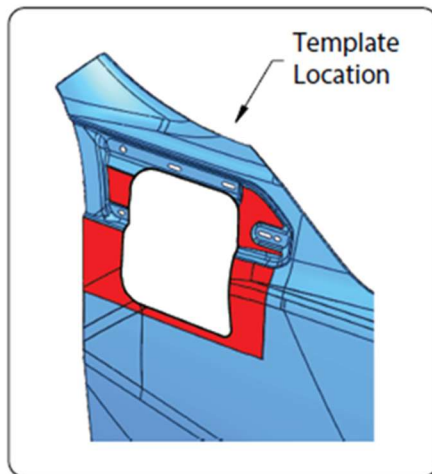
ITEM NO.	PART #	DESCRIPTION	QTY.
1	ATHZ1000AA	CONNECTION TUBE, T1 HD SNORKEL	1
2	ATHZ1001AA	GAS AIR BOX ADAPTER, T1 HD SNORKEL	1
3	ATHZ1003AA	CONNECTION TUBE BRKT, T1 HD SNORKEL	1
4	ATHZ1004AA	HORN RELOCATION BRKT, T1 HD SNORKEL	1
5	11519375	M6 X 1.0 X 16 HEX SCREW AND WASHER ASM	4
6	AEV93019AA	Nut, Rivnut, M6-1.0 - 0.7-4.2	1
7	P-15R25RSL/AA	5/32 x 1/4 aluminum split rivet (.125 - .250 grip range)	8
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10	ARMZ2002AA	AIR RAM, RAM SNORKEL	1
11	P-18R525ROB/SS	Rivet, 3/16" x 0.126"-0.25" - S.S.	4
12	ATHZ2001AA	MAIN BODY, T1 HD CHEVY SNORKEL	1
13	60406215AB	BADGE	1
14	ATHZ2000AA	FENDER REINF BRKT, T1 HD CHEVY SNORKEL	1
15	ATHZ1011AA	FENDER REINF FOAM, T1 HD SNORKEL	1
16	P-AVO17664	Rivet, ChrT, 5/16" (Hole Dia.) x 11/16" (Head Dia)	1
17	ATHZ1015AA	A-PILLAR BRKT (REVERT), T1 HD SNORKEL	1
18	AEV91068AB	Bolt, BHCS, M6-1.0x16 - PS11036-Black	2
19	AEV98027AA	Washer, M6-18 OD - PS5873-Black	2

BEFORE YOU BEGIN THE INSTALLATION, BE SURE TO CLEAN THE VEHICLE THOROUGHLY, INCLUDING THE ENGINE COMPARTMENT.

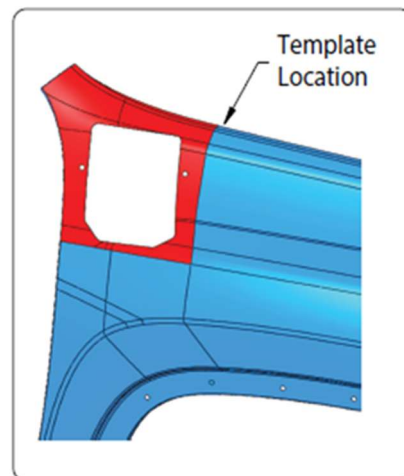
## I. VEHICLE PREPARATION

1. Lift vehicle and remove the passenger side front wheel and tire.
2. Remove the T-15 Torx screws and push pins holding the wheel liner in place.
3. Remove the wheel liner and SAVE.
4. Remove the sound insulation foam behind fender prior to drilling/cutting.

### GMC



### CHEVY



5. Align the supplied trim template as shown below in red and mark hole locations\*.

\*GMC: You will need to remove the fender badge to properly align the template.

### GMC & Chevy

6. Mark hole locations, remove template and center punch all locations.
7. Drill out hole locations per steps below.





A. CHEVY

- i Center-punch & Drill 1/8" pilot holes at each location (x6)
- ii Drill #2 holes to 3/8" (x2)
- iii Drill #1 holes to 2" (x4)

NOTE: BE CAREFUL OF ANTENNA WIRE WHEN DRILLING!

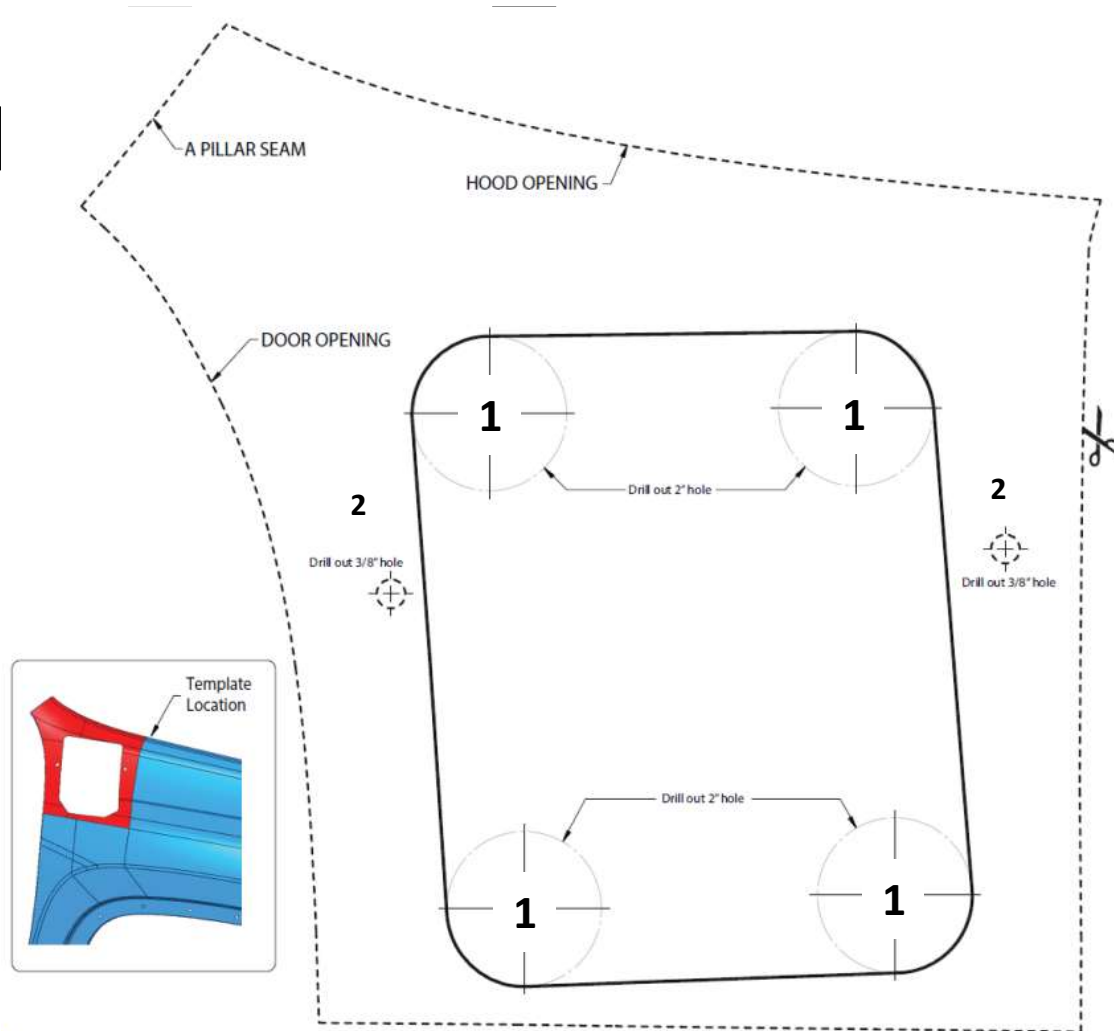


Figure 2



B. GMC

- i Center-punch & Drill 1/8" pilot holes at each location (x7)
- ii Drill #3 holes to 3/8" (x3)
- iii Drill #1 holes to 2.5" (x3)
- iv Drill #2 holes to 1" (x1)

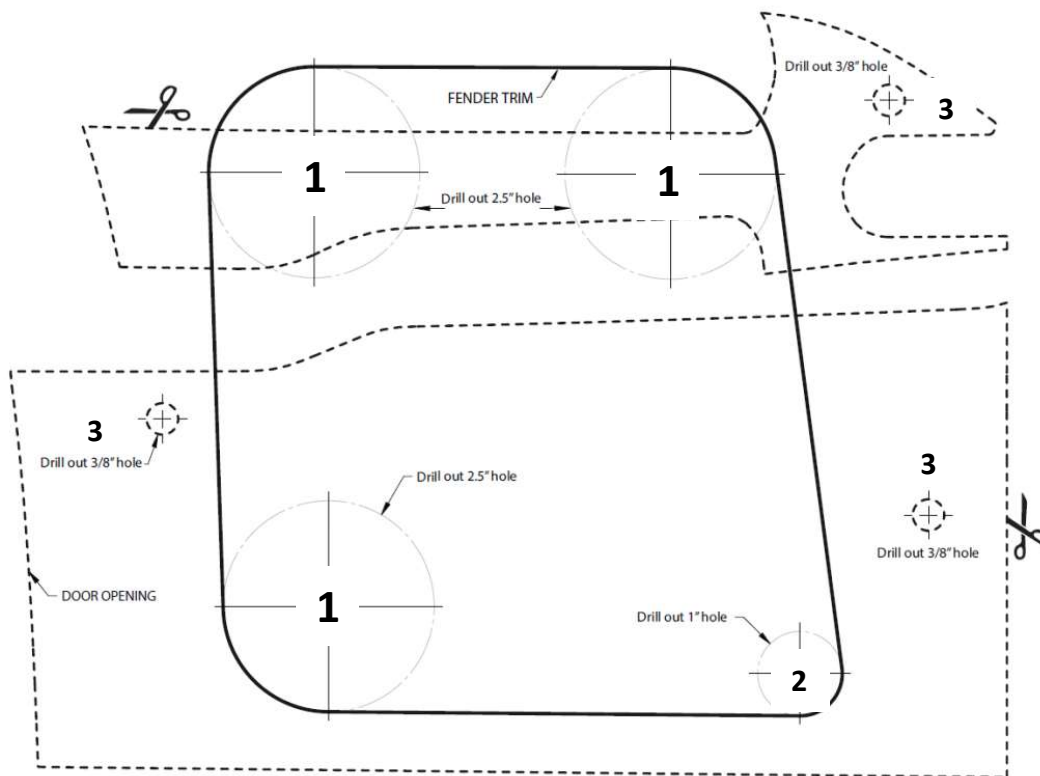


Figure 3

8. Use masking tape to layout tangent lines between the holes (fig. 4).



*Figure 4*

9. Using an air saw, electric, or air powered abrasive cut-off wheel, carefully cut on lines to make one large cut-out.

NOTE: Be sure to wear proper safety equipment including gloves and eye protection. Always cover any exposed window glass or painted surface to protect from sparks.

10. Remove tape.
11. Deburr Raw Edges then apply a touch-up paint or rust inhibitor to all bare metal edges.
12. Attach A-Pillar Bracket to A-Pillar Per Steps below (fig. 5)

- A. Using the bottom edge of the A-pillar bracket, measure 9" (through center) of A-Pillar and align to bottom edge of fender. Be sure to apply masking tape to the A-Pillar for protection prior to measurement and marking.
- B. Using the A-Pillar bracket, Mark the four holes and drill 1/8" pilot holes.
- C. Using your predrilled pilot holes, Drill 3/16" holes into the A-Pillar. (x4)
- D. Apply rust prevention treatment to raw edge to newly drilled holes.
- E. Using the supplied 3/16" Stainless Rivets and a Rivet Tool attach A-Pillar Bracket to the A-Pillar.

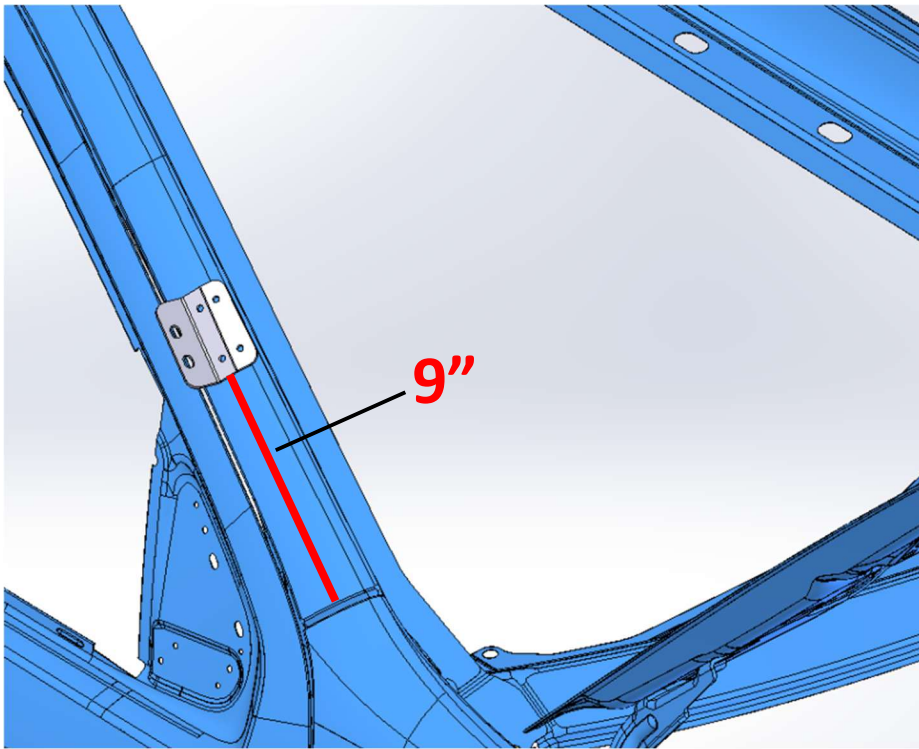


Figure 5

## II. AIR BOX PREPERATION

1. Disconnect & Remove Lower Air Box from Engine Compartment.

NOTE: Do not lose attached air box gromets.

2. Using the provided airbox adapter as a template (13, 4, 11, 2 \*see specific BOM for your adapter on pg. 3-6), mark out and trim away the outer strengthening ribs & trim the outer air inlet flush. Once this is complete you can apply your trim template and trim out the remainder. **Stock air inlet tube can be discarded.**

NOTE: Diesel template shown, Follow same process for Gas Trim Template. (fig. 6)

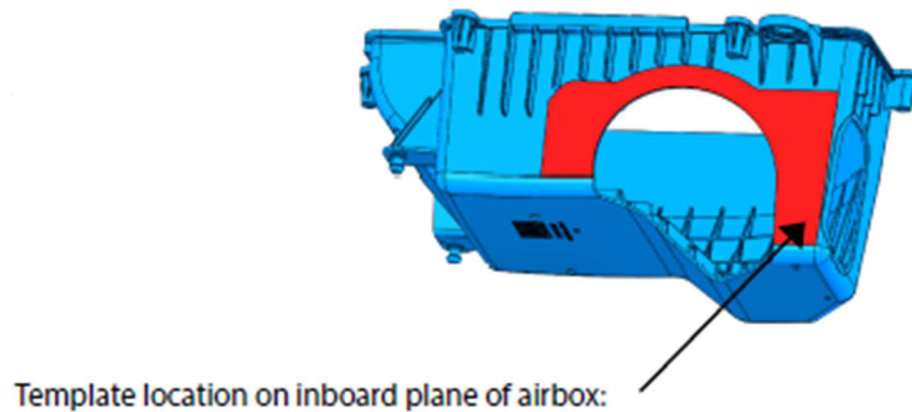


Figure 6

3. Apply provided Trim Template to lower air box and cut remaining trim lines. (fig. 7) \*Diesel Only\*

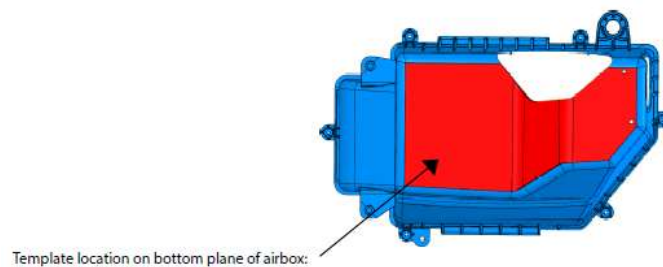


Figure 7

4. Fit adapter to air box, drill out the 5/32" holes, using the provided 5/32" aluminum split rivets attach the adapter to the lower airbox.



5. To install the lower connection tube, you will need to remove the stock fender reinforcement plastic. You can use a small hand saw or wire to cut away the molded clips. The foam adhesive can be cut using a fishing wire or string. Careful when removing to not damage the fender. See (fig. 8)

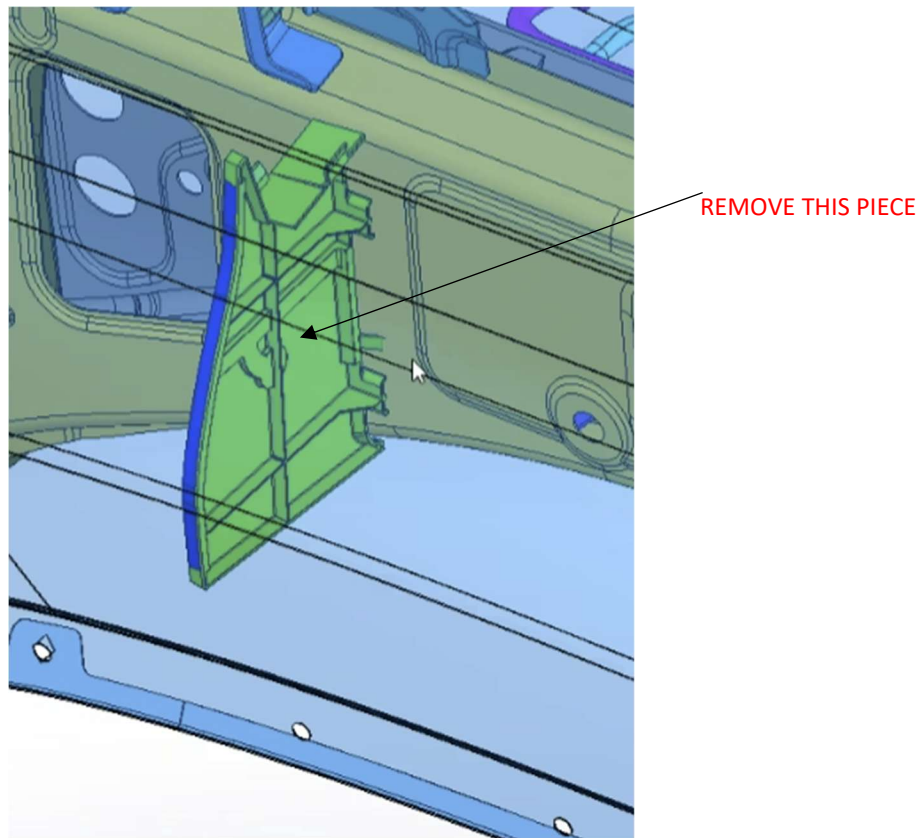


Figure 8

6. Proceed with the installation of the connection tube to the air box adapter. Hand tighten the connection tube to the air box using the 5" SS Clamp.

7. Install the provided horn relocation bracket to the frame and re-install horns. (fig. 9)

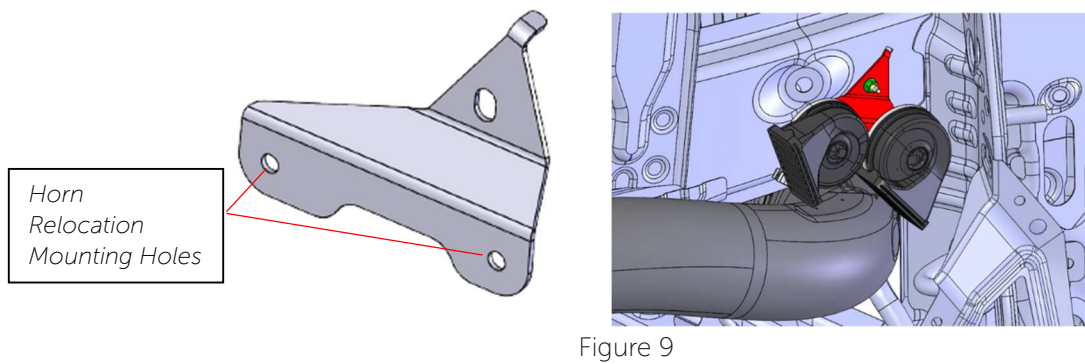


Figure 9

8. Install the provided connection tube bracket (1), fender reinforcement (2), and foam (3). (See fig. 10)

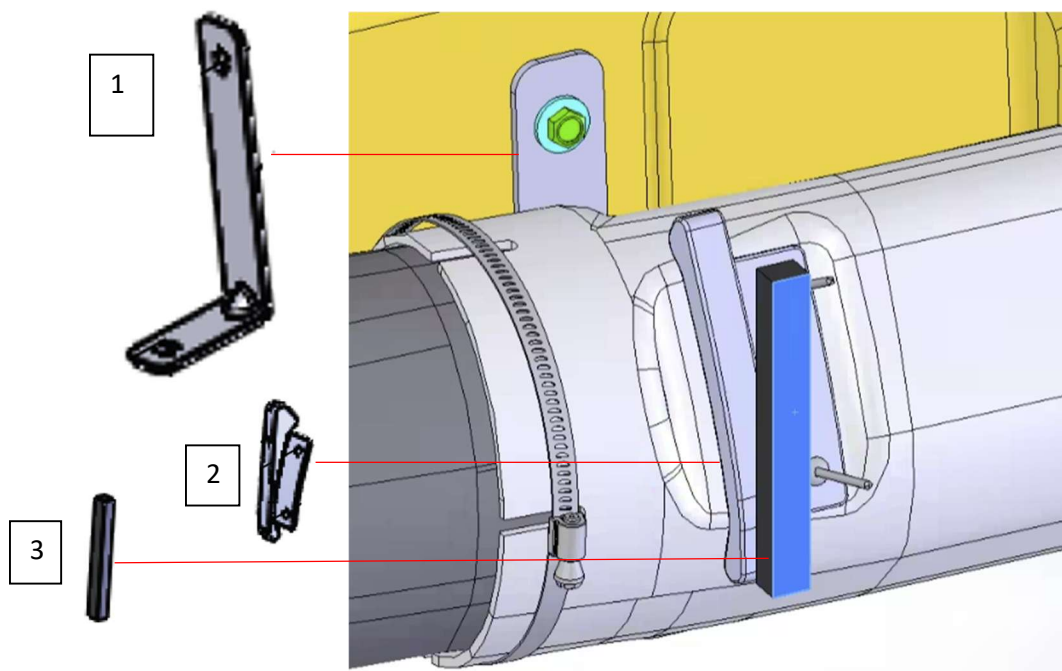


Figure 10



9. \*Diesel Only: Install the provided Airbox Plug over existing hood intake. (See Fig. 11)

Diesel Hood Air Intake

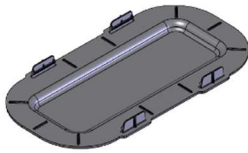


Figure 11

### III. SNORKEL INSTALLATION

1. Loosen/Remove Fender bracket bolts (x3) to allow for snorkel main body installation through trim hole.
2. Insert the main snorkel body through trimmed fender hole.
3. Attach Main body to lower connection tube and tighten with 5" SS Clamp.
4. Install provided M6 bolts (x2) into main snorkel body from backside of fender.
5. Re-tighten fender bolts to body. (x3)
6. Install black button head screw & black washers through A-Pillar bracket to main snorkel body and tighten.





#### IV. AIR RAM INSTALLATION

1. Attach the Air Ram to the top of the main snorkel body and adjust so it is forward facing to front of vehicle.
2. Mark the attachment clip hole location on the snorkel body and drill a 1/4" hole. (See fig. 12)

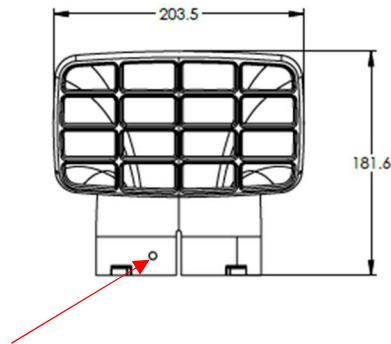


Figure 12

3. Install Air Ram using supplied push pin.
4. Install the plastic snorkel clamp to the backside of your Air Ram.
5. Using a 5/16<sup>th</sup> wrench, tighten until snug enough to prevent lifting or twisting of the air ram, assuring the pin on the bottom side of the "bolt" is all the way through so it holds.
6. Once the clamp is tightened, snip the extra off.