



AMERICAN EXPEDITION
VEHICLES

JK SNORKEL WITH PRE-FILTER OR AIR RAM

Part Number: 40306004AA, 40306005AA



Installation Guide

(Updated 4/29/10)



PLEASE READ BEFORE YOU START

IN ORDER TO INSTALL THIS PART PROPERLY YOU OR YOUR INSTALLER MUST READ THESE INSTRUCTIONS THOROUGHLY BEFORE BEGINNING THE INSTALLATION. FAILURE TO DO SO MAY RESULT IN MISTAKES AND AFFECT THE QUALITY OF THE FINISHED PRODUCT.

Included Parts	QTY	Required Tools
AEV Snorkel	1	Pop-Rivet Tool
AEV Trim Ring	1	Air cut off wheel or body saw
Snorkel Bracket A	1	Center Punch
Snorkel Bracket B	1	Wax pencil
Snorkel Bracket C	1	Touch up paint
Stainless Steel Rivets	6	Tape
1/4 - 20 Stainless Steel Bolts	6	2" (50.8mm) hole saw
Stainless Steel washers	6	Pilot Drill
Stainless Steel lock washers	6	Drill Motor
Instruction Sheet w/Template	1	Common hand tools
Anti-rattle Sleeve	1	Black Silicone
Large Black Rubber Band	1	



JK SNORKEL INSTALLATION INSTRUCTIONS

Before you begin the installation, be sure to **clean vehicle thoroughly**, including the engine compartment.

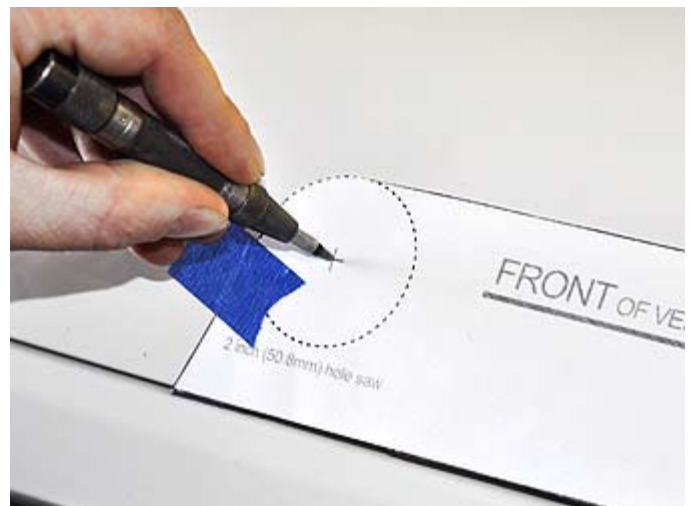
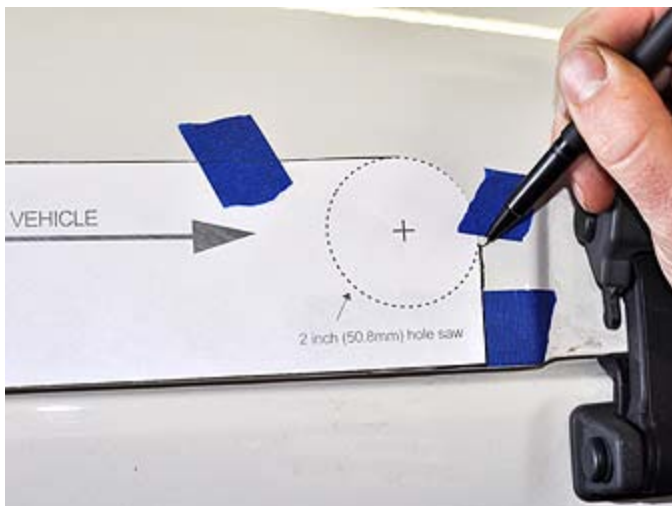
A. IF USING THE AEV HEAT REDUCTION HOOD

1. If the AEV Heat Reduction Hood is being used, be sure that it is installed at this time.
2. Skip ahead to Step C.

B. IF USING STOCK JEEP HOOD

If the stock hood is being used, it is necessary to modify the hood to fit the snorkel.

1. Cut out and place the template (if downloaded, this printable template is found on the last page of this Installation Guide) onto the right side of the hood. Measure 3/4" (19mm) back from the hood latch indentation as shown on the template. Mark out the cut line on the exterior of the hood using a wax pencil and then center punch the center of the 2" (50.8mm) circle.



2. Temporarily prop the hood up approximately 4.-6" (100-150mm) in order to cut the hood without damaging the fender or any under hood components. Cover and protect all glass, plastic and painted parts from sparks.



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3. Use a pilot drill to drill both layers of the hood first, then use the 2" (50.8mm) hole saw to carefully cut through both layers of the hood.



4. Using a cutoff wheel or reciprocating body saw, cut out the rest of the opening.



5. Mark the inside of the hood as shown. Draw the cut line approximately 1/4" (6mm) lower than the bend of the hood as shown. This can easily be done by holding a marker such that your finger can be used as a guide. Finish by marking the rest of the area to be removed.





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6. Using the cutoff wheel, clearance the hood inner so that it clears the opening when viewed from the side.



7. Use touch up paint or rust inhibitor such as MOPAR #82300508 on all areas affected. On lighter colored vehicles, you may want to “black out” the hood inner so that it is not noticeable. Mask and paint as desired.

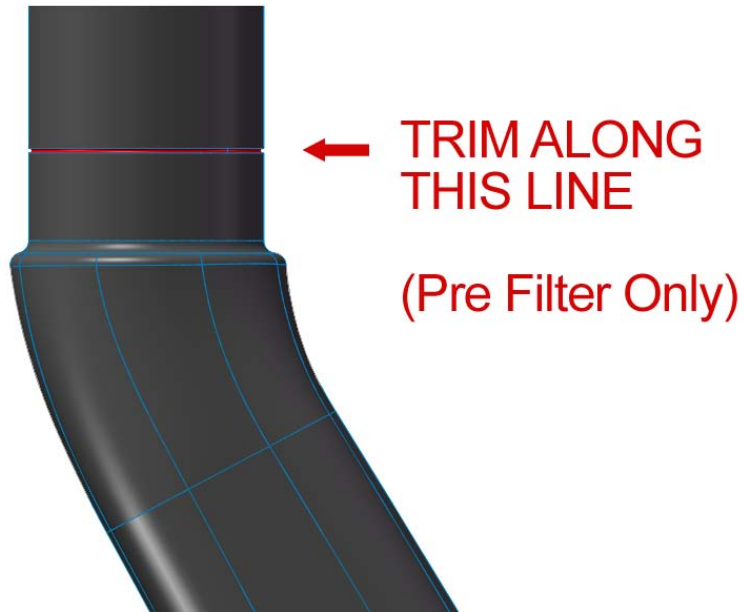


C. REMOVE THE FACTORY AIRBOX

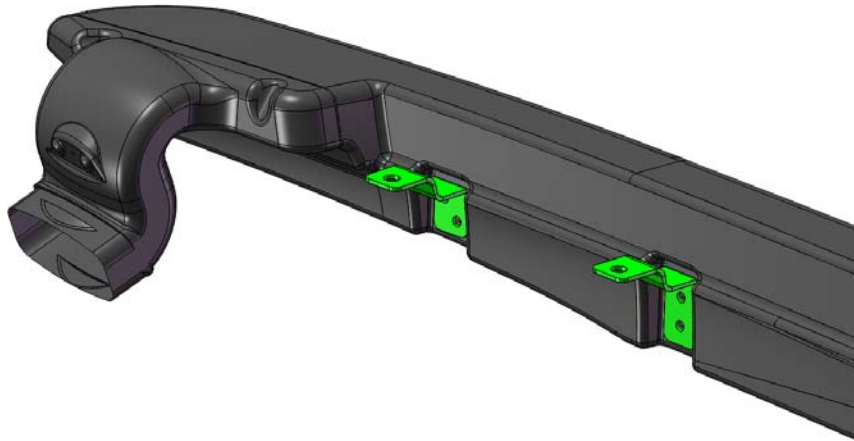
1. 3.8L Gas Models: Loosen the clamp on the engine intake hose. Separate the intake hose and crankcase breather hose (gas) from the airbox and remove the top of the airbox from the vehicle.
2. 2.8L Diesel Models: Loosen the clamp on the turbo intake hose and unplug the MAP and IAT sensors. Remove the top of the airbox from the vehicle.
3. Remove the OE filter and lower portion of the airbox. The airbox simply pulls vertically out of rubber mounts.

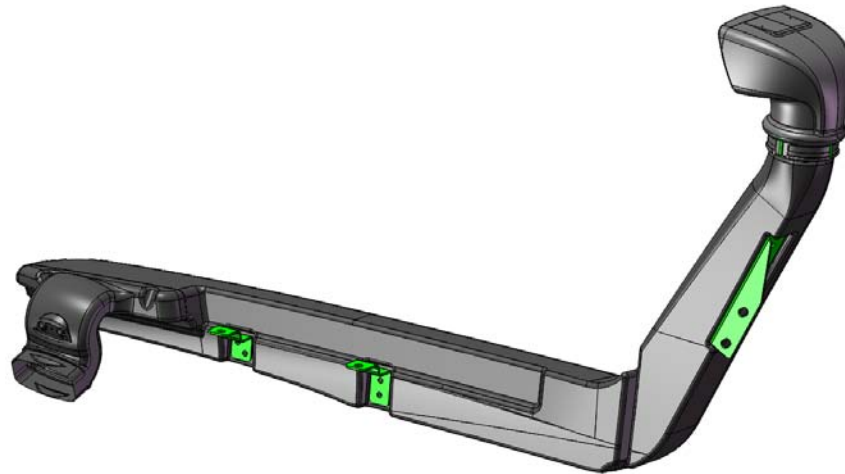
D. INSTALL THE SNORKEL

1. PRE-FILTER ONLY - If installing the pre-filter, trim the snorkel body as shown on the line molded into the snorkel. (see following photo)



2. Install the mounting brackets to the snorkel. Center the mounts in the recessed areas in the snorkel and attach the brackets using the 1/4"-20 bolts and washers. Do not tighten completely at this time - just enough to allow some movement for adjustment.





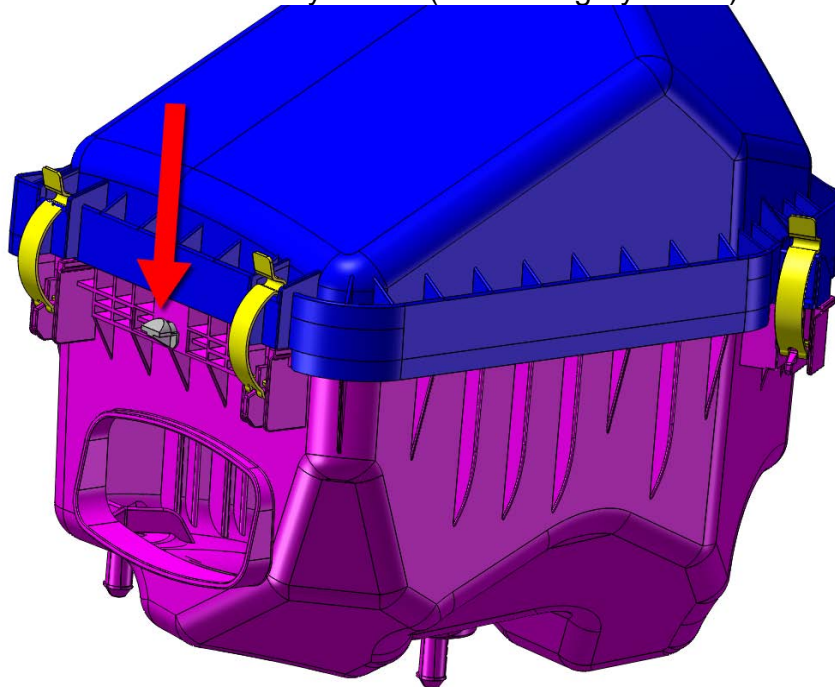
3. Remove the fender bolts and windshield bolts as shown to prepare the vehicle for mounting the snorkel.



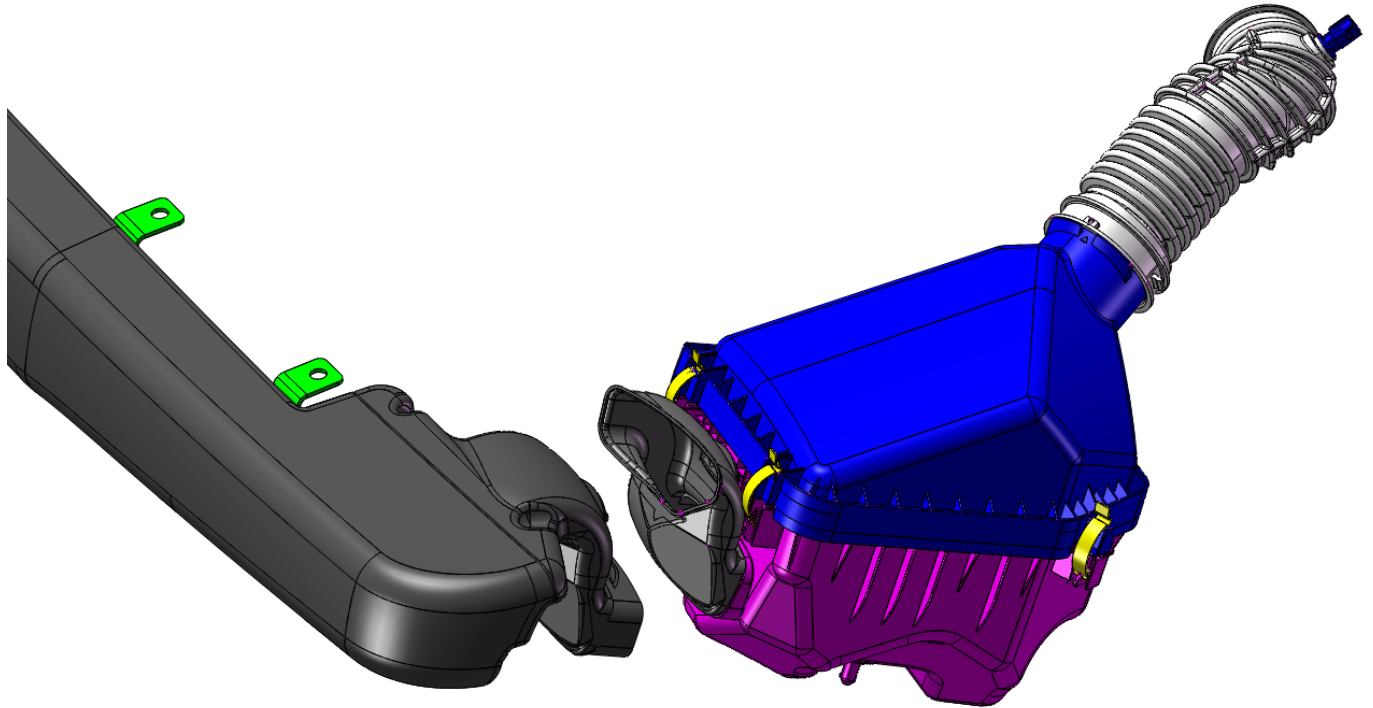
4. Remove the short factory “snorkel” by squeezing the part inside the airbox.



5. Cut off the small locator on the factory airbox (shown in gray below).



6. Install the snorkel into the factory airbox. Use black silicone to seal the snorkel-to-airbox joint and seal the holes in the bottom of the airbox.



7. Install the snorkel/airbox back into the vehicle. It may be necessary to lubricate the rubber airbox isolators to get the airbox to seat properly.
8. Install the fender bolts and windshield bolts temporarily in order to fit the snorkel for adjustment.



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9. Test fit the hood to snorkel clearance. The snorkel and hood should have roughly a 1/8" (3mm) gap surrounding the front and top of the snorkel.
10. Adjust the brackets for the best fit and then tighten every bolt and bracket.
11. Install the optional AEV Trim Ring. Place the AEV Trim Ring on the hood and adjust it so that the visual gap between the hood and the snorkel is even. Mark the location of the holes on the hood and drill to 1/8". Paint the holes with touchup paint and install the AEV Trim Ring using the supplied stainless steel rivets.



12. Reinstall the filter, top of the airbox and all hoses.
13. Install the AEV Air Ram or pre-filter (be sure to rotate the maintenance instruction label so that it is easily visible). Tighten the supplied hose clamp. Adjust the AEV Air Ram or pre-filter so that it sits straight and level when viewed from the front and side of the vehicle.

E. SNORKEL USAGE AND CARE INSTRUCTIONS

This product is intended to provide clean, dry air to the engine but does not necessarily mean the vehicle can exceed the manufacturer's recommended fording depth. There are many considerations to make when increasing fording depth and a snorkel is just one small part. While a snorkel can be a real lifesaver in an occasional accidental deep water crossing, the benefits can be seen every day in dust prevention - especially when equipped with the optional pre-filter. The dust collector is very effective and can fill up quickly in extremely dusty situations. It is not uncommon in desert areas, when traveling with many vehicles, for the dust bowl to need emptying twice a day or more. The snorkel and dust bowl must be cleaned with soap and water only.



F. ANTENNA ANTI-RATTLE DEVICE

The radio antenna may contact the snorkel body. This can result in a rattle from the two parts tapping against each other. In order to cure this issue we have included an anti-rattle sleeve. To install, slide the sleeve over the antenna all the way down to the base. The image below shows the installed anti-rattle sleeve.



G. LARGE RUBBER BAND

Install the Large Rubber Band on top of the snorkel between the Air Ram or Pre-Filter to provide additional friction to the clamping device.





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COMMENTS OR QUESTIONS?

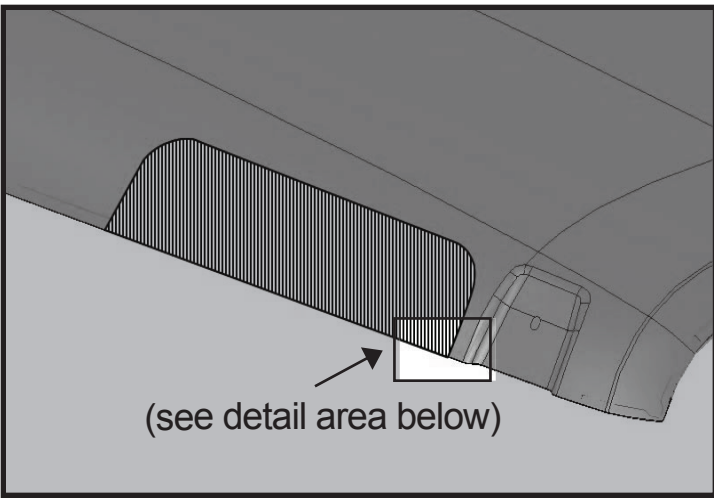
Be sure to visit our forum at: <http://forum.aev-conversions.com>

American Expedition Vehicles

Phone: 406.251.2100

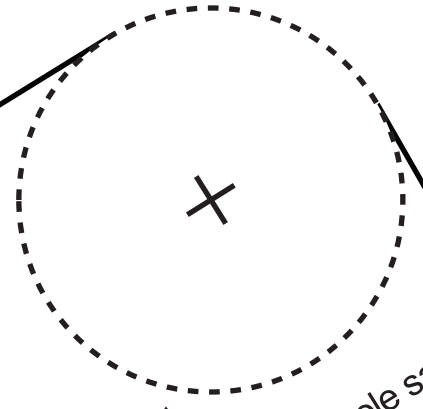
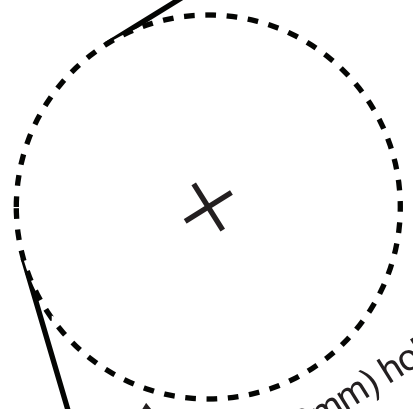
Email: tech@aev-conversions.com

Website: <http://www.aev-conversions.com>



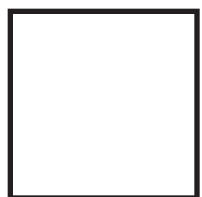
JK Hood

FRONT OF VEHICLE



3/4 inch (19mm) from latch pocket tangent

1 inch (25.4 mm) sq.
(check print scale)



flush with outer hem tangent

Hood Detail

