

# SS1066HF SAFARI V-SPEC SNORKEL

Jeep JK Wrangler Left Hand Drive  
 CRDI4 2.8Litre-I4 Diesel Engine and EGHV6  
 3.8Litre V6 Gasoline Engine



6/10/2009

ITEM	PART NO	DESCRIPTION	QTY
1	956-133-000	BODY - SNORKEL (SS1065HF)	1
2	000-135-800	3 1/2" AIR RAM ASSEMBLY	1
3	956-032-000	BRACKET - UPPER MOUNTING	1
4	000-002-100	BOLT - HEX - 6mm x 1.0 x 14mm (SEMS)	3
5	956-992-000	SPACER - PLASTIC 8.7mmID x 18mm x 4.5mm	2
6	000-110	STUD - S/S - 8mm x 1.25 x 25mm	3
7	000-311-300	WASHER - BODY - 8mm x 30mm - S/S	3
8	000-205-300	NUT - NYLOC - 8mm x 1.25mm - S/S	3
9	956-024-250	HOSE - AIR ENTRY	1
10	000-909	CLAMP - HOSE - 80/100mm	1
11	000-910	CLAMP - HOSE - 90/110mm	1
12	956-123-200	DUCT - AIR ENTRY (SS1066HF)	1
13	000-958-450	POP RIVET - ALUMINIUM - 4.8mm x 21mm	9
14	000-226	CLIP - SPIRE - 4.8 x 2.5/3.7mm	3
15	000-951-550	SCREW - S/T - 4.8mm x 16mm (BLACK)	3
16	000-914/B	CLAMP - HOSE - No. 56 (BLACK)	1
17	956-017-000	TEMPLATE - OUTER FENDER	1
18	956-017-200	TEMPLATE - INNER FENDER	1
19	956-017-300	TEMPLATE - FENDER LINER (FRONT)	1
20	956-017-400	TEMPLATE - FENDER LINER (REAR)	1
21	956-017-500	TEMPLATE - AIR CLEANER HOUSING	1
22	000-987-178	TIE STRAP - NYLON - 4.8mm x 178mm	1
23	000-268	NUT - TUBE - FENDER LINER	1
24	000-441-200	SLEEVE - AIR RAM	1

## Installation Guide

Fitment to:

- Right Hand Side

Fitting Time:

- 210 min

Special Tools:

- Air Body Saw (Reciprocating)
- Step Drill
- T40 Torx Bit
- Pop-Rivet Gun (Swivel Head)
- Touch-up Paint
- Sikaflex 227 (adhesive sealant)
- Loctite 243 (thread lock)
- Loctite 406 Instant Adhesive
- Clip Removing Tool
- 12"/18" Adjustable Wrench
- Prep Wash
- Masking Tape

**Prior to commencing the installation, it is the installer's responsibility to verify that all components and particularly the template (Item 17) are correct.**

**1** Jack the vehicle up and remove the right hand front wheel.

**2**

Remove the RHS inner fender liner. (The 3 rear plastic pop rivets must be removed as shown).



**Remove Plastic Pop Rivets**

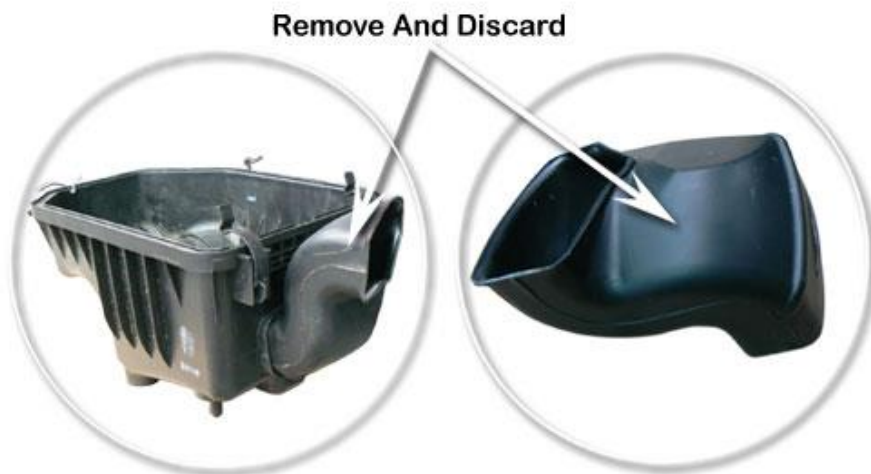
**3** Remove the following in accordance with the factory service manual:

- Radio antenna
- Air cleaner assembly

**4**

Remove and discard the:

- Air intake from the air cleaner housing
- "Sport" sticker from the RHS fender. (Use prep wash to remove any sticky residue from the sticker).



**5**

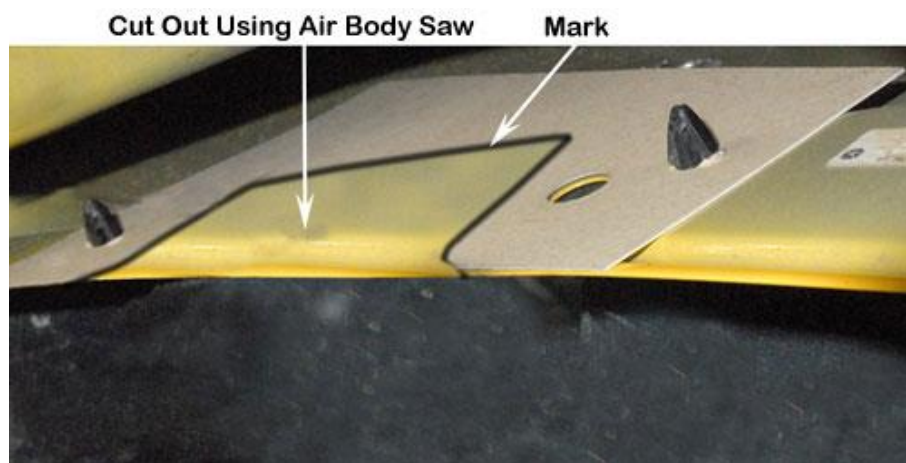
Tape the outer fender template (Item 17) to the rear and upper edges of the right hand fender. Use a felt tip pen to mark the 3 hole positions and the required fender panel and flare cut out area.

Remove the template.



**6**

Position the inner fender template (Item 18) over the 2 flare clips. Using a felt tip pen, mark the required fender panel area which needs to be removed.





7

Use an air body saw to remove the marked area of the inner fender panel, outer fender panel and flare.

Drill pilot holes for the three marked mounting hole positions. Use a step drill to drill the 3 mounting hole positions to 16mm.

De burr and paint all the exposed metal surfaces to prevent rust.

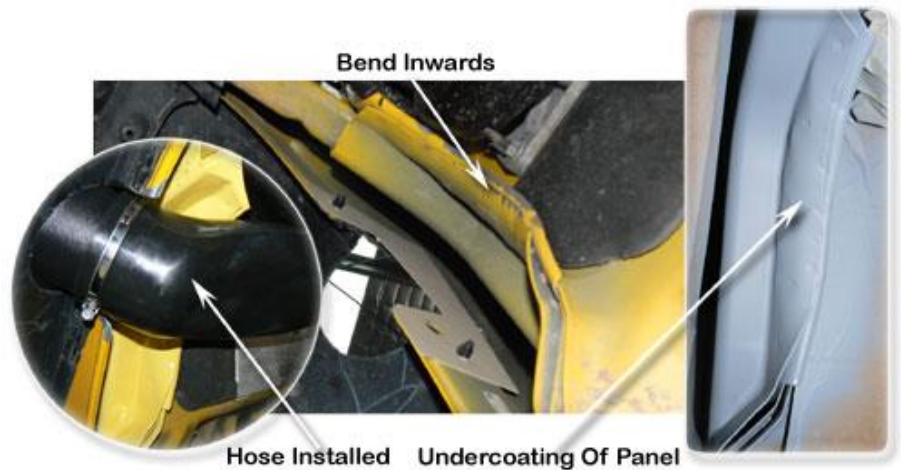


8

Using a 12" or 18" adjustable wrench or specialized panel beating equipment, bend the lower "A" Pillar reinforcement panel inwards (Be sure to bend the panel far enough inwards).

This process is critical to ensure that adequate clearance is achieved for the fitment of the air entry hose (Item 9).

Prepare the surface and paint to prevent the panel from rusting.

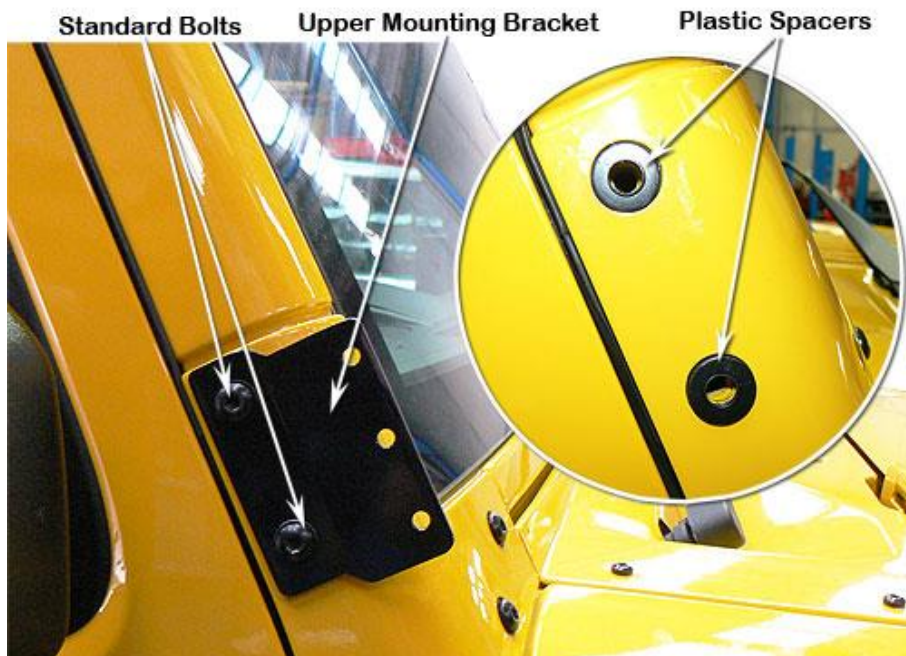


9

Remove the two stock bolts from the 'A' Pillar and install the two plastic spacers (Item 5) into the two 'A' Pillar bolt reliefs.

Apply Loctite 243 to the two stock 'A' Pillar bolts and install the upper mounting bracket (Item 3) onto the 'A' Pillar.

Fasten bolts in accordance with the factory service manual.



10

Apply Loctite 243 to each of the stainless steel mounting studs (Item 6) and install the studs finger tight into the snorkel body inserts.



11 Measure 65mm down from the top of the snorkel body and mark the circumference.

Slide the air ram sleeve (Item 24) over the top of the snorkel body (Item 1) and align the bottom of the sleeve with the 65mm mark.

Lift the edges of the sleeve (Item 24) and apply several small dabs of Loctite 406 Instant Adhesive or similar to secure the sleeve in position.





Install the snorkel body onto the fender panel.

Align the snorkel body to the upper mounting bracket and fender panel. When correctly aligned, fasten the snorkel body to the fender panel with body washers (Item 7) and nyloc nut (Item 8).

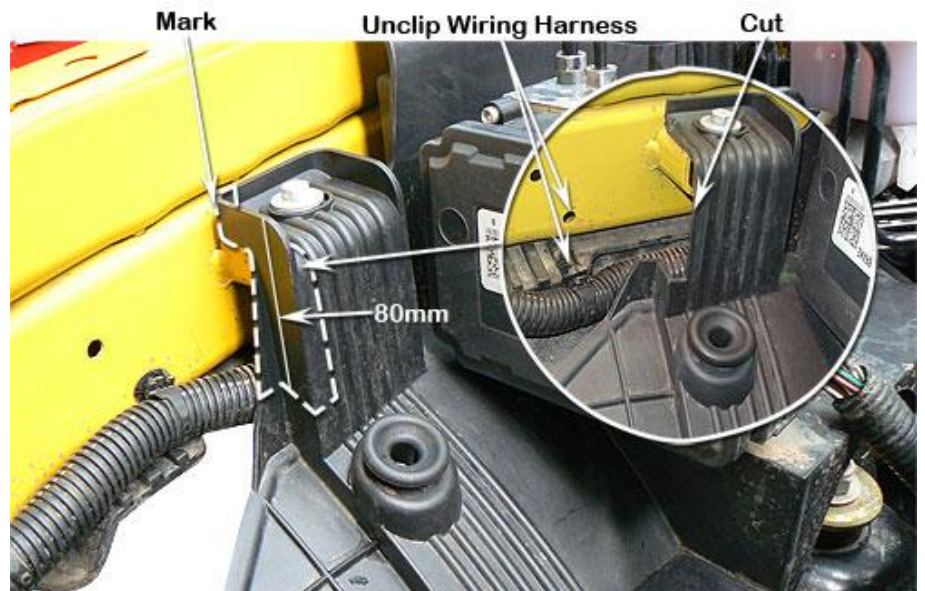
Fasten the snorkel body to the upper mounting bracket with hex bolts (Item 4).



Unclip the wiring harness from its mounting position. Mark 80mm down (3.2") from the top of the air cleaner housing mounting bracket as shown.

Use an air body saw to cut away the required section of the air cleaner housing mounting bracket as shown.

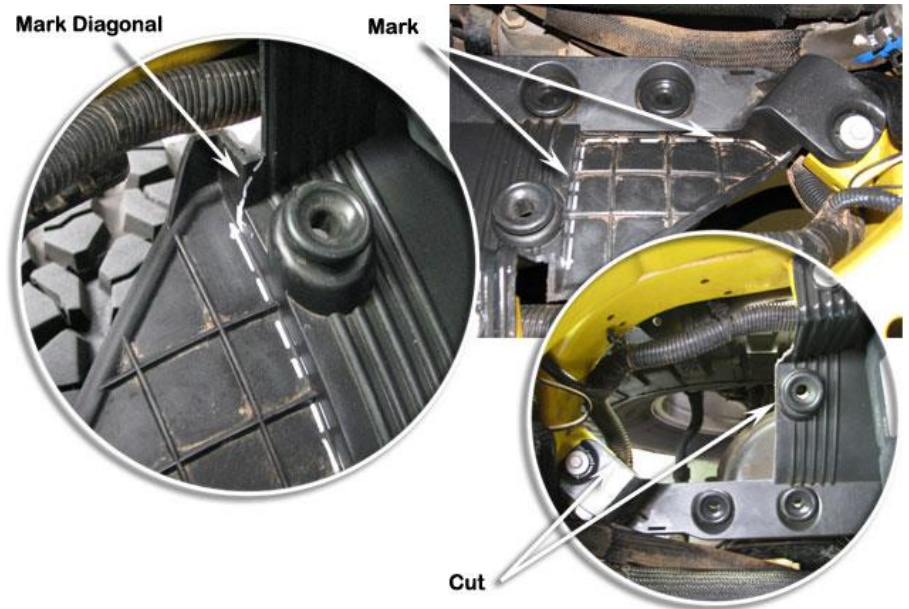
Ensure that the wiring harness is clear of the saw blade whilst cutting.



14

Mark the lower section of the plastic air cleaner housing mounting bracket as shown.

Use an air body saw to cut away the required section of the air cleaner housing mounting bracket.

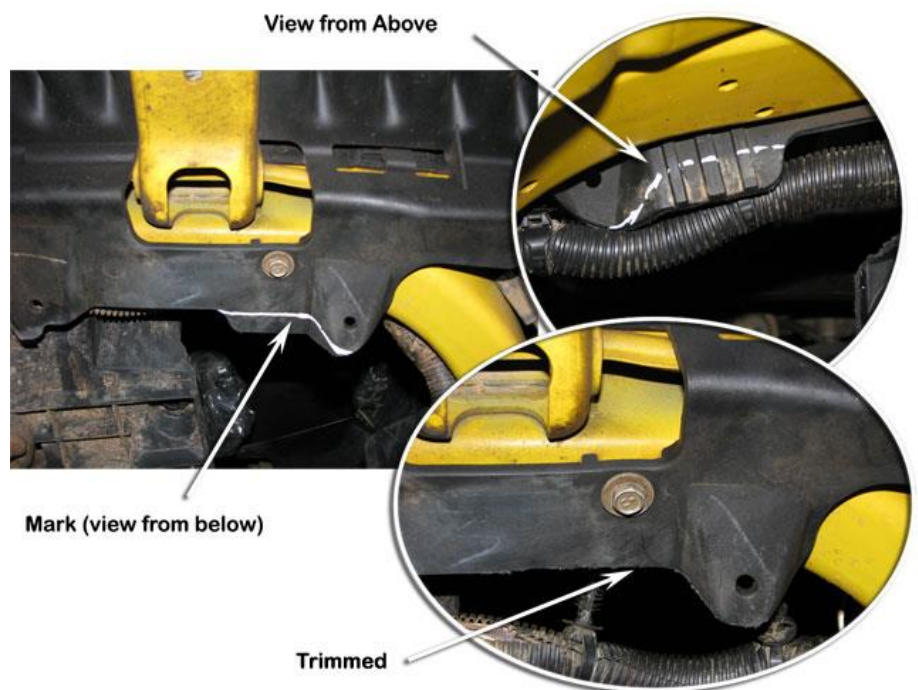


15

Mark the small section of the fender flare support bracket as shown.

Use an air body saw to cut the marked section off. Ensure that the wiring loom is clear of the saw blade whilst cutting.

Hint: It is easier to work from underneath inside the wheel well.



16

Use a grinder to remove the intake snout from the air cleaner base.

Hint: Remove the four lid retaining clips to make it easier to handle the air cleaner base.





- 17** Position the air cleaner base template (Item 21) to the underside of the air cleaner base, locate the template over the two air cleaner base mounting pins as shown and mark the required profile.

Use an air body saw to cut away the marked section of the air cleaner base and discard the centre cut piece.

Use a fine file to smooth any rough edges in the air cleaner base part of the cut.



- 18** Position the air entry duct (Item 12) over the air cleaner base and press down firmly.

With the air entry duct correctly positioned onto the air cleaner base, mark the nine hole positions onto the air cleaner base.

Drill the marked hole positions on the air cleaner base with a 5mm (13/64") drill.

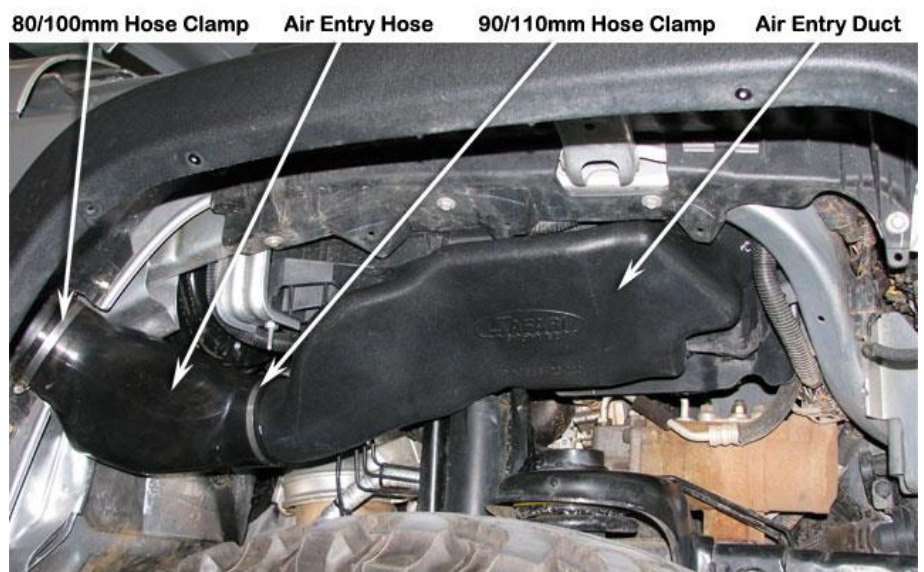


- 19** Install the air entry duct (Item 12) up through the air cleaner housing mounting bracket trimmed previously.

Install a 90/110 hose clamp (Item 11) at the front end and a 80/100 hose clamp (Item 10) at the rear end of the air entry hose (Item 9).

Install the air entry hose to the snorkel body outlet and the air entry duct.

Do not tighten the hose clamps yet.





Reposition the wiring loom to the upper holes.

Apply a thick coating of adhesive sealant to the air entry duct (Item 12) surfaces that will be mating with the bottom of the air cleaner base.

Clip Wiring

Thick Coating  
Adhesive Sealant



21 Reinstall the four air cleaner lid retaining clips to the air cleaner base and apply lubricant to the rubber air cleaner mounting bushes.

Apply a generous coating of adhesive sealant to the underside surfaces of the air cleaner base that will be mating with the air entry duct (Item 12).

Install the air cleaner base and install all nine pop rivets before securing with the pop rivet gun.

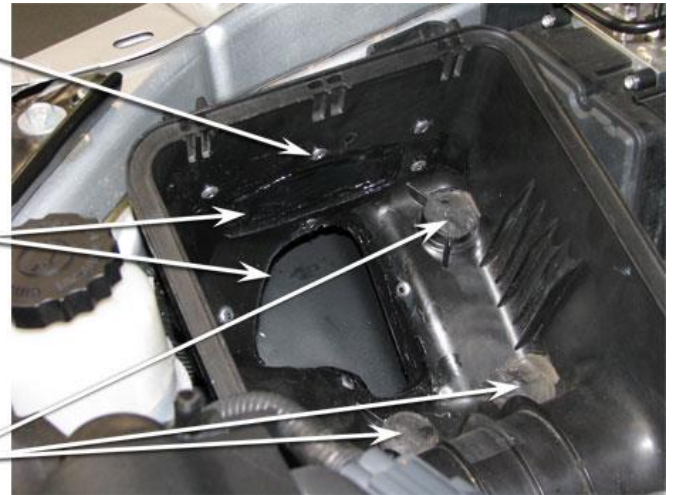
To make the mounting pins watertight, completely seal the holes in the three mounting pins with adhesive sealant.

Wipe away and smooth out any excess adhesive sealant.

Pop rivets (Nine)

Smooth Excess  
Adhesive Sealant

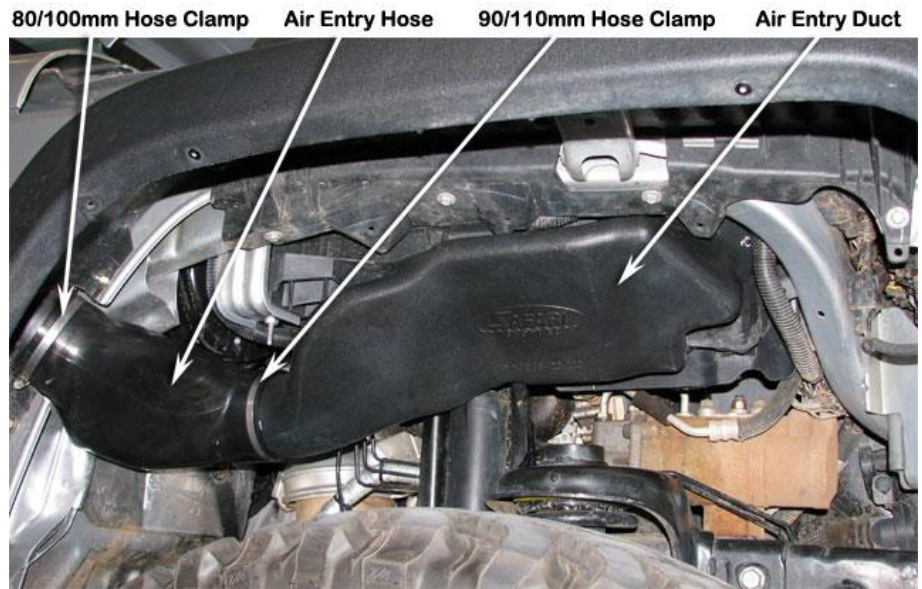
Seal Holes in  
Mounting Pins



22

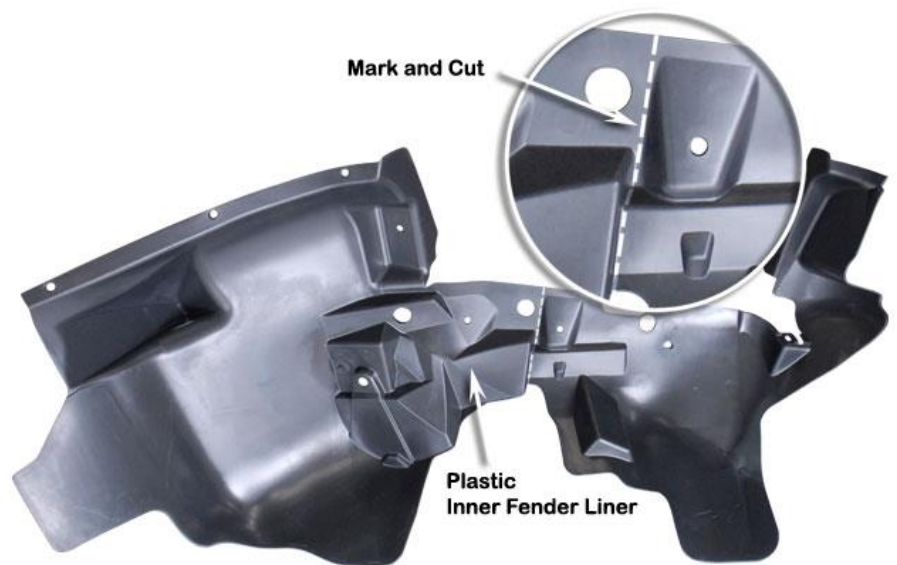
Adjust the position of the air entry hose (Item 9) installed earlier for a relaxed fit. Tighten the hose clamps (Items 10 & 11) at each end of the air entry hose (Item 9).

Reinstall the air filter element, air cleaner housing top and connect sensor plugs.



23

Mark and cut the inner fender liner as shown.



24 Align the front inner fender liner template (Item 19) to the engine bay side of the front section of the plastic fender liner as shown. Retain with masking tape.

Mark the outline of the noted section of the fender liner to be cut and the hole position shown.

Use an air body saw to cut the marked section out from the front section of the plastic fender liner.

Drill the marked hole position with a 5mm (13/64") drill.





25

Align the rear inner fender liner template (Item 20) to the front wheel side of the plastic fender liner as shown. Retain with masking tape.

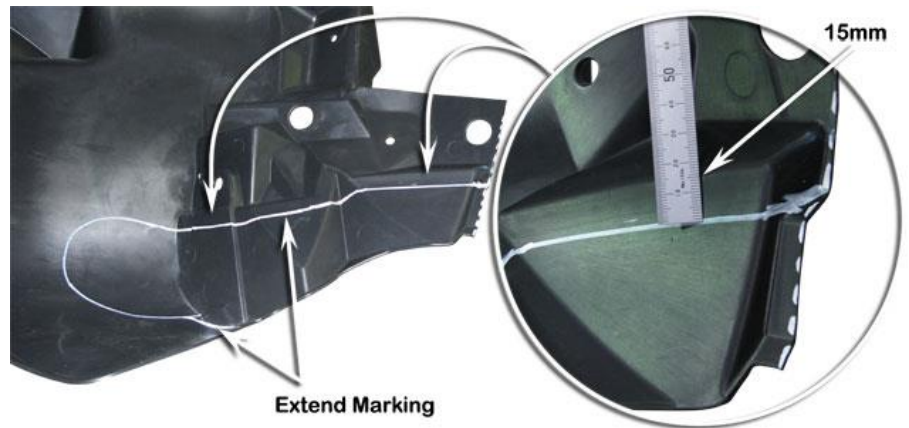
Mark the outline but do not cut yet.



26

Extend the cutting path as shown. Maintain approximately a 15mm (9/16") below the corner ridge shown.

Use an air body saw to cut the marked section out from the rear section of the plastic fender liner.



27

Trail fit the rear plastic inner fender liner and mark areas shown for additional trimming.

Trim marked areas to achieve a neat fit and finish.



28

Trial fit the front section of the fender liner and if required, make further trimming adjustments for a neat fit.

Install the front section of the fender liner and secure with the stock clips.

Drill a 5mm (13/64") hole into the shocker tower and with a small file, elongate the hole for the plastic tie strap. Deburr and paint the hole to prevent rust. Install the plastic tie strap (Item 22) as shown.

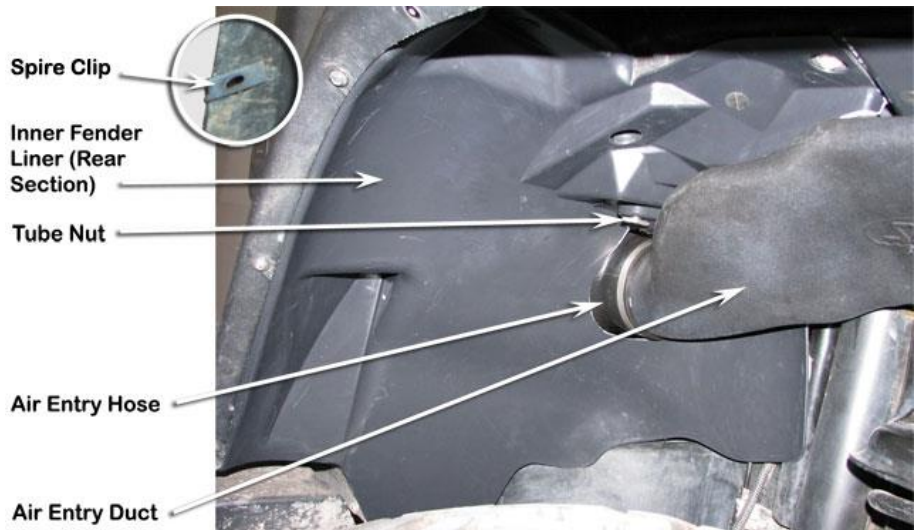


29

Install 3 spire clips (Item 14) to the three rear fender liner holes.

Install the rear section of the inner fender liner.

Secure in place with stock clips and the tube nut (Item 23).



30

Install three self tapping screws (Item 15) through the fender flare and into the three spire clips (Item 14).



31 Refit the right front wheel, radio antenna and any other components that may have been removed during the installation process.

32

Loosely install the black hose clamp (Item 16) to the base of the air ram assembly (Item 2). Install the air ram assembly onto the snorkel body. Align the air ram assembly and tighten the black hose clamp (Item 16).



**It is the installer's responsibility to ensure that all connections are watertight.**