



# SS445HF

SAFARI V-SPEC SNORKEL

To Suit: Toyota 4Runner Gen4 Pre & Post Facelift

4.0L V6 Gasoline (1GR-FE Engine)

Built: August 2002 -August 2009



Note: Pre-Facelift Model Pictured

01/07/2019

## Parts List

ITEM	PART NO.	DESCRIPTION	QTY
1	361-133-000	BODY - SNORKEL (SS440HF / SS445HF)	1
2	000-135-960	4" AIR RAM ASSEMBLY	1
3	361-032-000	BRACKET - UPPER MOUNTING	1
4	000-002-100	BOLT - HEX - 6mm x 1.0 x 14mm (SEMS)	2
5	000-951	SCREW - S/T - 4.2mm x 13mm - S/S	3
6	000-960	INSERT - PLASTIC	3
7	000-110	STUD - 8mm x 1.25 x 25mm - S/S	5
8	000-311-300	WASHER - BODY - 8mm x 30mm - S/S	5
9	000-205-300	NUT - NYLOC - 8mm x 1.25mm - S/S	5
10	361-024-200	HOSE - AIR ENTRY	1
11	000-909	CLAMP - HOSE - 80/100mm	1
12	000-1913	CLAMP - HOSE - 120/140mm	1
13	000-1931/B	CLAMP - HOSE - SIZE 64 (BLACK)	1
14	361-016-000	RUBBER - FLARE INFILL (Pre-Facelift Models Only)	1
15	361-017-000	TEMPLATE - FENDER	1

## Installation Guide

### Fitment to:

- Right Hand Side

### Fitting Time:

- 180min
- +15mins for pre-facelift models

### Special Tools:

- 86mm & 114mm Holesaws
- Body Saw (reciprocating)
- Loctite 243 (thread lock)
- Sikaflex 227 Adhesive Sealant
- Step Drill
- Files
- Masking Tape
- Touch-up paint

**Prior to commencing the installation, it is the installer's responsibility to verify that all components and particularly the template (Item 15) are correct.**

1

Remove the following in accordance with the factory service manual:

- Air Cleaner Assembly
- Air Cleaner Inlet Ducting
- Right Hand Front Mud Flap
- Right Hand Front Fender Liner

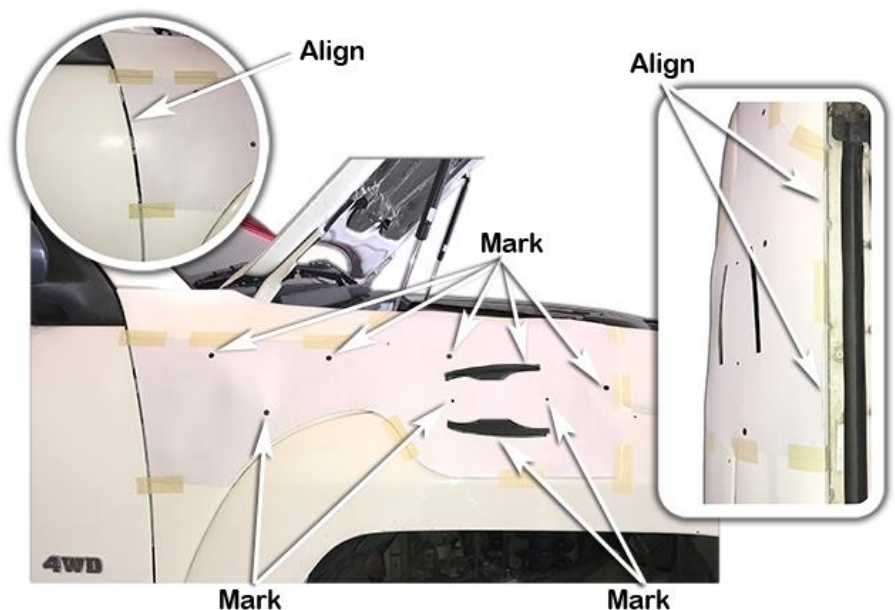
2

Align the fender template (Item 15) to the upper and rear edges of the right hand fender as shown.

Tape the template to the fender with masking tape.

Mark all hole positions and the upper and lower cut-out sections with a felt tip pen.

Remove the template.



Prior to drilling any holes in the fender, place a strip of masking tape along the join of the fender flare and fender to prevent any metal filings being trapped between the fender flare seal and fender.

Drill a pilot hole for each of the marked hole positions.

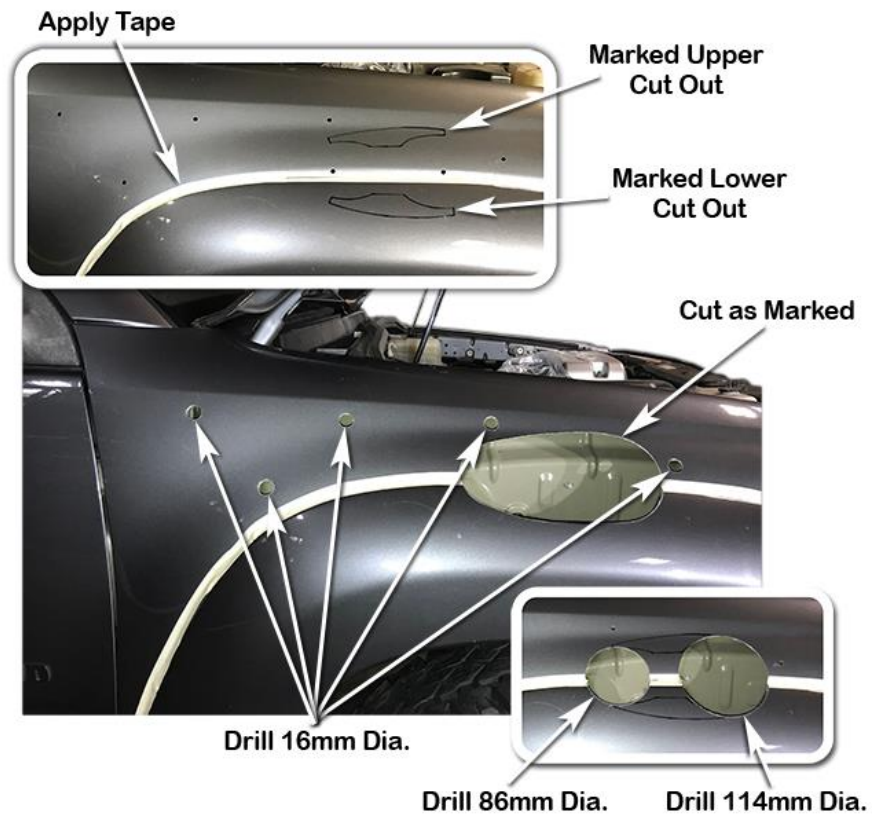
Using an 86mm and 114mm holesaws, Drill the snorkel body outlet hole, drilling the front part of the hole using the 114mm holesaw and rear part of the hole using the 86mm holesaw.

Using the body saw, cut the marked upper and lower cut-out sections of the fender and fender flare as marked from the fender template in step 2.

*Note: Facelift models; it may be necessary to cut away the lower section of the flare first then the lower section of the fender.*

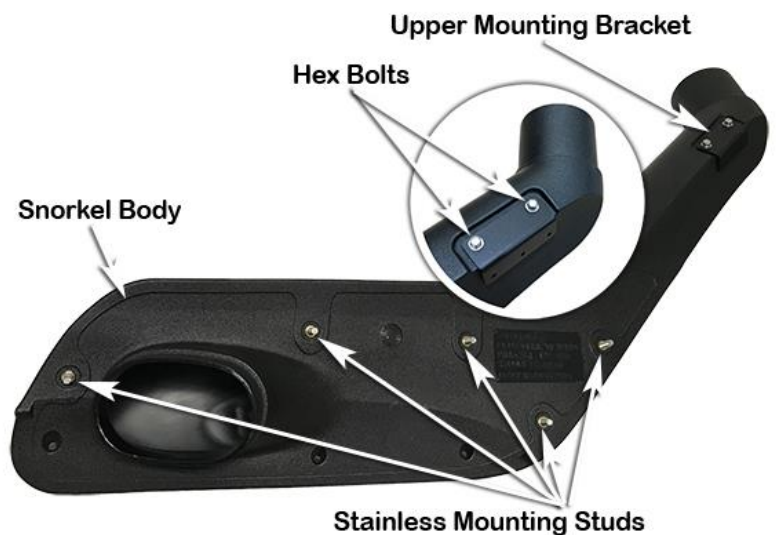
Use a step drill, drill the five mounting holes to 16mm diameter.

Deburr and paint holes.



Install the upper mounting bracket (Item 3) to the snorkel body (Item 1) with hex bolts (Item 4).

Apply Loctite 243 to each of the stainless steel mounting studs (Item 7) and install the studs finger tight into the snorkel body (Item 1) mounting inserts as shown.





**Pre-Facelift Models Only:**

Apply adhesive sealant to the lower rear section of the snorkel body as shown.

Install the flare infill rubber (item 14) to the snorkel body (item 1), tape the infill rubber to the snorkel body in several positions to hold the infill rubber in position while the adhesive sealant cures, it may be necessary to install a small wedge between the snorkel body outlet snout and the infill rubber to ensure the infill rubber aligns to the bottom edge of the snorkel body correctly.

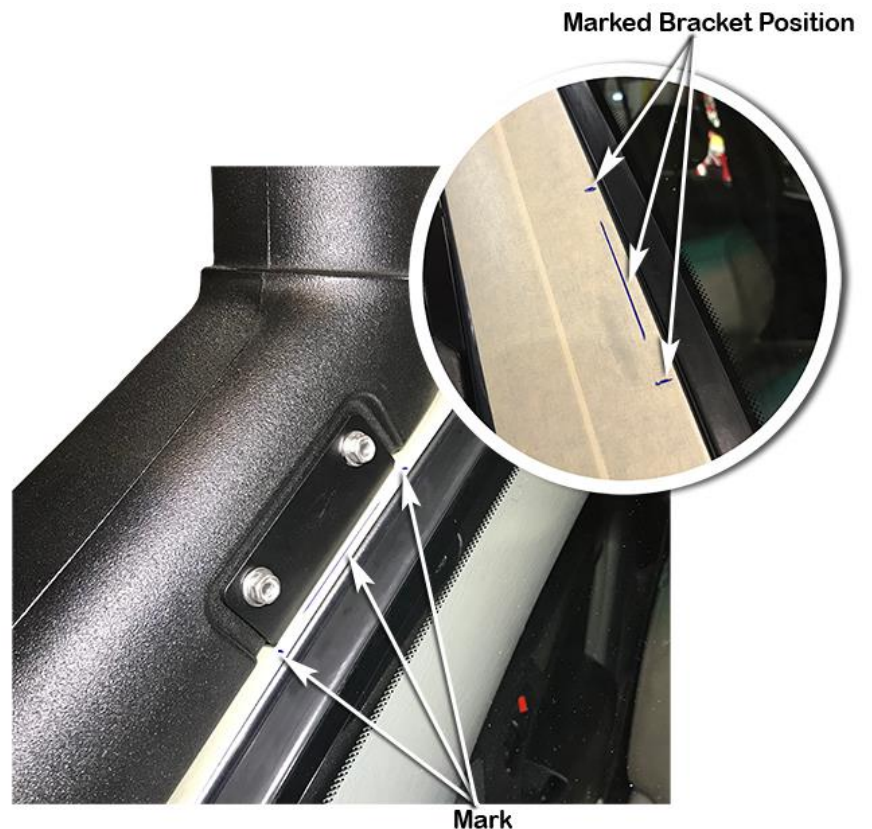
*Hint: A standard fender liner clip can be used as a wedge.*



Place a strip of masking tape along the A-pillar panel.

Carefully install the snorkel body (Item 1) to the fender.

With the snorkel body correctly positioned on the vehicle, mark the position of the upper mounting bracket (Item 3) onto the masking tape.

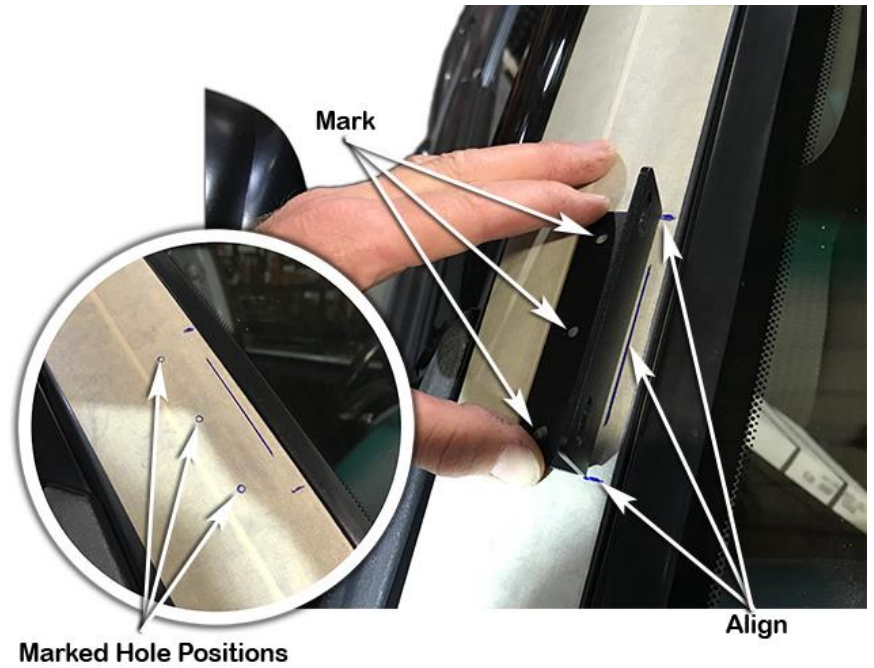


7

Remove the snorkel body (Item 1) from the vehicle and remove the upper mounting bracket (Item 3) from the snorkel body.

Position the upper mounting bracket (Item 3) onto the A-pillar and align the bracket with the marked bracket outline.

Mark the three mounting hole positions with a felt tip pen.



8

Drill a pilot hole at each of the three marked hole positions.

Drill each hole position to 8mm diameter with a step drill or 8mm drill bit.

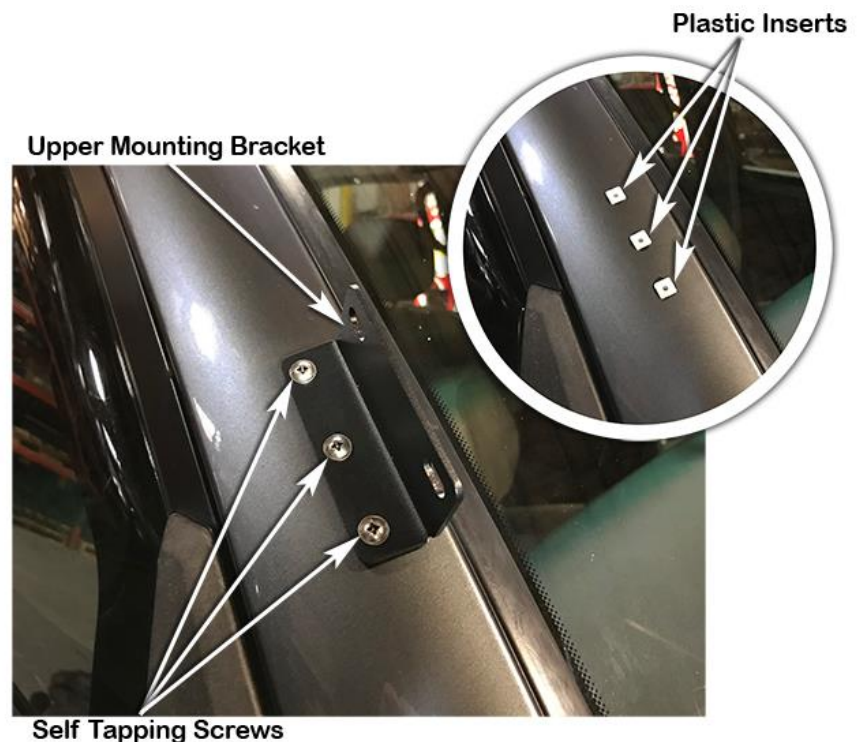
Deburr and paint holes.



9

Install the plastic inserts (Item 6) into the 8mm diameter holes in the A-pillar.

Secure the upper mounting bracket (Item 3) to the A-pillar with three self-tapping screws (Item 5).

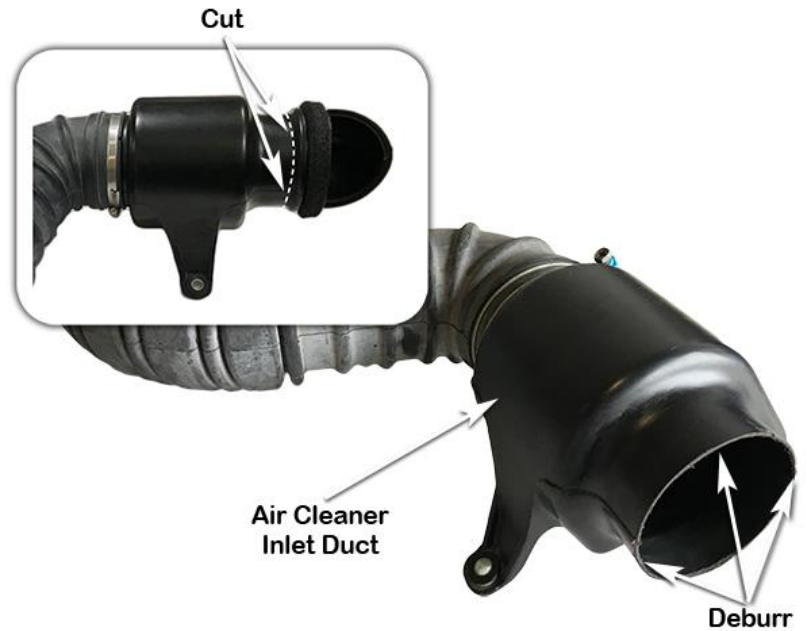




10

Using the body saw or a hacksaw, cut-off the front section of the air cleaner inlet duct as shown.

Deburr the cut section.



11

**INSTALLER OPTION :**

The air cleaner lid and air inlet duct have drain holes as shown.

The drain holes can permit water to enter the air intake.

Safari advises that the drain holes should be sealed to ensure a watertight installation.



12

Install the air entry hose (item 10) through the hole in the inner fender panel.

Loosely install a 80/100mm hose clamp (item 11) over the end of the air entry hose.

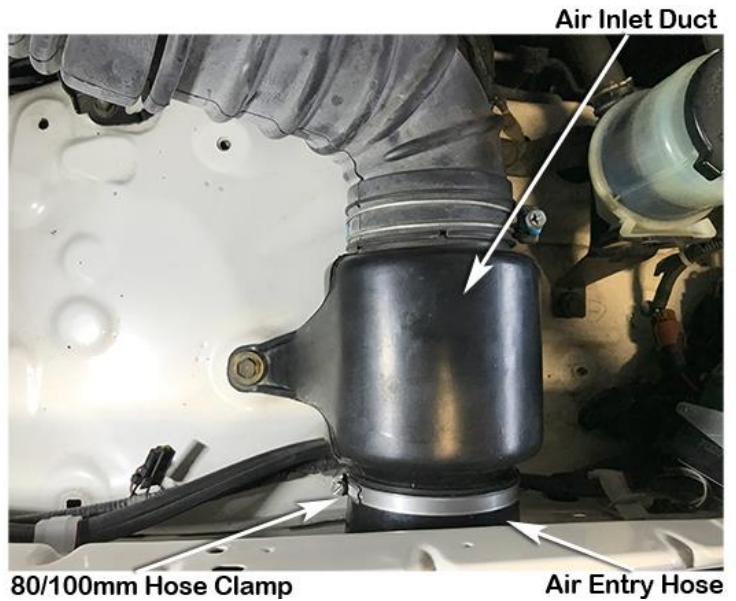
*Note: The orientation of the hose clamp*



Apply a small amount of lubricant to the inside of the air entry hose and install the modified air cleaner inlet duct into position, guiding the snout of the air cleaner inlet duct into the air entry hose.

Fasten the air cleaner inlet duct with the standard mounting bolts.

Do not tighten the 80/100mm hose clamp.



Carefully shape the 120/140mm hose clamp (item 12) to the oval shape of the air entry hose (item 10).

**Note: The orientation of the hose clamp.**

Loosely install the oval shaped 120/140mm hose clamp onto the air entry hose (Item 10) orientated the hose clamp onto the air entry hose as shown.

Apply a small amount of lubricant to the inside of the air entry hose.

120/140mm Hose Clamp

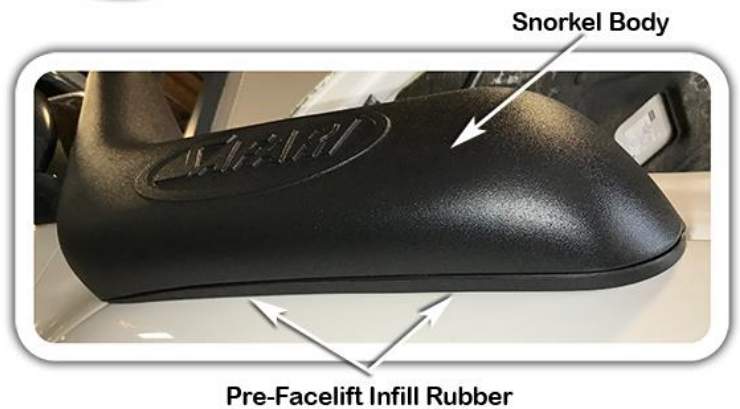


Carefully install the snorkel body (Item 1) to the fender, guiding the snorkel body outlet snout into the air entry hose (item 10), align the snorkel body to fender and upper mounting bracket.

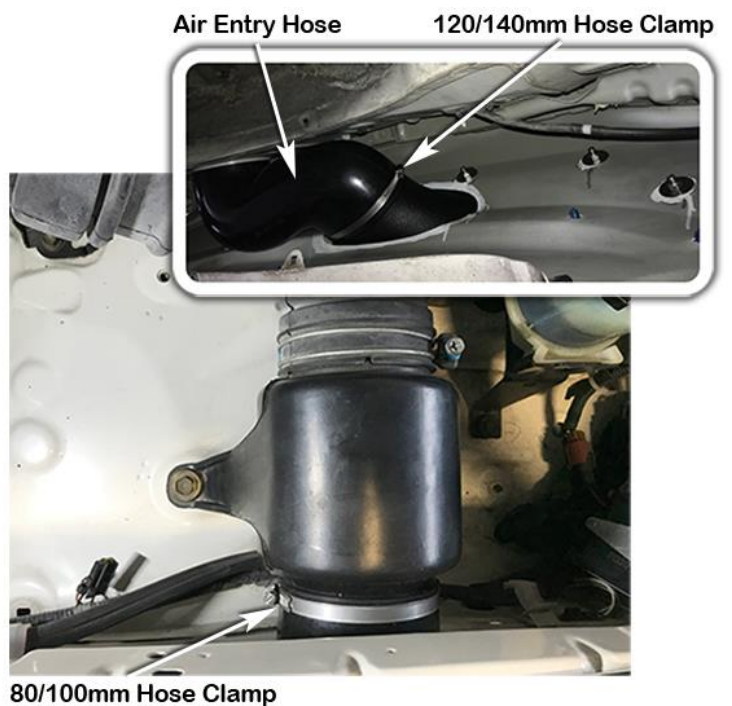
When correctly aligned, fasten the snorkel body to the fender with body washers (Item 8) and nyloc nuts (Item 9).

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

*Note: The lower image show's Pre-facelift model with the flare infill rubber installed.*



Align the air entry hose for best fitment (*Ensure the air entry hose is installed hard up against the shoulder of the snorkel body outlet*), correctly position the 80/100mm and 120/140mm hose clamps at either end of the air entry hose and tighten the hose clamps.





17

Loosely install the black hose clamp (Item 13) over 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 13).



18

Install the fender liner, mud flap, air cleaner element, air cleaner lid and any other items that may have been removed during the snorkel installation process.

19

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