



**4X4 ENGINEERING**

# SS820HF SAFARI V-SPEC SNORKEL

SUZUKI JIMNY

1.3L 4 Cylinder Petrol (G13B & M13A Engines)



01/04/2015

## Parts List

ITEM	PART NO	DESCRIPTION	QTY
1	930-133-000	BODY - SNORKEL	1
2	000-135-400	3 " AIR RAM ASSEMBLY	1
3	930-032-000	BRACKET - UPPER MOUNTING	1
4	000-002-100	BOLT - HEX - 6mm x 1.0 x 14mm - S/S (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 32mm - S/S	5
9	000-205-300	NUT - NYLOC - 8mm x 1.25mm - S/S	5
10	930-024-000	HOSE - AIR ENTRY	1
11	000-907	CLAMP - HOSE 60/80mm	1
12	000-909	CLAMP - HOSE 80/100mm	1
13	000-918/B	CLAMP - HOSE - No. 48 (BLACK)	1
14	930-017-200	TEMPLATE - INNER GUARD	1
15	930-017-000	TEMPLATE - GUARD PANEL	1

**Installation Guide**

**Fitment to:**

- Right Hand Side

**Fitting Time:**

- 150min

**Special Tools:**

- 86mm Hole saw
- Step drill
- Touch-up paint
- Loctite 243 (Threadlocker)
- Masking tape
- Body Saw (Reciprocating)

**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.

- RHS Guard Liner
- Battery
- Air Cleaner Assembly
- Vacuum Reservoir

**2**

Remove and discard the air inlet ducting (including inlet sleeve) as shown.



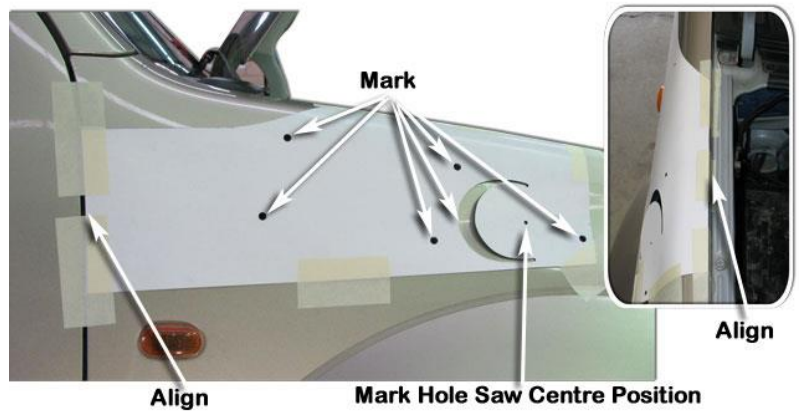
3

Align the guard panel template (item 15) with the upper and rear edges of the RHS guard panel.

Tape the template to the guard panel with masking tape.

Mark all five mounting hole positions the hole saw centre position and the cut out section with a felt tip pen.

Remove the template.



4

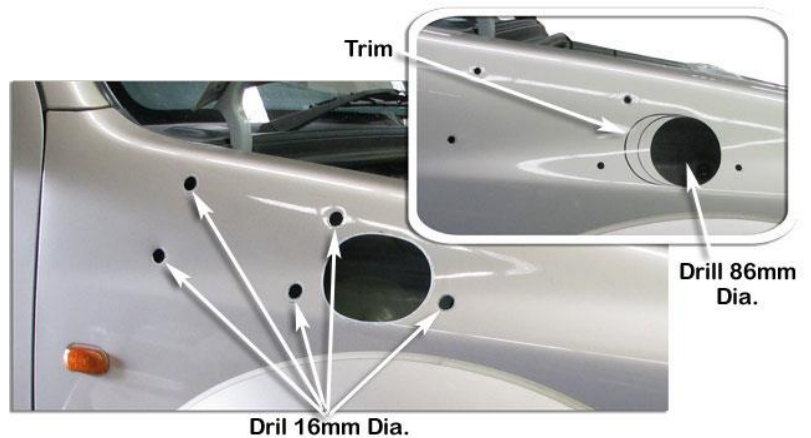
Drill a pilot hole for each of the marked hole positions.

Use a 86mm diameter hole saw to drill the snorkel body outlet hole position in the guard panel.

Use a body saw to trim away the marked section of guard panel.

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

Deburr and paint holes to prevent rust.

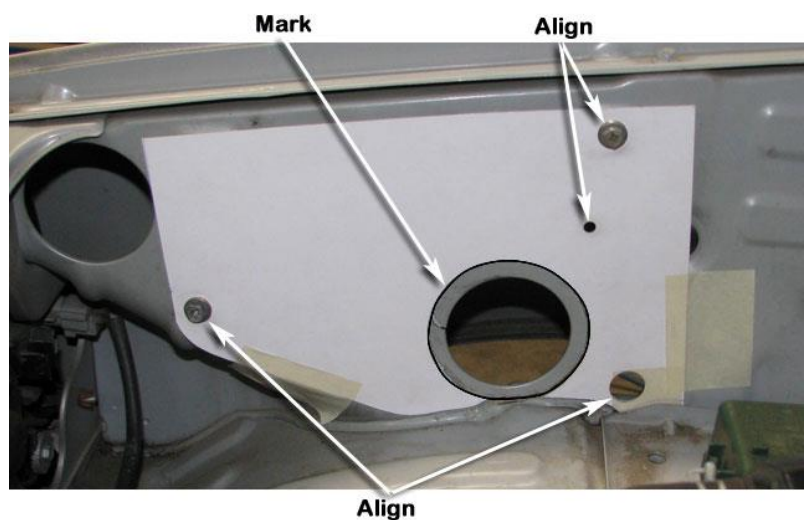


5

Align the inner guard template (item 14) to the M6 threaded holes, 8mm hole and the 20mm oval hole in the inner guard panel as shown.

Mark the 86mm diameter hole onto the inner guard panel with a felt tip pen.

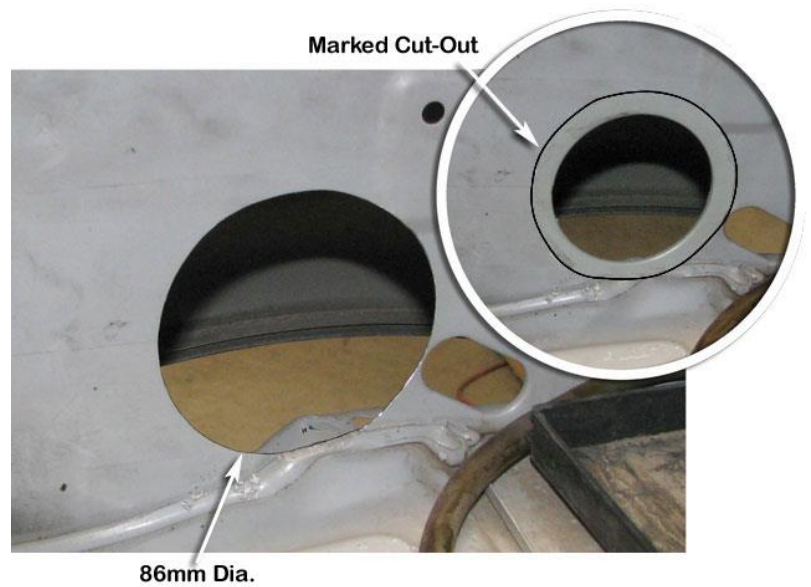
Remove the template.



6

Use a body saw to enlarge the hole in the inner guard panel to 86mm diameter (cutting on the outside of the line).

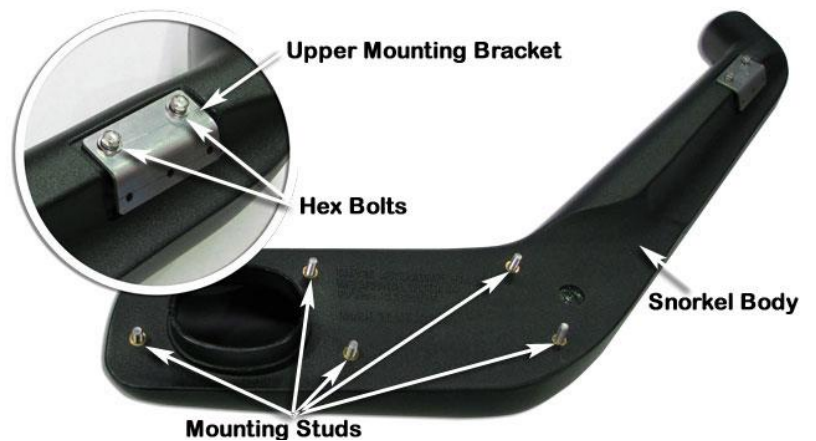
Deburr and paint hole.



7

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.

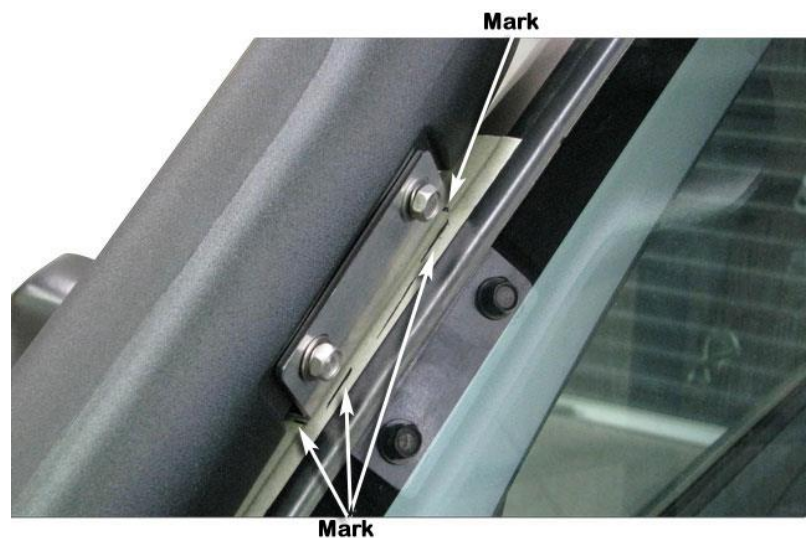


8

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

Carefully install the snorkel body (item 1) to the guard panel.

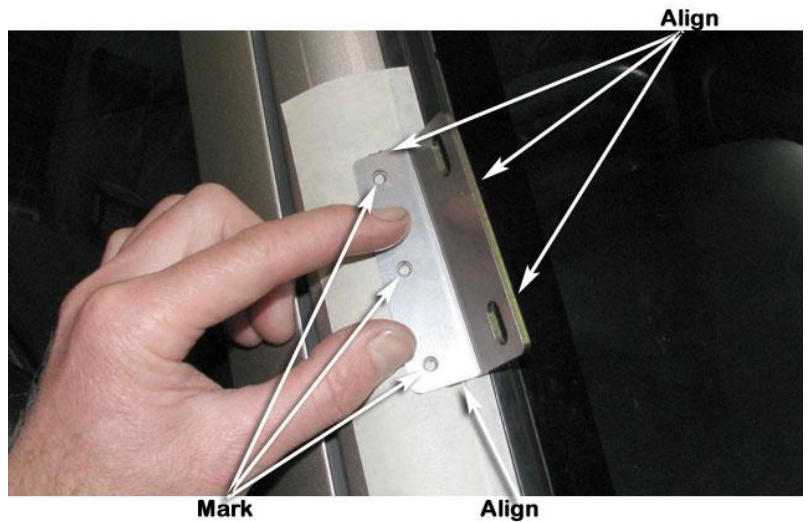
With the snorkel body correctly positioned, mark the position of the upper mounting bracket onto the masking tape as shown.



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 onto the A-pillar and align the bracket to the marked bracket position on the masking tape.

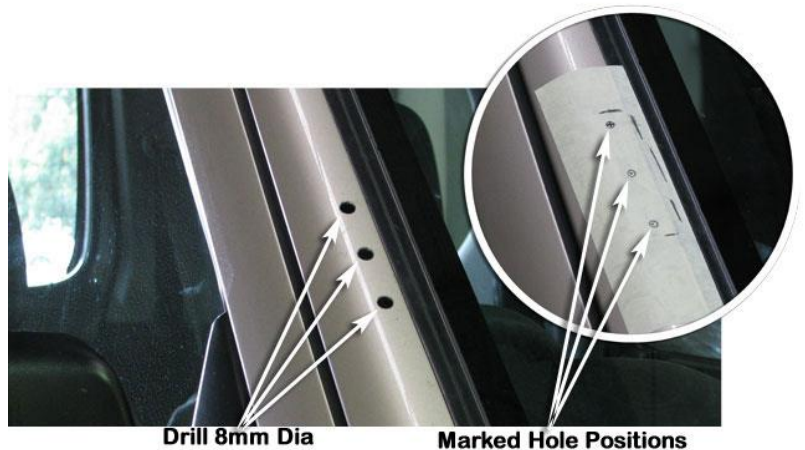
With the bracket correctly aligned mark the three mounting hole positions with a felt tip pen.



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

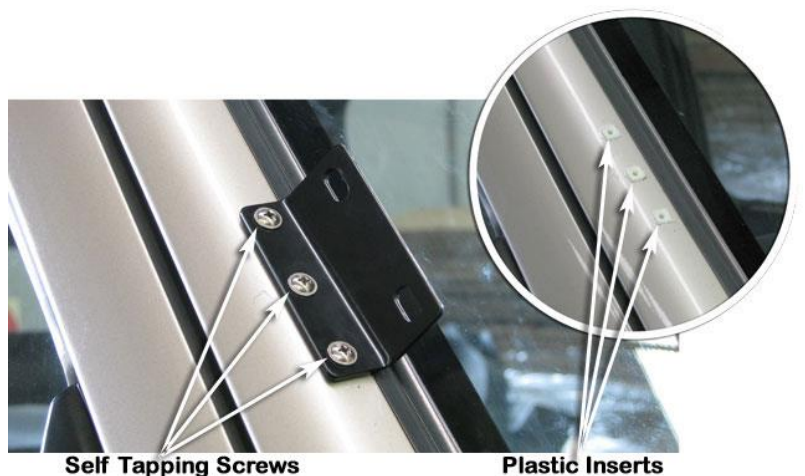
Drill each hole position to 8mm diameter with a step drill or 8mm drill bit.

Deburr and paint holes to prevent rust.



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 stainless steel self-tapping screws (item 5).

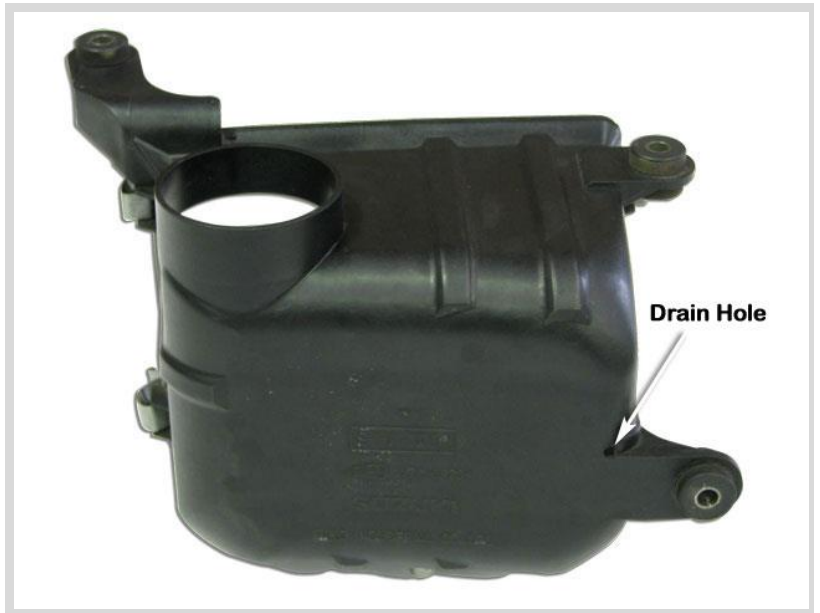


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### INSTALLER OPTION

The air cleaner base has one small drain hole. The drain hole can permit water to enter the air intake.

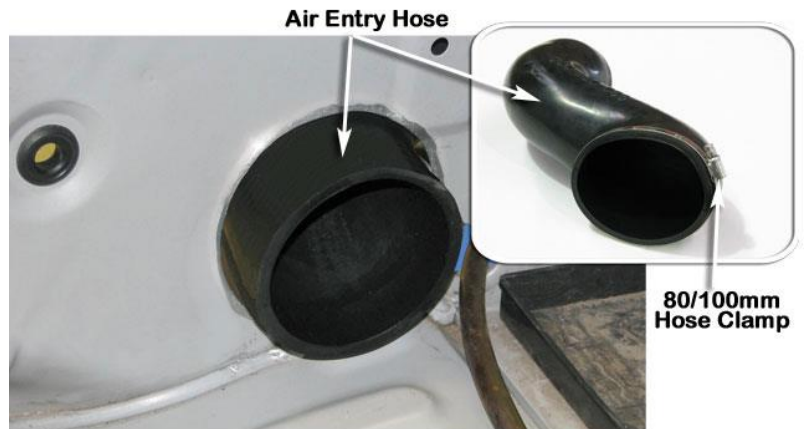
It is up to the installer to decide whether the drain hole should be sealed.



13

Shape the 80/100mm hose clamp (item 12) to the oval shape of the air entry hose (note the orientation of the hose clamp).

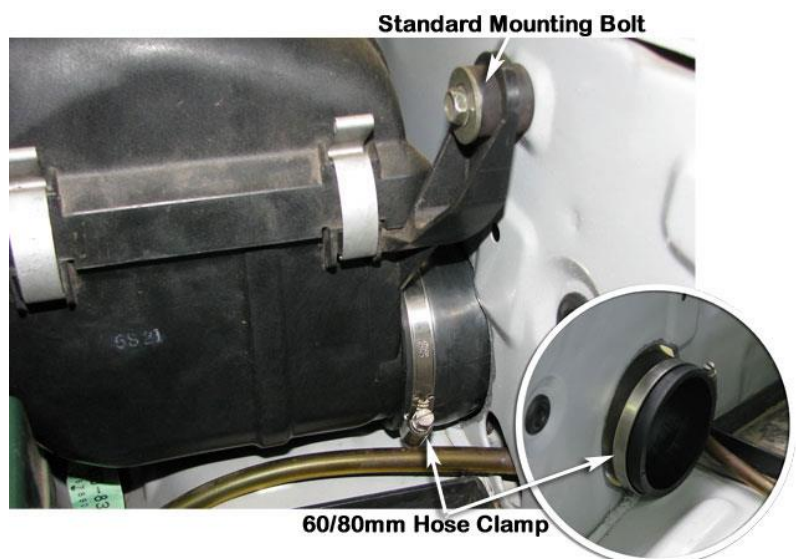
Loosely install the hose clamp over the air entry hose and install the hose through the enlarged hole in the inner guard panel.



14

Loosely install the 60/80mm hose clamp (item 11) to the air entry hose and install the air cleaner base, fasten into position with the standard mounting bolts.

Do not tighten the 60/80mm hose clamp.



Align the air entry hose (item 10) to the hole in the guard panel.

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

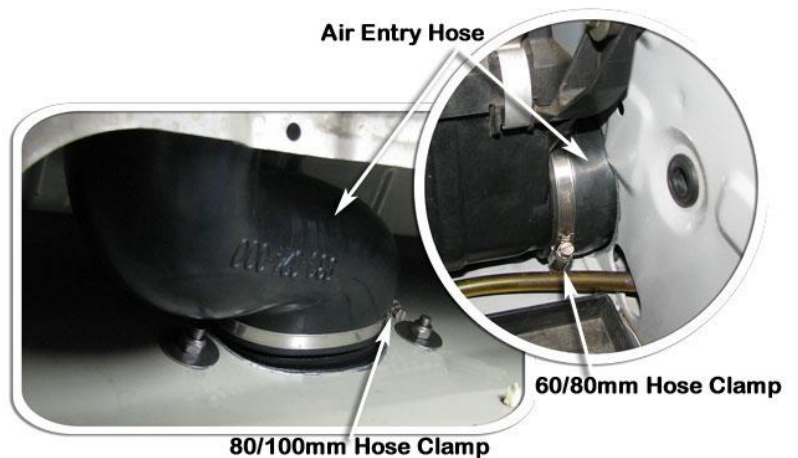
When correctly aligned fasten the snorkel body to the guard panel with body washers (item 8) and nyloc nuts (item 9).

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



Align the air entry hose (item 10) for best fitment, ensure that the hose is installed hard up against the shoulder of the snorkel body outlet snout and correctly installed onto the air cleaner base inlet snout.

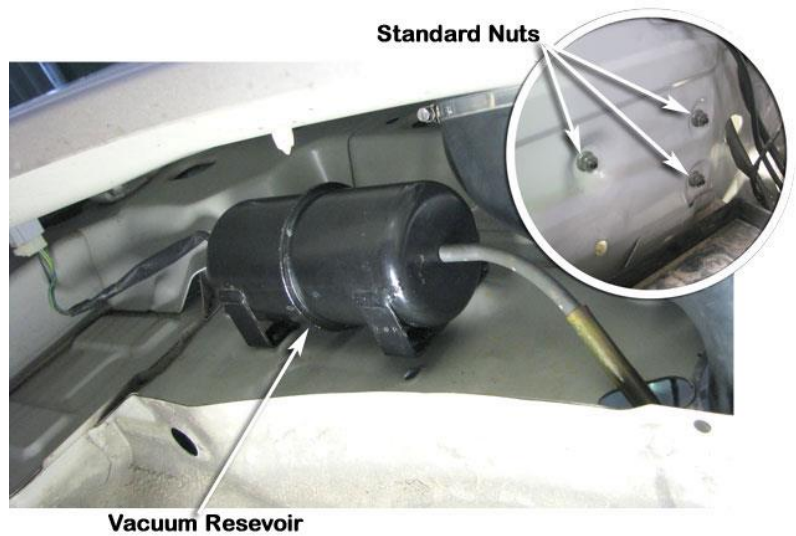
Tighten the 60/80mm hose clamp (item 11) and 80/100mm hose clamp (item 12).



17

Install the vacuum reservoir and fasten with standard nuts, reconnect the vacuum hose, install the battery and reconnect battery cables.

Install the air cleaner element, air cleaner lid, reconnect wiring plugs and standard outlet hose.



18

Install the black hose clamp (item 13) loosely 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).



19

Re-install the guard liner and any other items that may have been removed during the snorkel installation process.

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