



**4X4 ENGINEERING**

# SS735HFB

**SAFARI V-SPEC SNORKEL**

**Nissan D40 Navara Single, King and Dual Cab**

**2.5L Diesel (YD25DDTi Engine)**

**Built: SIAM NISSAN AUTOMOBILE CO., LTD (Thailand)**

**(Does not Suit: 4x2 & 4x4 RX Single Cab Models)**



16/01/2018

## Parts List

ITEM	PART NO.	DESCRIPTION	QTY
1	430-133-000	BODY - SNORKEL (SS730HF)	1
2	000-135-800	3 ½" AIR RAM ASSEMBLY	1
3	430-032-000	BRACKET - UPPER MOUNTING	1
4	000-002-100	BOLT - HEX - 6mm x 1.0 x 14mm (SEMS)	3
5	000-951-300	SCREW - S/T - 4.2mm x 16mm - S/S	3
6	000-960	INSERT - PLASTIC	3
7	000-110	STUD - 8mm x 1.25 x 25mm - S/S	4
8	000-311-300	WASHER - BODY - 8mm x 30mm - S/S	4
9	000-205-300	NUT - NYLOC - 8mm x 1.25mm - S/S	4
10	430-024-700	HOSE - AIR ENTRY	1
11	430-025-700	PLATE - HOSE SUPPORT	1
12	430-217-200	TEMPLATE - AIR INLET DUCT	1
13	000-958-200	POP RIVET - 4mm x 16mm	10
14	000-300-350	WASHER - BODY - 4mm x 12mm - S/S	4
15	000-958-450	POP RIVET - 4.8mm x 21mm (Split Sleeve)	1
16	000-909	CLAMP - HOSE - 80/100mm	1
17	000-914/B	CLAMP - HOSE SIZE 56 (BLACK)	1
18	430-016-000	GASKET - FOAM BODY (SELF ADHESIVE)	1
19	430-017-000	TEMPLATE - GUARD PANEL	1



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Built: SIAM NISSAN AUTOMOBILE CO., LTD (Thailand)

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### Installation Guide

#### Fitment to:

- Left Hand Side

#### Fitting Time:

- 150min

#### Special Tools:

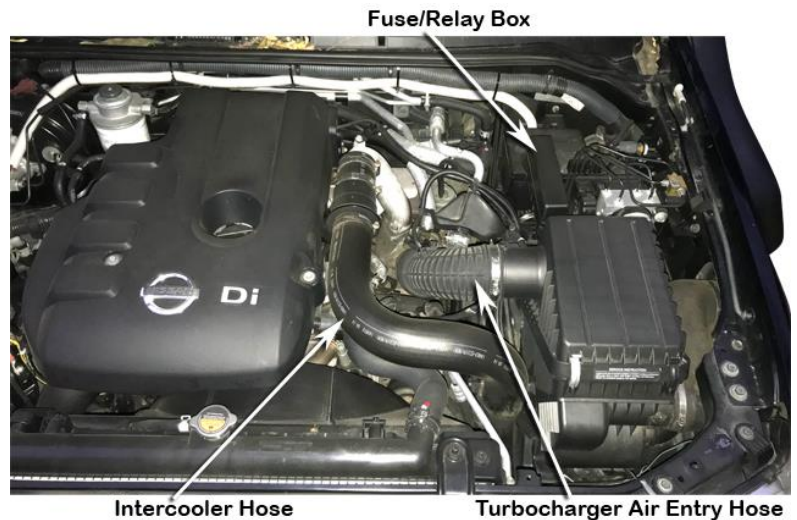
- 105mm hole saw
- Step drill
- 4.5mm & 5.0mm Drill Bits
- Pop Rivet Gun
- Loctite 243 (thread lock)
- Touch-up paint
- Prep-wash
- Sikaflex 227 Adhesive Sealant

**Prior to commencing the installation, it is the installer's responsibility to verify that all components and particularly the template (Item 19) are correct.**

1

Remove the following in accordance with the factory service manual:

- LHS mud flap
- LHS Inner guard liner
- LHS Indicator lamp (if fitted)
- Air cleaner assembly
- Turbocharger air entry hose
- Intercooler Hose
- Fuse / relay box (remove from mount only)



2

Remove and discard the foam insulator from between the inner and outer guard panel.

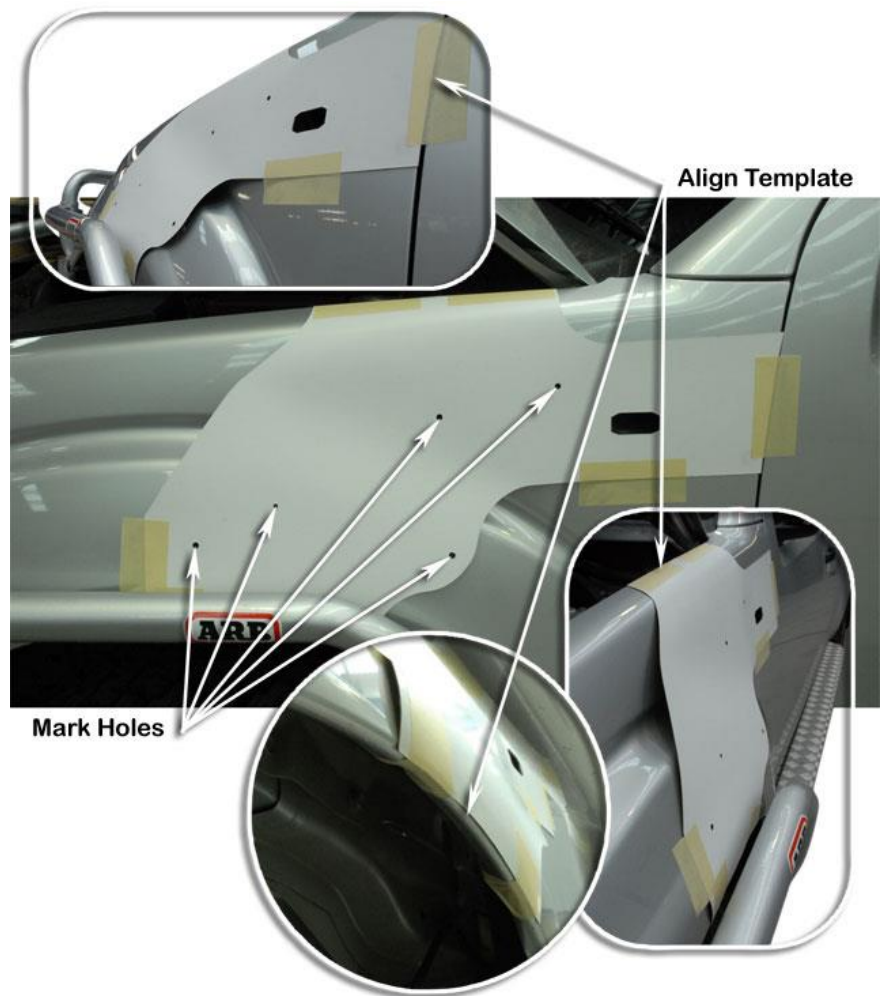


3

Tape the guard panel template (item 19) to the rear, upper and lower edges of the left hand guard panel using the indicator hole as a reference point only (some vehicle specifications may not have a guard mounted side indicator fitted).

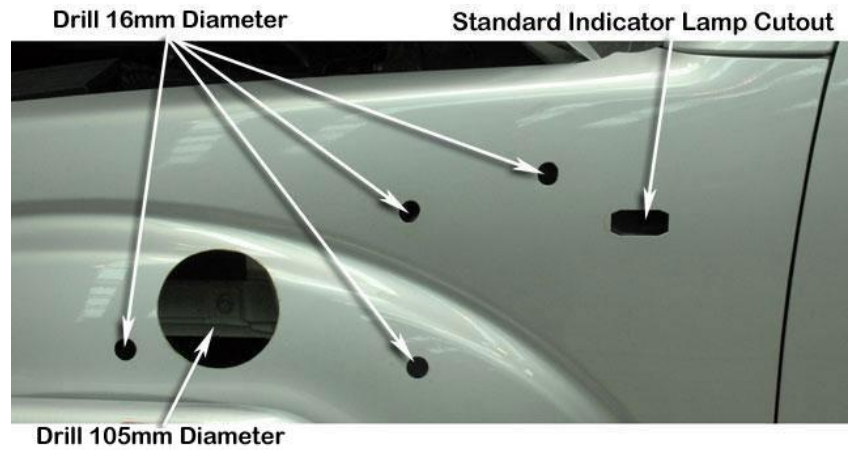
Ensure that the template is stretched tight to the lower edge of the guard panel. Using a felt tip pen mark all hole positions.

Remove the template.



Drill a pilot hole for each marked hole position. Using the 105mm hole saw, drill the main hole in the guard panel. Using the step drill, drill the 4 mounting hole positions to 16mm.

Deburr and paint holes to prevent rust.



### NEW ZEALAND INSTALLATIONS ONLY :

Safari have developed 2 methods of Snorkel A pillar attachment, for the conventional method please proceed with the current document alternatively please see the link below for further instructions.

[www.safari4x4.co.nz/apillarmounting](http://www.safari4x4.co.nz/apillarmounting)

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

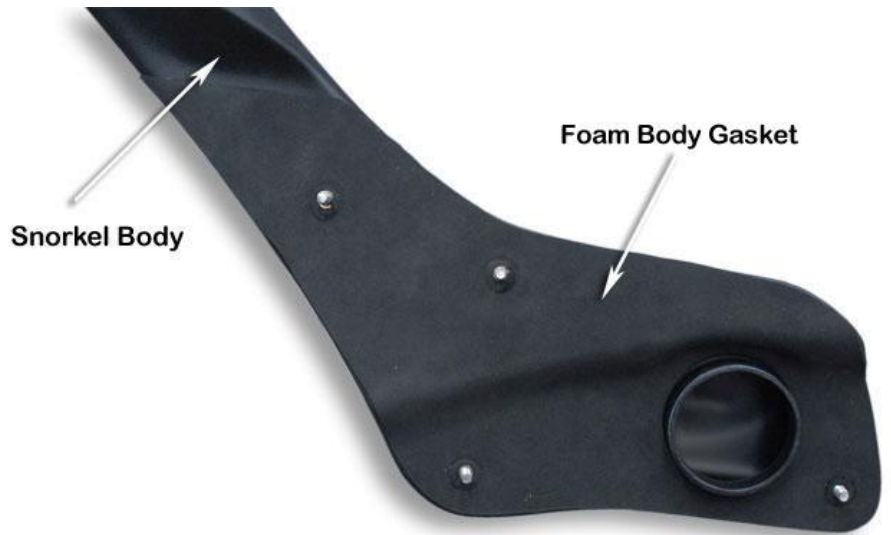
Apply Loctite to all four studs (Item 7) and install the studs finger tight into the snorkel body (item 1) mounting inserts.



6

Remove the adhesive backing paper from the foam body gasket (Item 18).

Carefully align the foam body gasket to the back of the snorkel body (item 1), when correctly positioned, apply firm pressure all over, paying attention to the alignment along the top and front edges of the snorkel body.



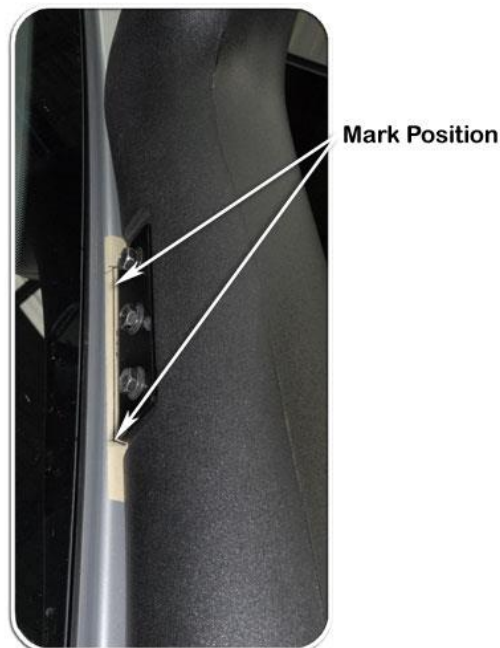
7

Place a strip of masking tape along the 'A' Pillar panel, carefully install the snorkel body onto the guard panel. Ensure there is adequate clearance around each of the mounting studs. (If necessary enlarge the 16mm mounting holes to achieve adequate clearance around each of the mounting studs to the guard panel using a round file or die grinder).

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With the snorkel body correctly positioned onto the guard panel and adequate clearance around each mounting stud, mark the position of the upper mounting bracket (item 3) onto the masking tape as shown.

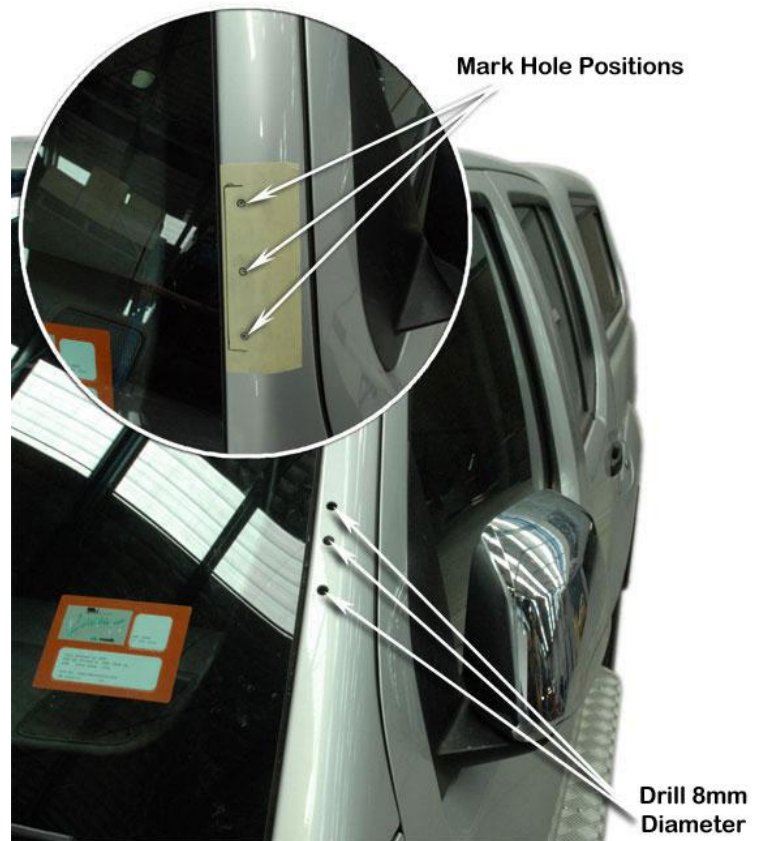
Remove the snorkel body from the vehicle. Remove the upper mounting bracket from the snorkel body.



Align the upper mounting bracket (item 3) with the marked position on the 'A' Pillar.

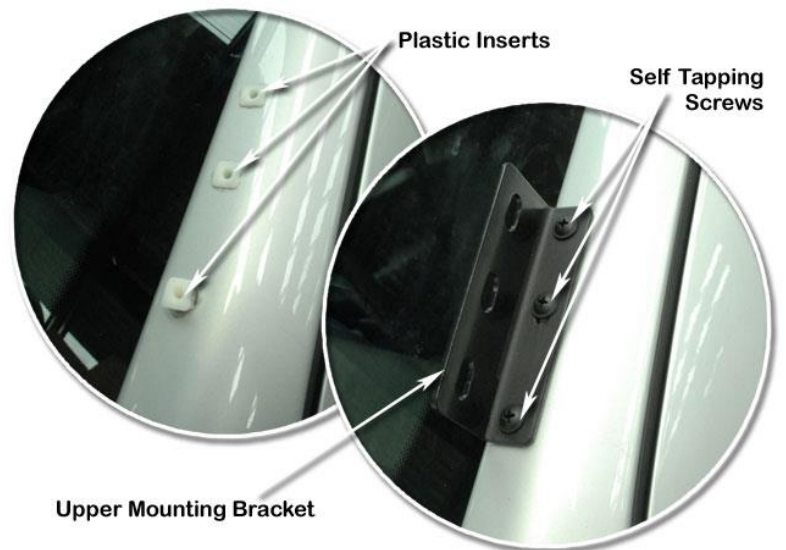
Mark the three mounting hole positions.  
Drill a pilot hole at each of the three marked hole positions.  
Drill each hole position to 8mm diameter with a step drill or 8mm drill bit.

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 self-tapping screws (Item 5).



Remove and discard the foam seal from the air inlet flange.

Using a 5.0mm drill bit, drill out the pop rivet holding the air inlet duct to the transfer duct.



12

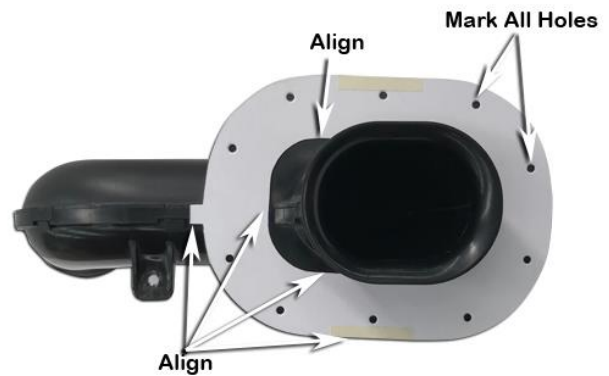
Using a small screwdriver unclip and remove the air inlet duct and transfer duct from the air cleaner base.



13

Align and tape the air inlet duct template (item 12) to the air inlet duct flange as shown, mark all hole positions.

Remove the template.



14

Drill a pilot hole at each of the ten marked hole positions on the flange. Drill each hole position to 4.5mm diameter.

**Note: When drilling the four holes shown, care must be taken NOT to drill through into the air inlet duct.**



Align the hose support plate (item 11) to the air entry hose flange, install the support plate over the flange of the air entry hose (item 10) as shown.



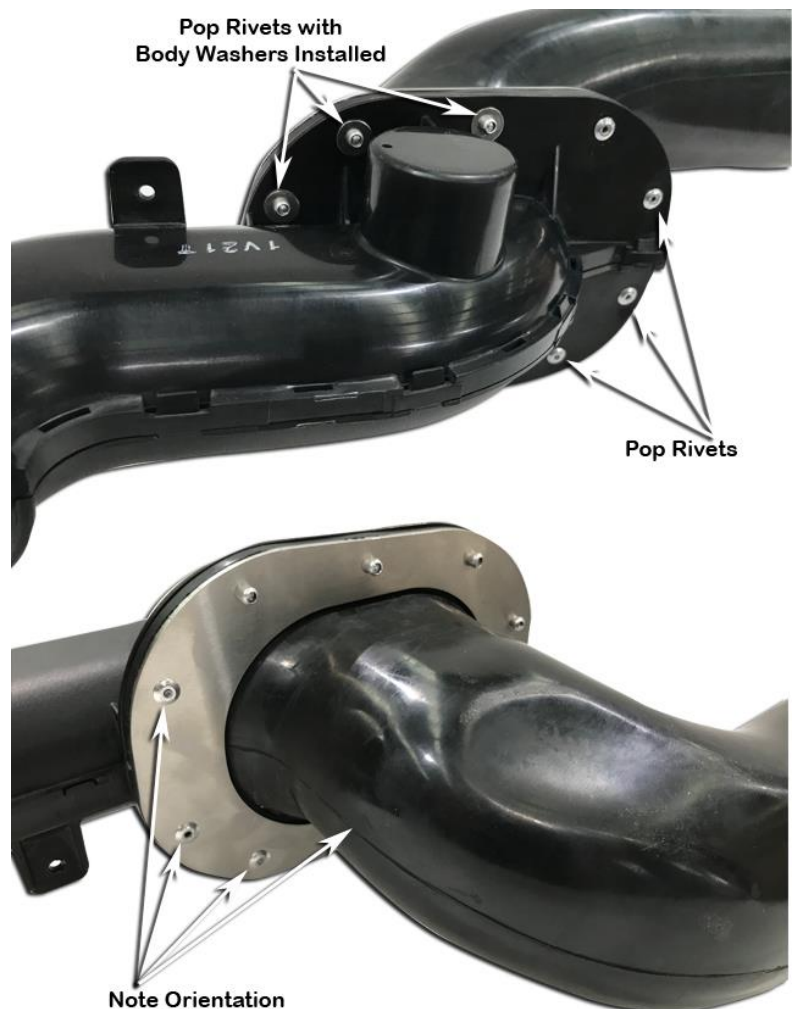
Apply Sikaflex adhesive sealant to the mating surfaces of the air inlet duct and air entry hose flanges.

Install the air entry hose with the hose support plate installed to the air inlet duct, install all ten pop rivets (item 13) as shown.

**Note: The orientation of four of the pop rivets, these four pop rivets require a 4mm body washer (item 14) installed on the rear side to prevent the plastic flange from splitting.**

With all the pop rivets installed and the hose and hose support plate aligned correctly, work from the centre outwards and fasten the pop rivets with a pop rivet gun.

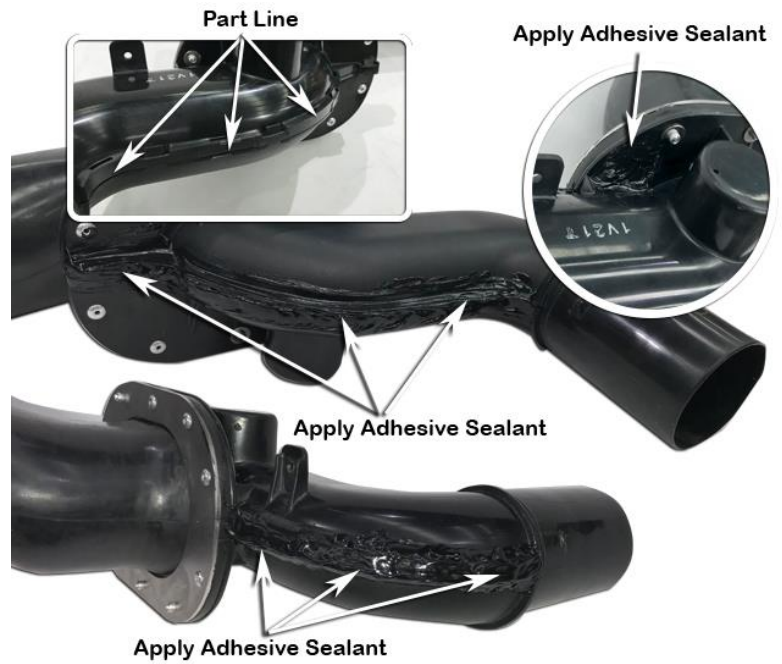
Clean-up any excess sealant to ensure a neat finish.





The air inlet duct is a two piece part which must be sealed correctly to prevent water from entering the air intake of the vehicle. Apply a generous amount of Sikaflex adhesive sealant to the joins of the air inlet duct, ensure the duct is completely sealed along the centreline and on both sides of the join.

Clean-up any excess sealant to ensure a neat finish.



The transfer duct is a two piece part which must be sealed correctly to prevent water from entering the air intake of the vehicle. Apply a generous amount of Sikaflex adhesive sealant to the joins of the transfer duct, ensure the duct is completely sealed along the centreline and on both sides of the join.

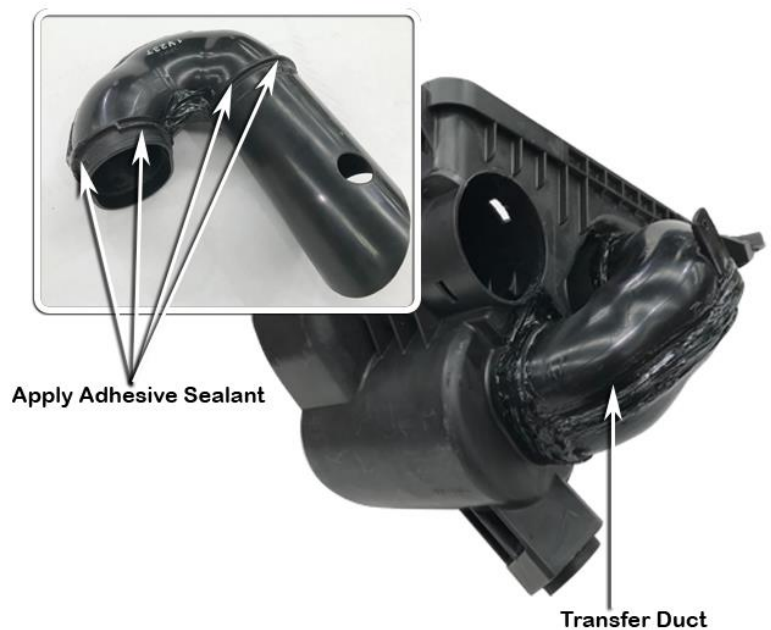
Clean-up any excess sealant to ensure a neat finish.



Apply a generous amount of Sikaflex adhesive sealant to the transfer ducts inlet and outlet and install the duct into the air cleaner base, ensure the duct clips back into position correctly.

With the transfer duct clipped back into the air cleaner base, apply sealant over the two clip position.

Clean-up any excess sealant to ensure a neat finish.



Apply a generous amount of Sikaflex adhesive sealant to the air inlet duct outlet and install the duct into the air cleaner base, ensure the duct clips back into position correctly.

With the duct clipped back into the air cleaner base, apply sealant over the clip position.

Clean-up any excess sealant to ensure a neat finish.

Install the 4.8mm x 21mm pop rivet (item 15) through the hole in the air inlet duct and transfer duct, with the pop rivet installed correctly secure the pop rivet using a pop rivet gun.



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**INSTALLER OPTION :**

The air cleaner base and air inlet duct have four small drain holes as shown. These drain holes can permit water to enter the air intake.

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



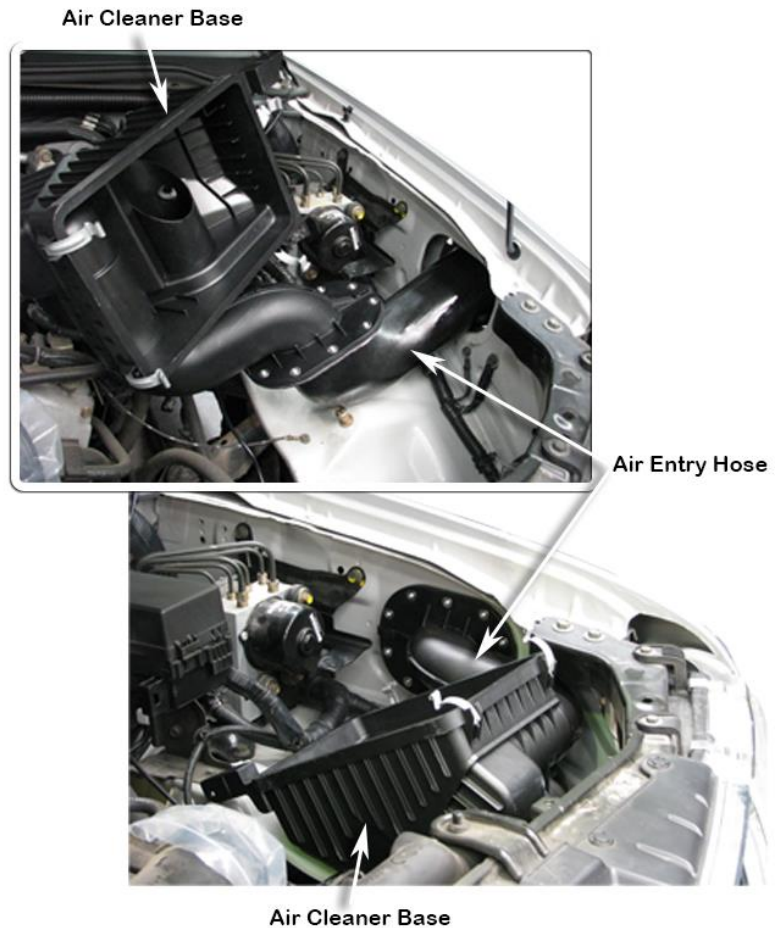
22

Apply silicone spray or similar lubricant to the outer surface of the air entry hose (item 10).

Install the air cleaner base / air entry hose assembly back into the vehicle, guiding the air entry hose through the hole in the inner guard panel as shown.

Rotate the assembly towards the front of the vehicle until the hose is completely through.

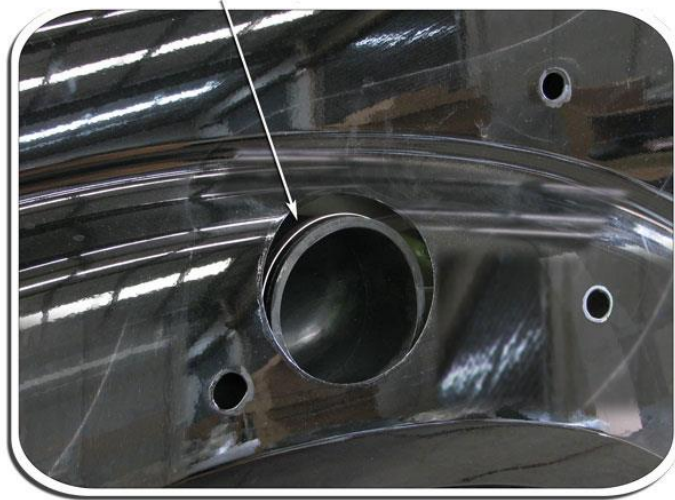
Locate the air cleaner base onto the two standard mounting pins, fasten the air cleaner base with standard mounting bolt.



Install the 80/100mm hose clamp (item 16) loosely over the air entry hose (item 10).

Ensure the inside of the air entry hose is completely free of lubricant from the previous step.

80/100mm Hose Clamp

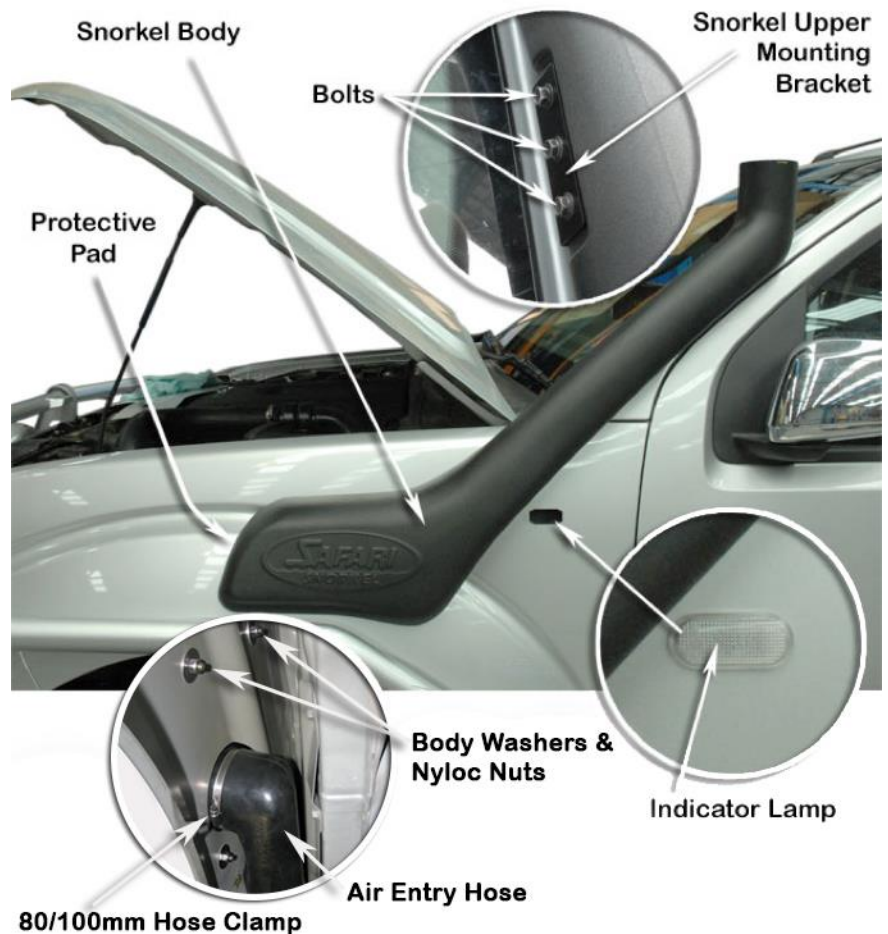


Carefully install the snorkel body (item 1) to the guard panel, guiding the snorkel body outlet snout into the air entry hose (item 10), align the snorkel body to the guard panel and upper mounting bracket.

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).

Ensure the air entry hose (item 10) is correctly installed onto the snorkel body outlet snout and tighten the 80/100mm hose clamp (item 16).



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Install the black hose clamp (item 17) 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 17).



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Install the LHS indicator lamp (if fitted to vehicle), inner guard liner, mud flap, air filter element, air cleaner housing lid, fuse / relay box, turbocharger air entry hose, intercooler hose, connect the air mass sensor wiring and any other items that may have been removed during the snorkel installation process.

Road test vehicle.

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