



# SS98HF

## SAFARI V-SPEC SNORKEL

To Suit: Toyota LandCruiser 300 Series (MY22)  
3.3L V6 Twin Turbo Diesel (F33A-FTV Engine)

N.B: Does Not Suit Models with Factory Raised Air Intake (Snorkel)



25/11/2022

### Parts List

ITEM	PART NO.	DESCRIPTION	QTY
1	371-133-000	BODY - SNORKEL (SS98HF)	1
2	000-135-800	3 ½" AIR RAM ASSEMBLY	1
3	371-032-000	BRACKET - UPPER MOUNTING	1
4	000-002-100	BOLT - HEX - 6mm x 1.0 x 14mm (SEMS) - S/S	2
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	6
8	000-311-300	WASHER - BODY - 8mm x 30mm - S/S	6
9	000-205-300	NUT - NYLOC - 8mm x 1.25mm - S/S	6
10	371-024-000	HOSE - AIR ENTRY	1
11	000-1911	CLAMP - HOSE - 100/120mm - S/S	1
12	371-025-000	CLAMP - AIR ENTRY HOSE - LOWER - S/S - (Pressed)	1
13	371-025-100	CLAMP - AIR ENTRY HOSE - UPPER - S/S - (Pressed)	1
14	371-025-200	BRACKET - AIR CLEANER INLET SUPPORT - S/S	1

15	000-958-150	POP RIVET - 4mm x 13mm	2
16	000-022-300	BOLT - HEX - 5.0mm x 0.8 x 16mm - S/S	2
17	000-320-300	WASHER - FLAT - 5.0mm x 10mm - S/S	4
18	000-221-300	NUT - NYLOC - 5.0mm x 0.8mm - S/S	2
19	000-914/B	CLAMP - HOSE - SIZE 56 (BLACK)	1
20	371-017-000	TEMPLATE - GUARD PANEL	1

## Installation Guide

**Fitment to:**

- Left Hand Side

**Fitting Time:**

- 180min

**Special Tools:**

- Body saw (reciprocating)
- Step drill
- 4.0mm Drill Bit
- Pop Rivet Gun
- Sikaflex 227 adhesive sealant
- CRC / Silicone Spray Lubricant
- Masking tape
- Loctite 243 (thread lock)
- Touch-up paint
- Prep-wash
- Knife / Chisel

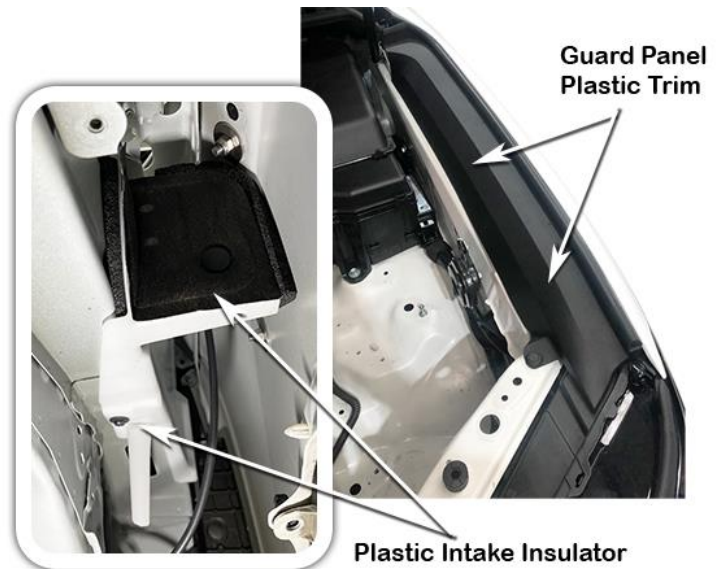
**Prior to commencing the installation, it is the installer's responsibility to verify that all components and particularly the template (Item 20) are correct.**

**1**

Remove the LHS mud flap, inner guard liner and the air cleaner assembly in accordance with the factory service manual.

**2**

Remove the top plastic guard panel trim and Inner guard plastic intake insulator, as shown.



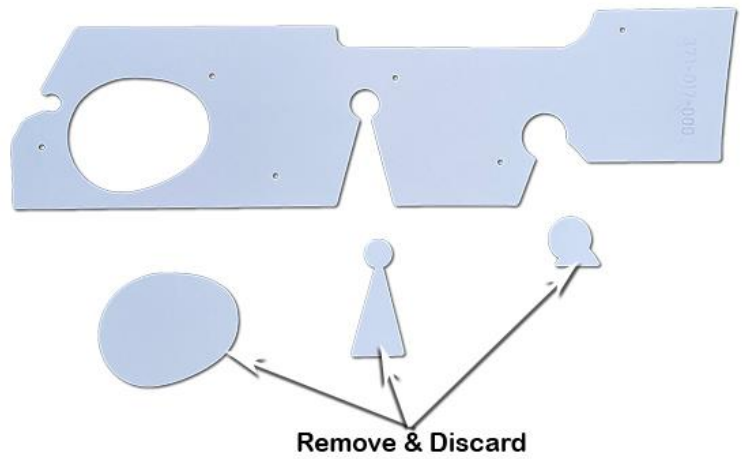
3

Remove and discard the standard air entry ducting as shown.



4

Remove and discard the three perforated sections of the guard panel template (Item 20) as shown.



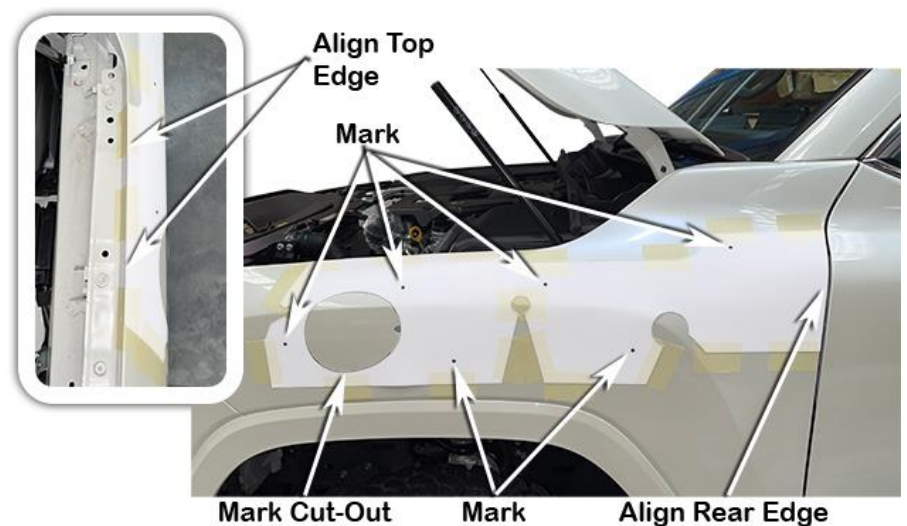
5

Align the guard panel template (Item 20) to the top and rear edges of the left hand guard panel as shown.

Tape the template to the guard with masking tape.

Mark all hole positions and the main cut out section with a felt tip pen.

Remove the template.

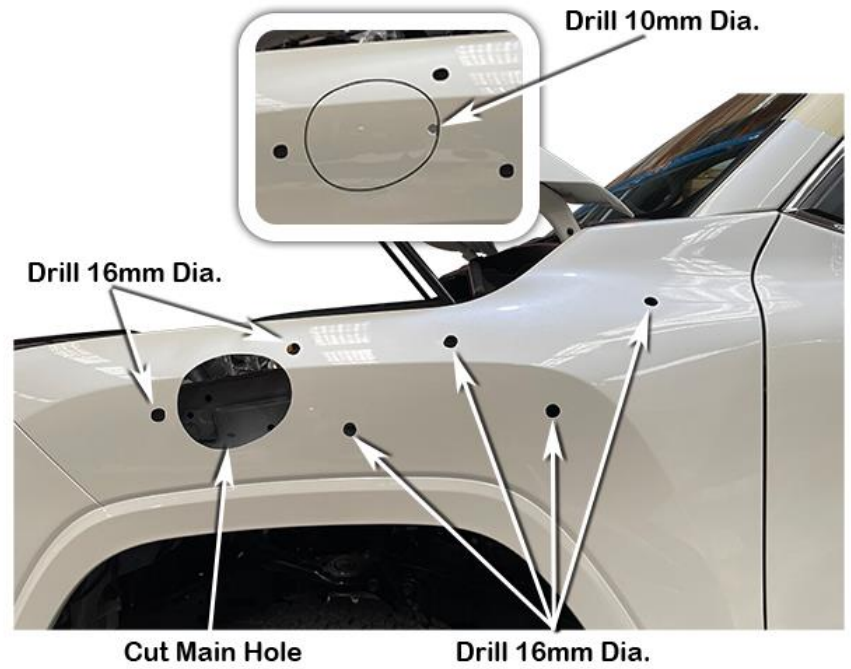


Drill a pilot hole for each of the marked hole positions.

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

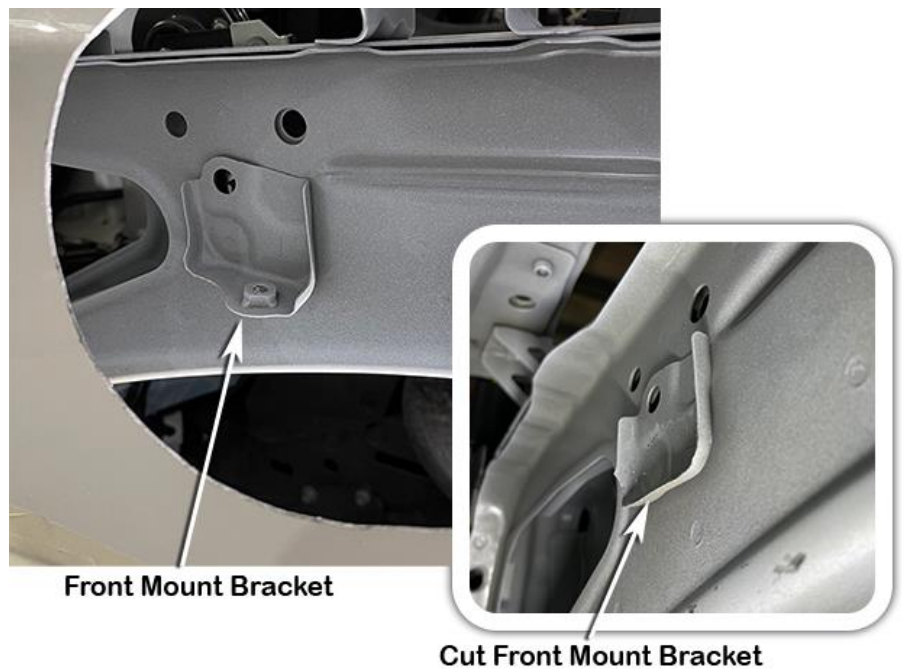
Drill 1 or 2, 10mm diameter holes in the cut-out section for a start/stop point for the body saw, using the body saw cut the main hole in the guard panel, as marked from the template cut-out in step 5.

Deburr and paint holes.



Using a body saw, cut off the lower section of the front air inlet duct mounting bracket from the inner guard panel, as shown.

Deburr and paint the cut edge to prevent rust.



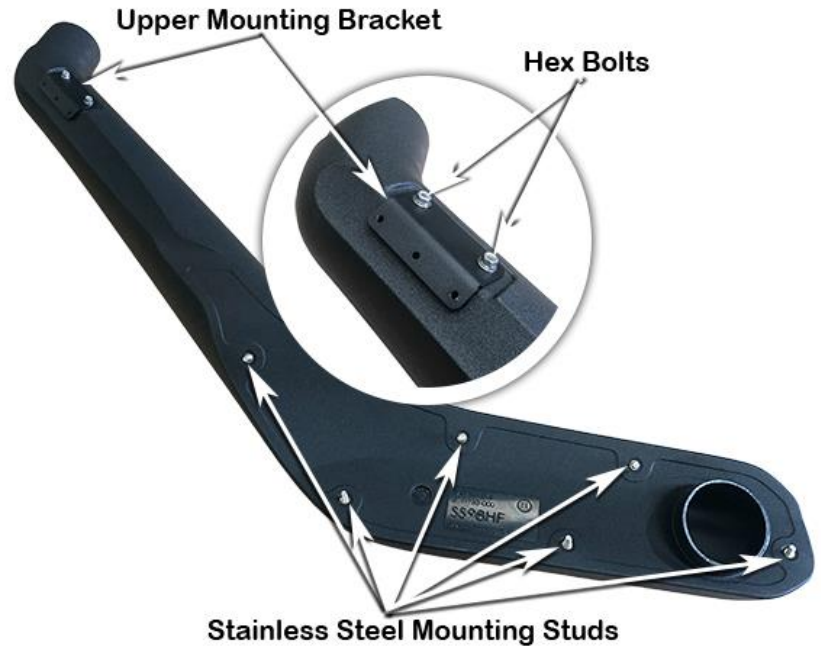
### **NEW ZEALAND INSTALLATIONS ONLY :**

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).

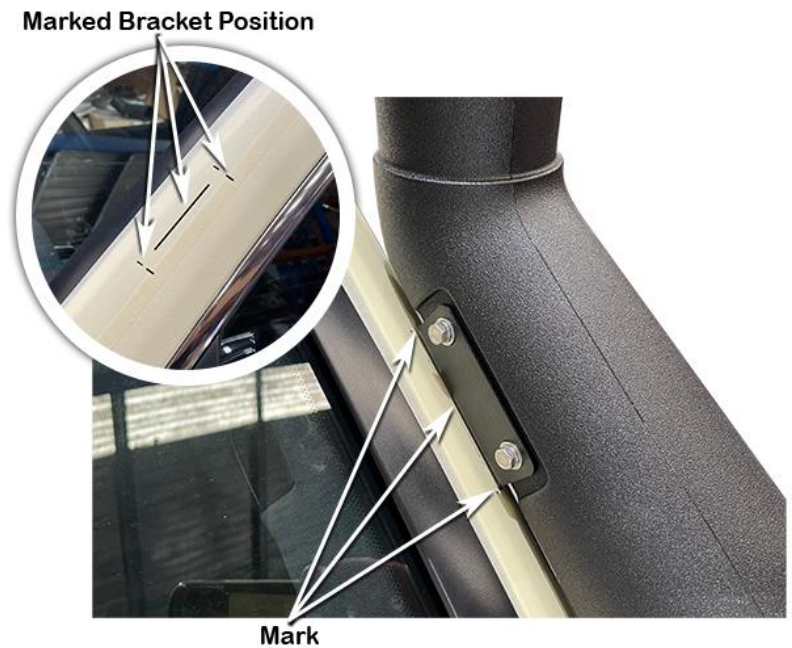
Apply Loctite 243 to each of the stainless steel mounting studs (Item 7) and install the studs finger tight into the snorkel body (item 1) mounting inserts as shown.



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

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

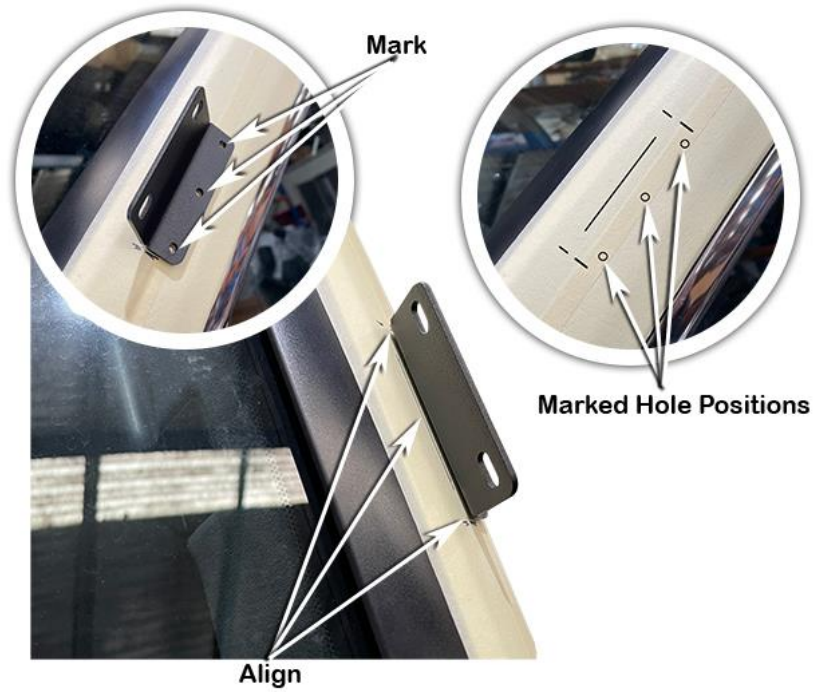
With the snorkel body correctly positioned, mark the outline of the upper mounting bracket (Item 3) onto the masking tape.



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

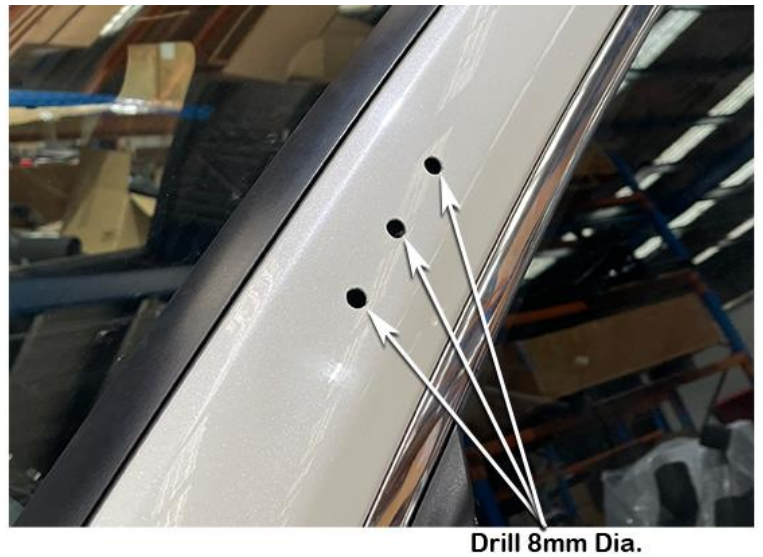
Position the upper mounting bracket onto the A-Pillar and align the bracket with the marked bracket outline. Mark the three mounting hole positions with a felt tip pen.



11

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

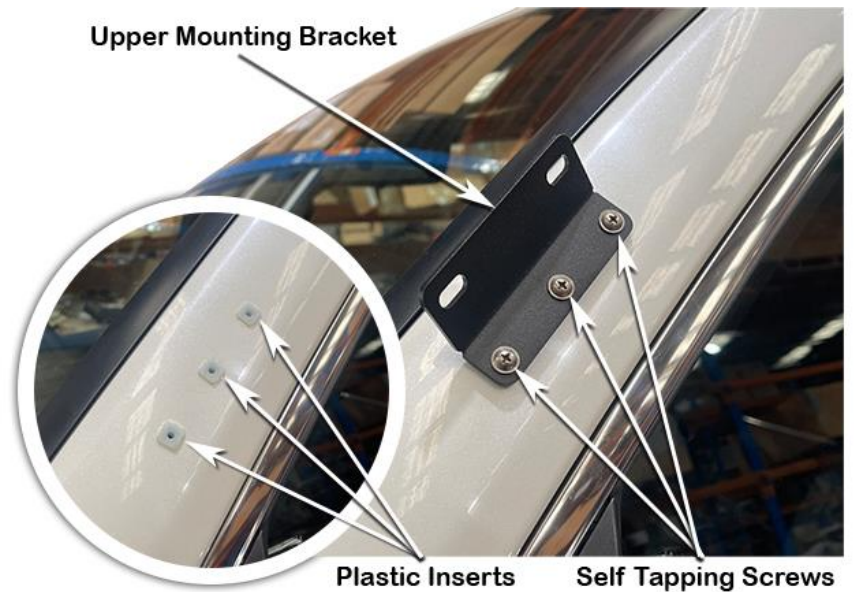
Deburr and paint holes.



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

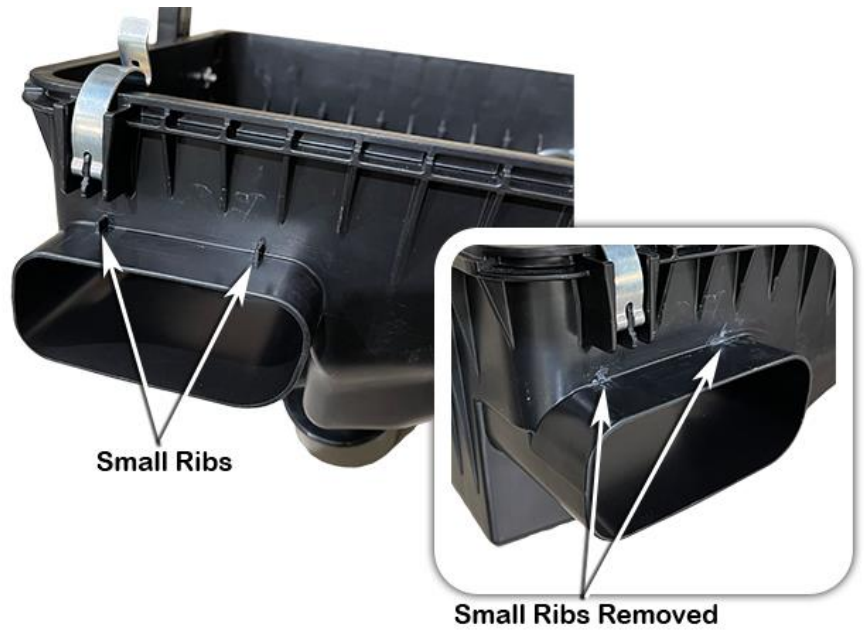
Secure the upper mounting bracket (Item 3) to the A-pillar with three self-tapping screws (Item 5).



Remove and discard the foam sealing tape from the air cleaner base inlet snout.



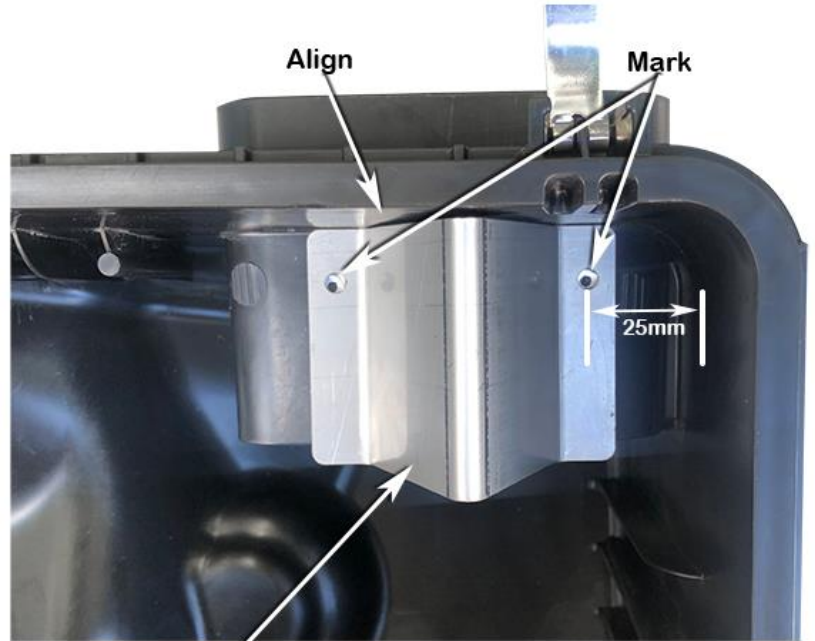
Using a chisel or sharp knife remove the two small ribs from the top of the air cleaner base inlet snout.





Measure and mark a line 25mm in from the internal front wall of the air cleaner base inlet as shown, align the air cleaner inlet support bracket (item 14) to the internal side wall, align the mounting hole of the air cleaner inlet support bracket to the 25mm marked line, mark the two mounting hole positions inside the air cleaner base as shown.

Remove the air cleaner inlet support bracket (item 14) and drill a 4mm hole at the two marked hole positions.

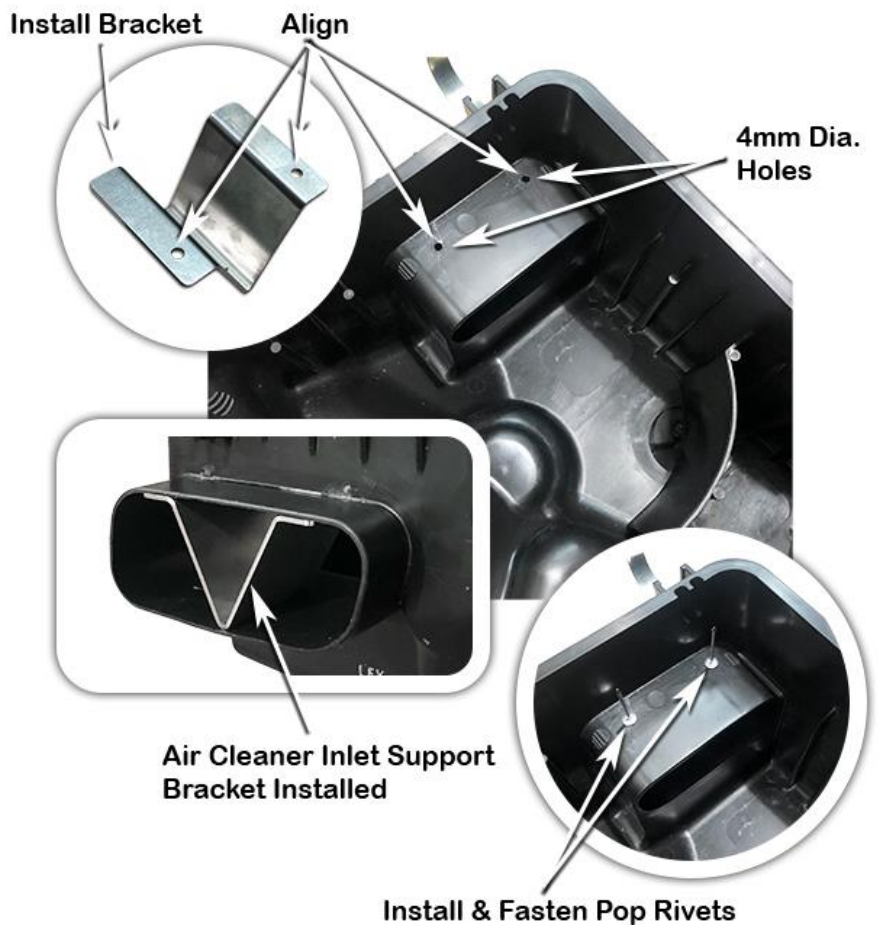


Air Cleaner Inlet Support Bracket

Install the air cleaner inlet support bracket (item 14) into the air cleaner inlet, aligning the bracket mounting holes with the two drilled 4mm Dia. holes in the air cleaner base inlet.

***Hint: The front edge of the Air Cleaner Inlet Support Bracket should align with the end of the Air Cleaner Base Inlet Snout.***

Install the two 4 x 13mm pop rivets (Item 15) from inside the air cleaner base, using a pop rivet gun, secure the air cleaner inlet support bracket (item 14) into position.

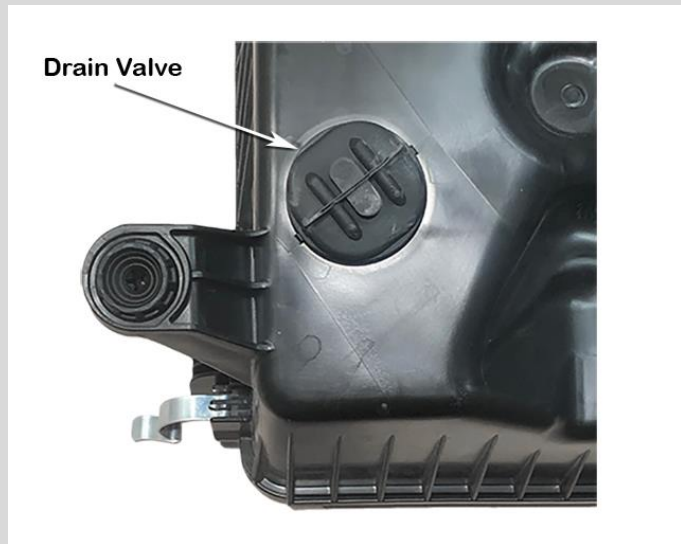


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### INSTALLER OPTION

The air cleaner base contains a drain valve as shown. The drain valve can permit water to enter the air intake.

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

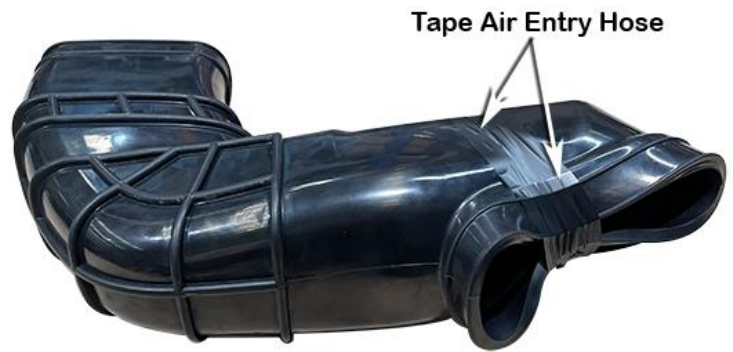


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Squash the end of the air entry hose (item 10) inwards and tape to hold in position.

With the hose taped, spray lubricant over the outside of the hose.

***N.B: it is critical the hose is taped the way shown in the photo, for installation purposes.***



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Carefully install the air entry hose (item 10) through the two inner guard panel holes from the engine bay side, a considerable amount of effort and twisting of the hose may be required for the hose to be installed into position.

***N.B: Take note of orientation of hose in photo, for ease of installation.***

Remove the tape and clean-off all lubricant, especially at the hose clamp end of the air entry hose.

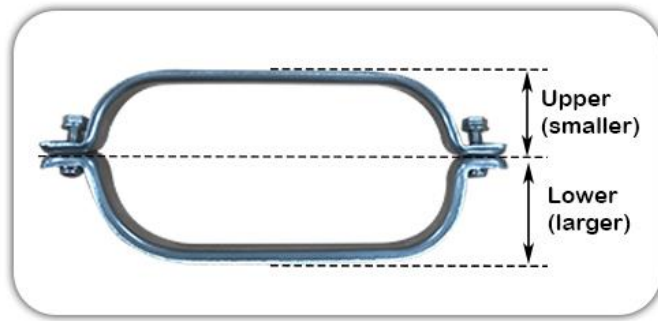


Pre-assemble the upper and lower pressed hose clamp brackets (Items 12 & 13) together with the directional arrows on the pressed hose clamp brackets facing in the same direction, loosely install the clamps together using the 5 x 16mm hex bolts (Item 16), 5.0mm flat washers (Item 17) and nyloc nuts (Item 18).

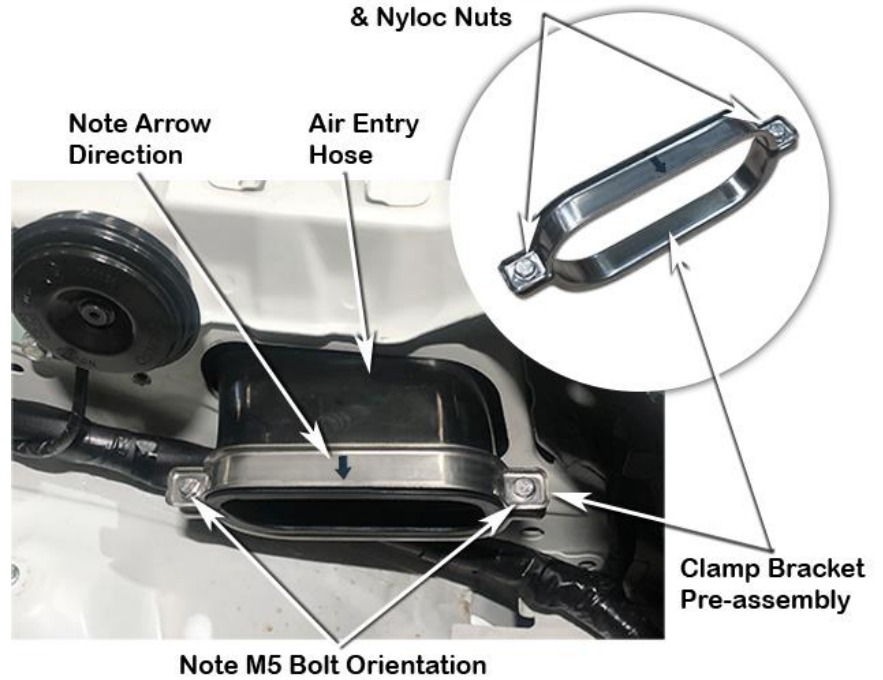
**Note:** *Upper pressed hose clamp bracket (Item 13) is the smaller clamp bracket.*

Loosely install the pressed hose clamp bracket assembly onto the air entry hose (Item 10). Ensure the 5 x 16mm hex bolts (Item 14) are installed from the upper pressed hose clamp bracket side for ease of installation.

**Note:** *The directional arrows on both lower & upper clamp brackets must point towards the air cleaner base inlet, as shown.*



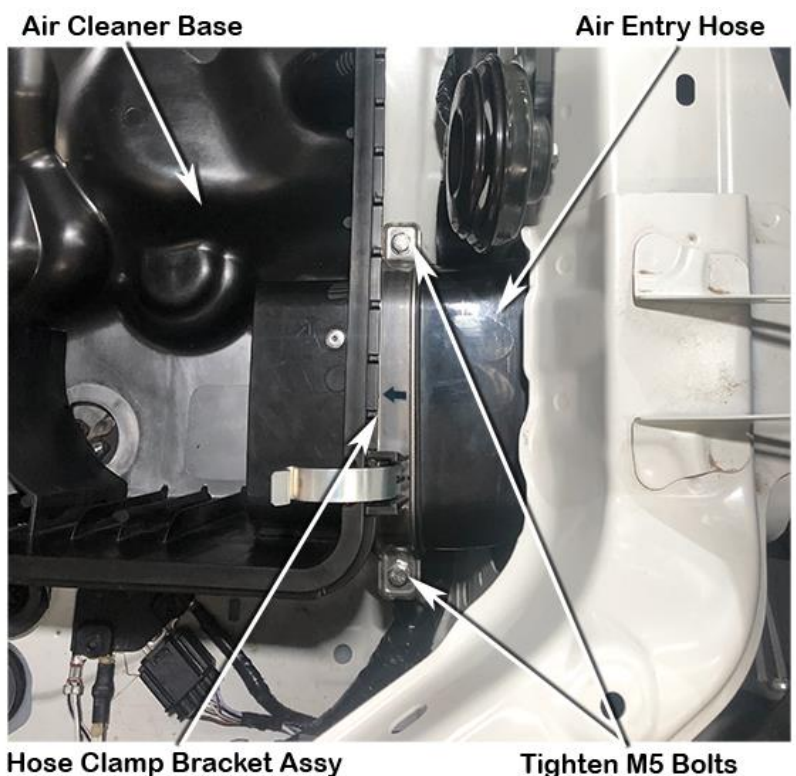
M5 Hex Bolts, Washers & Nyloc Nuts



Install the air cleaner base into the vehicle, guiding the air cleaner base inlet snout into the air entry hose (Item 10).

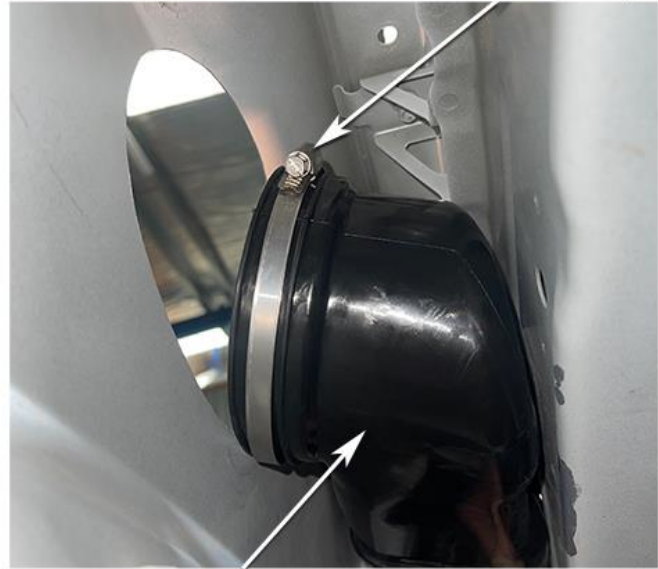
Ensure the air entry hose (Item 10) is fully engaged onto the air cleaner base inlet snout.

Tighten both 5mm hex bolts (item 16) and 5mm nyloc nuts (item 18) to secure the hose clamp brackets (Items 12 & 13).



Loosely install the 100/120mm hose clamp (Item 11) onto the air entry hose (Item 10), ensure that the hose clamp is orientated in the same position on the air entry hose as shown.

100/120mm Hose Clamp



Air Entry Hose

Carefully install the snorkel body (Item 1) to the guard panel, guiding the snorkel body outlet into the air entry hose (Item 10), align the snorkel body to 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).

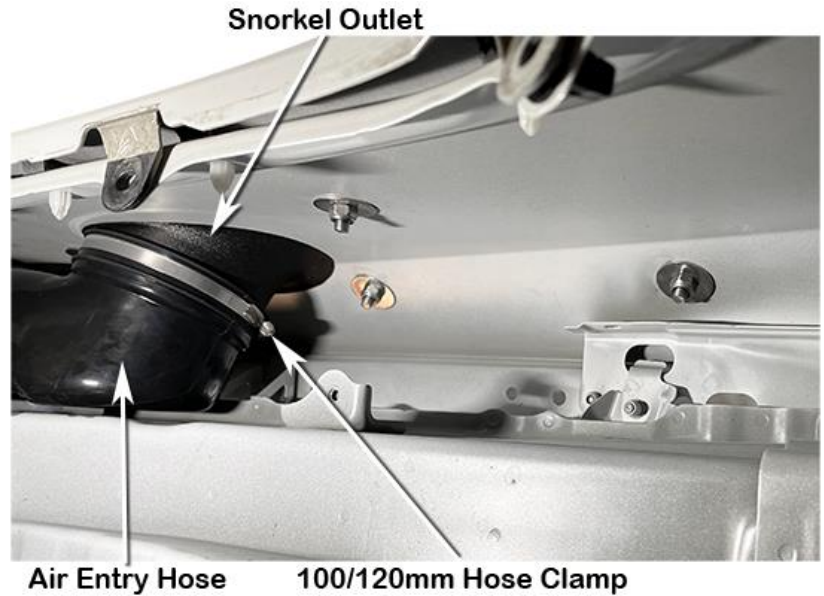


Snorkel Body

M8 Body Washers &amp; Nyloc Nuts

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Ensure the air entry hose is correctly installed onto the snorkel body outlet snout and tighten the 100/120mm hose clamp (Item 11).



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Loosely install the black hose clamp (Item 19) to the base of the air ram assembly (Item 2).

Install the air ram assembly onto the snorkel body (Item 1).

Align the air ram assembly and tighten the black hose clamp (Item 19).



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Install the top plastic guard panel trim and Inner guard plastic intake insulator, removed in step 2.

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Install the inner guard liner, mud flap, air filter element, air cleaner lid, reconnect sensor wiring and any other items that may have been removed in accordance with the factory service manual.

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