SS191HP

SAFARI ARMAX SNORKEL
To Suit: Toyota Land Cruiser Prado 250 Series
GDJ251 2.8L D-4D Diesel (1GD-FTV Engine)
GDJ251 2.8L D-4D Diesel (48V) (1GD-FTV Engine)
TJA250 2.4L Turbo Petrol (T24A-FTS Engine)
TJA251 2.4L Turbo Petrol (HEV) (T24A-FTS Engine)
Built: Jan 2024 onwards

11/09/2025

Parts List

ITEM	PART NO.	DESCRIPTION	QTY
1	366-133-600	BODY - SNORKEL (SS191HP)	1
2	000-135-980	ARMAX AIR RAM ASSEMBLY	1
3	366-032-100	BRACKET - UPPER MOUNTING	1
4	366-016-000	GASKET - UPPER MOUNTING BRACKET	1
5	000-002-100	BOLT - HEX - 6mm x 1.0 x 14mm (SEMS)	2
6	000-951-025	SCREW - S/T - 4.2mm x 25mm - BLACK	2
7	000-960	INSERT - PLASTIC	2
8	000-110	STUD - 8mm x 1.25 x 25mm - S/S	6
9	000-311-300	WASHER - BODY - 8mm x 30mm - S/S	6
10	000-205-300	NUT - NYLOC - 8mm x 1.25mm - S/S	6
11	366-024-600	HOSE - AIR ENTRY - SNORKEL OUTLET	1
12	366-025-700	HOSE - AIR ENTRY - FLANGED	1
13	366-025-700	JOINER - OVAL - 35mm LONG - S/S	1
14	000-1916	CLAMP - HOSE - 150/170mm - S/S	1
15	000-1911	CLAMP - HOSE – 100/120mm	2

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16	366-217-600	TEMPLATE - AIR CLEANER - A - FRONT	1
17	366-217-625	TEMPLATE - AIR CLEANER - B - SIDE	1
18	366-217-650	TEMPLATE - AIR CLEANER - C - LOWER	1
19	366-217-675	TEMPLATE - AIR CLEANER - MOUNT BRACKET	1
20	366-025-600	PLATE - HOSE SUPPORT - A	1
21	366-025-610	PLATE - HOSE SUPPORT - B	1
22	366-025-620	PLATE - HOSE SUPPORT - C	1
23	366-025-630	PLATE - HOSE SUPPORT - D	1
24	366-025-640	PLATE - HOSE SUPPORT - E	2
25	000-958-175	POP RIVET - 4.0mm x 17mm	20
26	000-300-350	WASHER - BODY - 4mm x 12mm - S/S	3
27	366-031-600	BRACKET - AIR CLEANER MOUNTING	1
28	000-1022-300	BOLT - B/H - 5mm x 0.8 x 16mm - S/S	3
29	000-320-350	WASHER - BODY - 5.0mm x 15mm - S/S	6
30	000-221-300	NUT - NYLOC - 5mm - S/S	3
31	371-442-600	GOMMET - RUBBER - RELOCATION - AIR CLEANER ASSY	3
32	000-951-480	SCREW - S/T - 4.2mm x 13mm - BLACK	4
33	366-017-600	TEMPLATE - GUARD PANEL	1

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Built: Jan 2024 onwards

Installation Guide

Fitment to:
- Right Hand Side

Fitting Time:
- 150min

Special Tools:
- Body Saw (reciprocating)
- Pop Rivet Gun (swivel head)
- Step Drill and Metric Drill Bits
- Die Grinder
- Allen Key Set (metric)
- Files
- Loctite 243 (thread lock)
- Masking Tape
- Touch-up paint
- 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 33) are correct.

1 Remove the following in accordance with the factory service manual:

- Air Cleaner Assembly
- RHS Mud Flap
- RHS Guard Liner
- Foam Baffle (Retain)

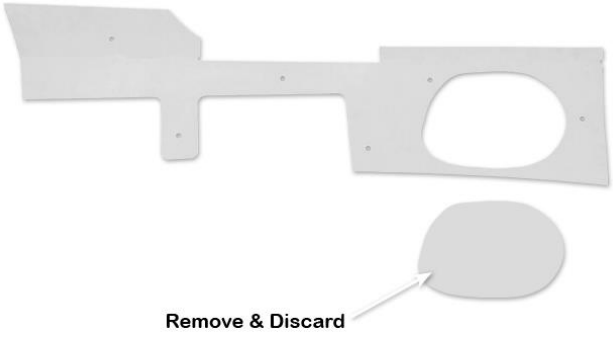
2

Remove and discard the air intake duct from inside the wheel arch.

Remove and discard the air intake adaptor from the inner guard.

3

Remove and discard the perforated cut-out section from the guard panel template (Item 33) as shown.



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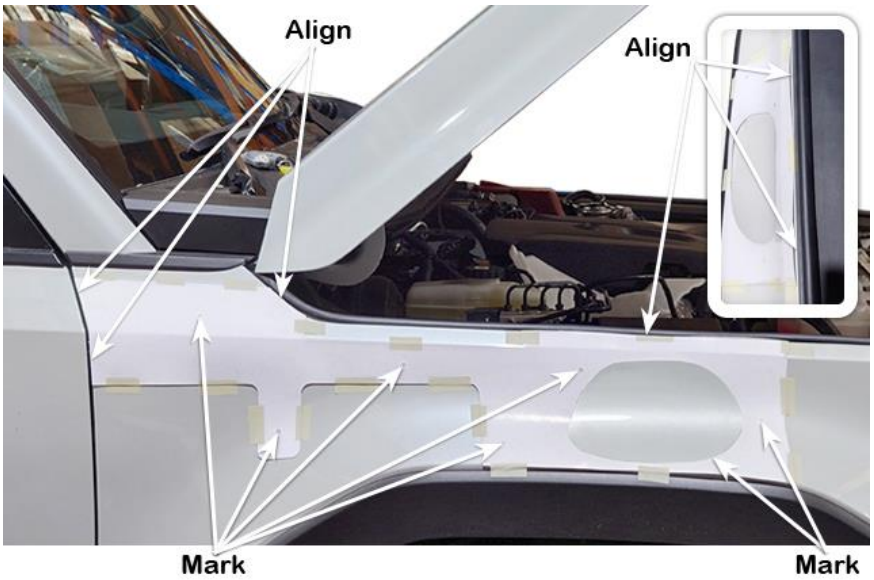
4

Align the guard panel template (Item 33) to the upper and rear edges of the right-hand guard panel, as shown.

Tape the template to the guard panel with masking tape.

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

Remove the template.



5

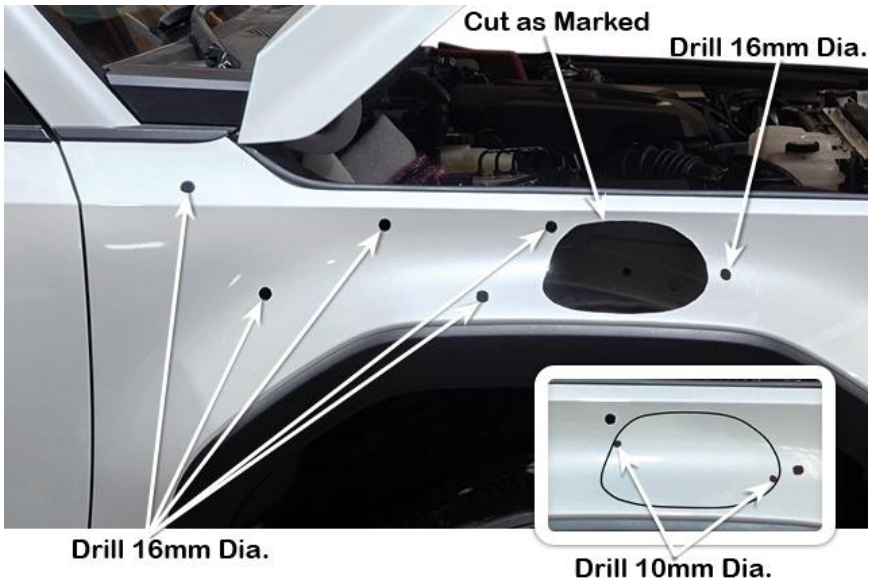
Drill a pilot hole for each of the marked hole positions.

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

Drill two or three, 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 4 *(cutting on the outside of the marked line)*.

Deburr and paint holes.

Hint: Prior to any cutting or drilling, place a strip of masking tape along the wheel arch moulding and guard panel to prevent metal filings being trapped between the moulding and guard panel.



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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

6

Apply Loctite 243 to each of the stainless-steel mounting studs (Item 8) and install the studs finger-tight into the snorkel body (Item 1) mounting inserts as shown.

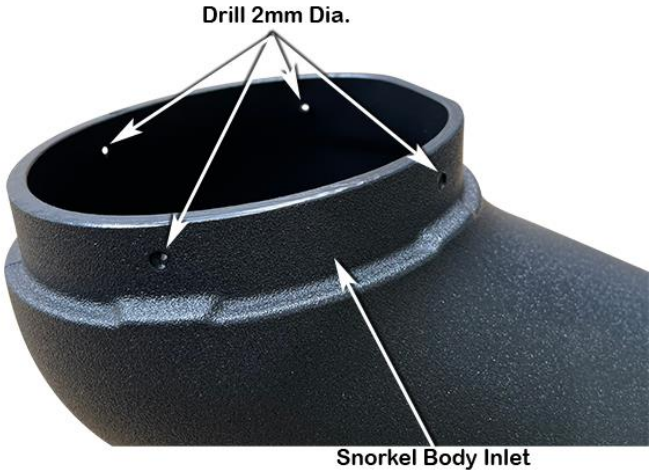
Lightly secure the upper mounting bracket (Item 3) to the snorkel body with hex bolts (Item 5).

Note: *Tighten the M6 bolts enough to allow adjustment in the upper mounting bracket slots.*

7

Locate the four dimples around the inlet of the snorkel body.

Drill a 2.0mm diameter pilot hole at each of the four dimple locations as shown.



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8

Install the ARMAX air ram assembly (Item 2) onto the snorkel body.

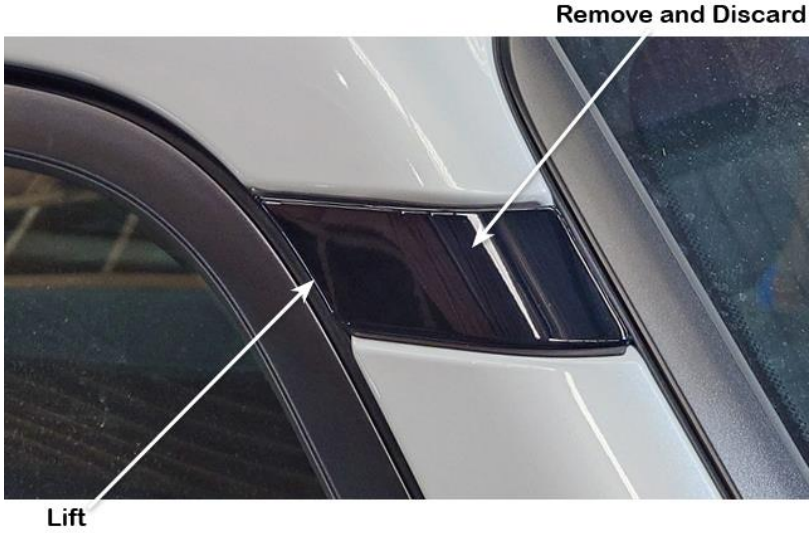
Align the ARMAX air ram assembly mount holes with the four pre-drilled 2mm diameter holes in snorkel body inlet.

Secure the ARMAX air ram (Item 2) to the snorkel body (Item 1) with four black self-tapping screws (Item 32).

9

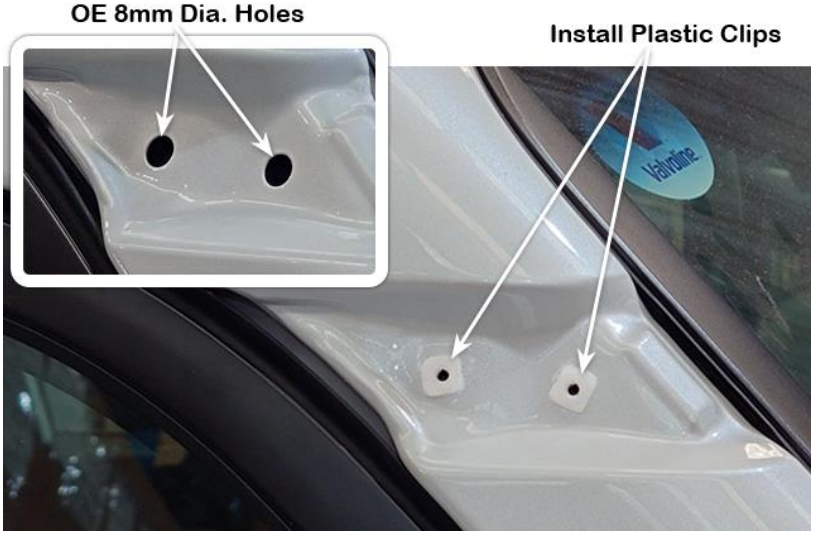
Remove and discard the plastic trim piece from the right-hand side A-pillar.

Note: *The trim is held in by two plastic trim clips and a small adhesive patch located next the windscreen edge.*



10

Install a plastic insert (Item 7) into each of the two OE 8mm diameter holes in the A-pillar.



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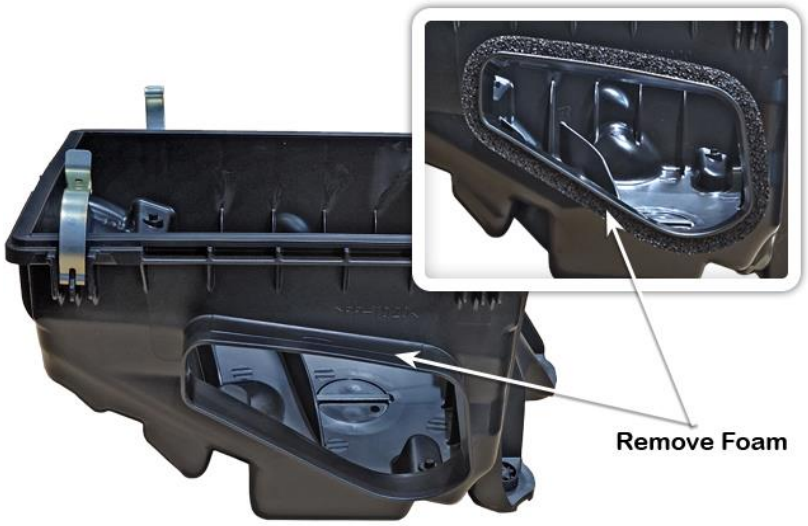
11

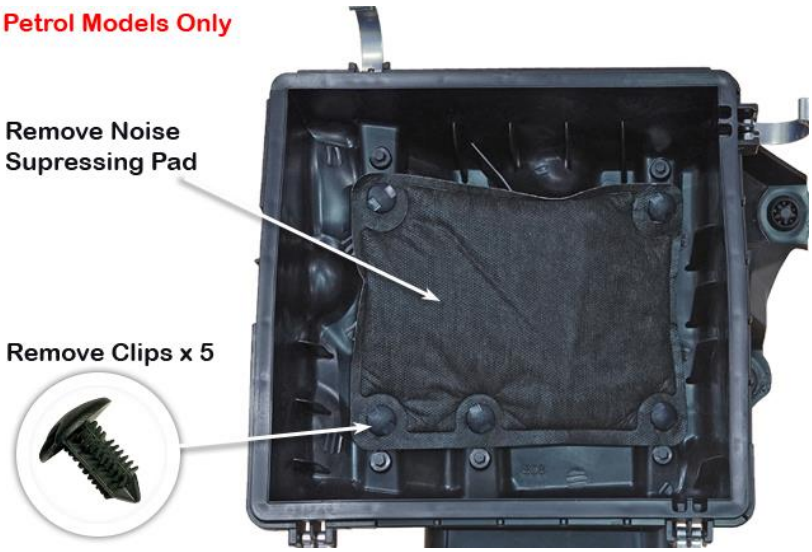
Remove and discard the foam strip from the end of the air cleaner base inlet snout.



12

TJA250 & TJH250 Models Only:

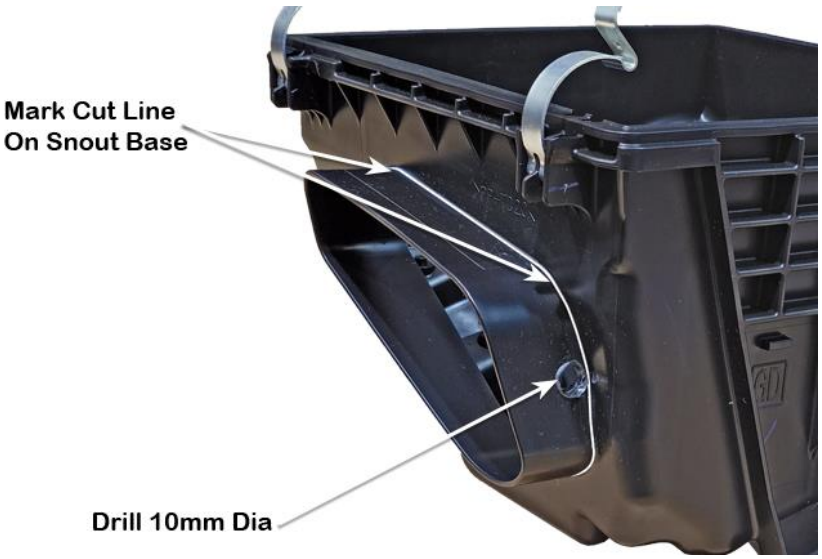
Remove and discard the air intake noise suppressing pad and five retaining clips for the air cleaner base, as shown



13

Mark around the inner edge of the inlet snout as close to the air cleaner base, but not the air cleaner base itself.

Drill a 10mm entry point on the inlet for a start/stop point for the body saw/hacksaw blade.



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14

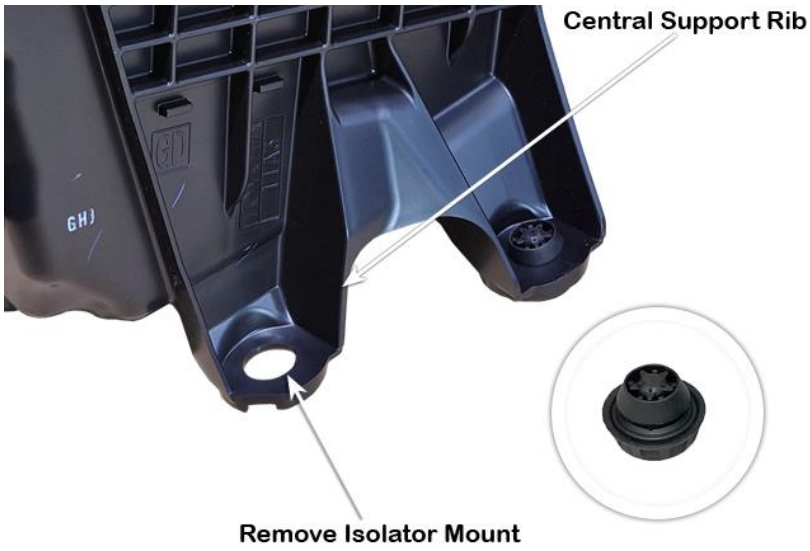
Use a hacksaw blade or body saw to remove the inlet snout, cutting along the marked line.

Ensure to cut the inlet snout flush with the external face of the air cleaner base.

N.B: **Do not cut around the outside of inlet snout.**

15

Remove and discard the isolator mount shown.



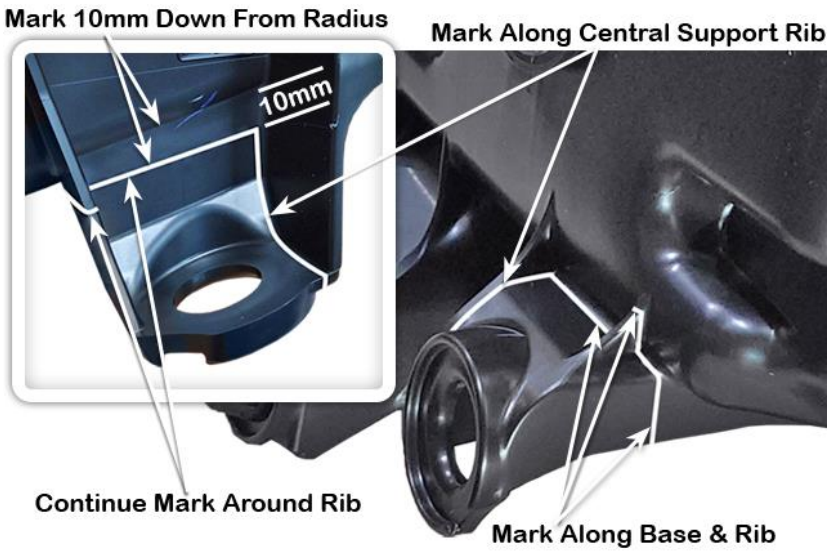
16

Mark a cut line 10mm below the bottom radius of the air cleaner base across the external face of the isolator mount foot support the grommet has been removed from.

Continue the cut mark away from the central support structure rib across the exterior and interior of the isolator foot mount support.

Mark a line along the internal and external edge of central support structure rib, as shown.

Note: *Central Support Rib is NOT to be removed*.



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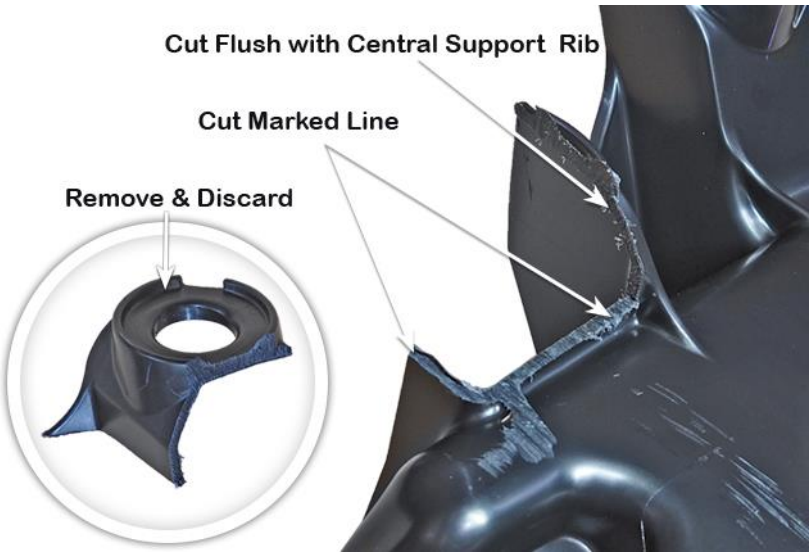
17

Cut along the marked line.

Ensure to cut flush with the central support structure rib of the air cleaner base shown.

Remove and discard the isolator mount foot.

Note: *Central Support Rib is NOT to be removed*.



18

Mark the ribs on the front of the air cleaner base, as shown.

Mark the angled corner rib shown, stopping 3mm below the solid underside of the upper reinforcement support of air cleaner base.

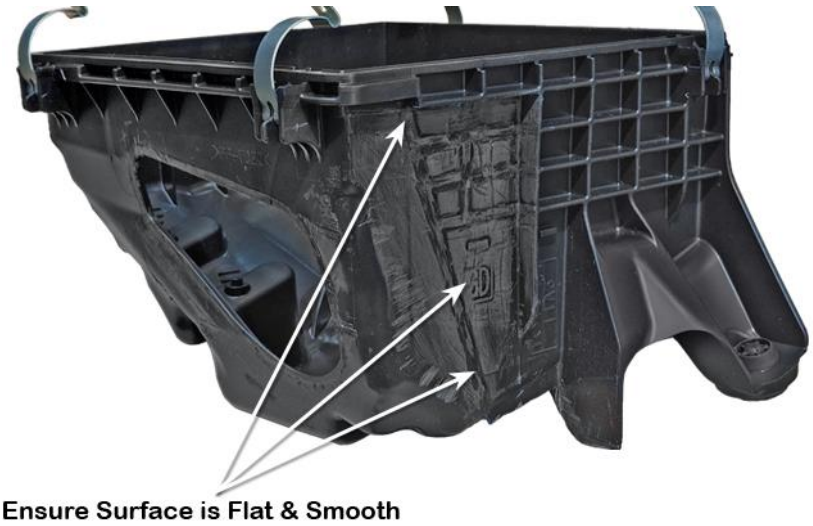
Mark the obtrusions shown including identification markers.

19

Neatly remove all marked ribs and obtrusions.

Use a file or die-grinder and carefully remove any remaining material from the air cleaner base to ensure the entire surface, where the ribs and obtrusions have been removed, is flat and smooth.

Note: *The air entry hose needs a flat surface for mating, to ensure a proper seal is made.*



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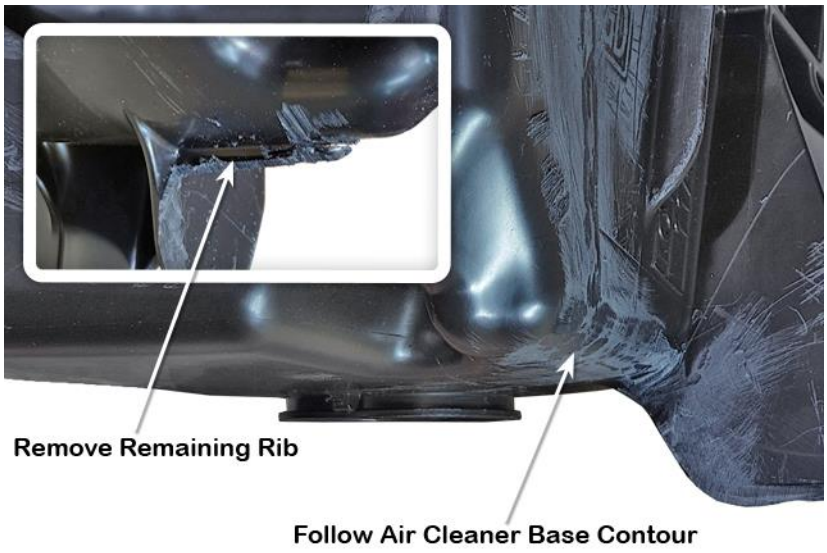
20

Carefully and neatly remove the remainder of the ribbing from the air cleaner base, where the isolator foot mount was removed.

Follow the contour of the air cleaner base, ensure a smooth finish to allow proper mating of the air entry hose.

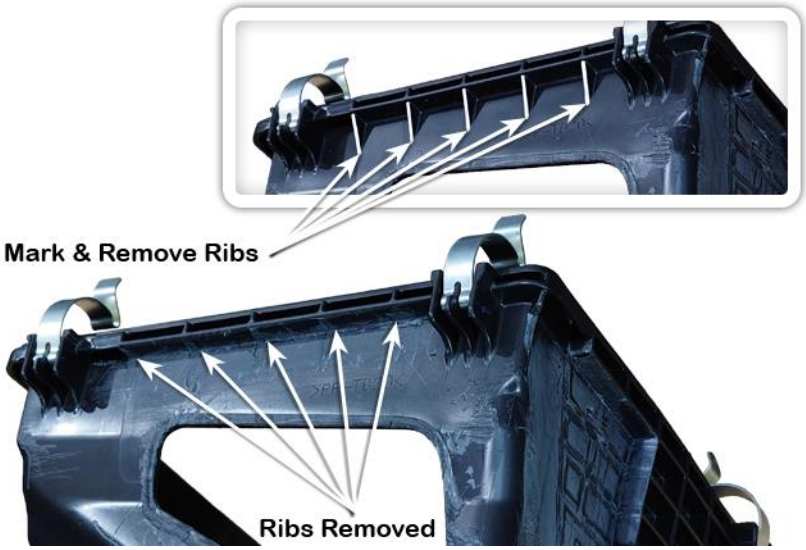
Note: *Central Support Rib is NOT to be removed*.



21

Mark the top support ribs located above the original inlet snout position of the air cleaner base.

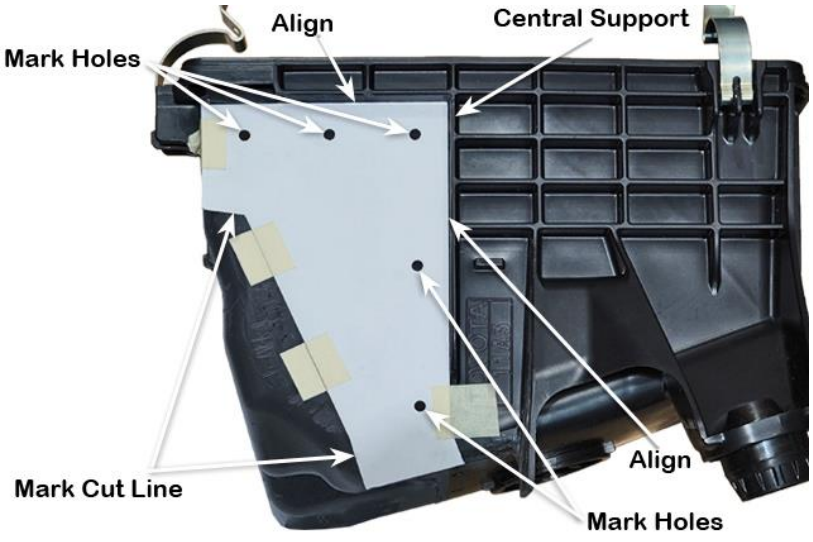
Neatly remove the ribs and any remaining material.



22

Align the front template (Item 16) to the remaining upper and vertical ribs as shown.
Tape in position.

Mark the five hole positions and the cut line.



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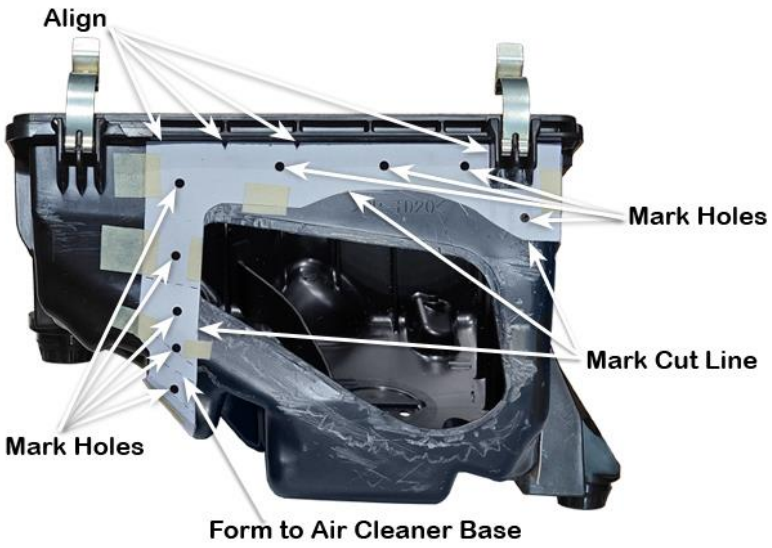
23

Align side air cleaner template (Item 17) under the upper reinforcement support and front retaining clip mount. Ensure the upper two cutouts align to the support ribs. Tape in position, forming the template to the contour of the air cleaner base with the perforated sections of template.

Mark the nine hole positions and the cut line.

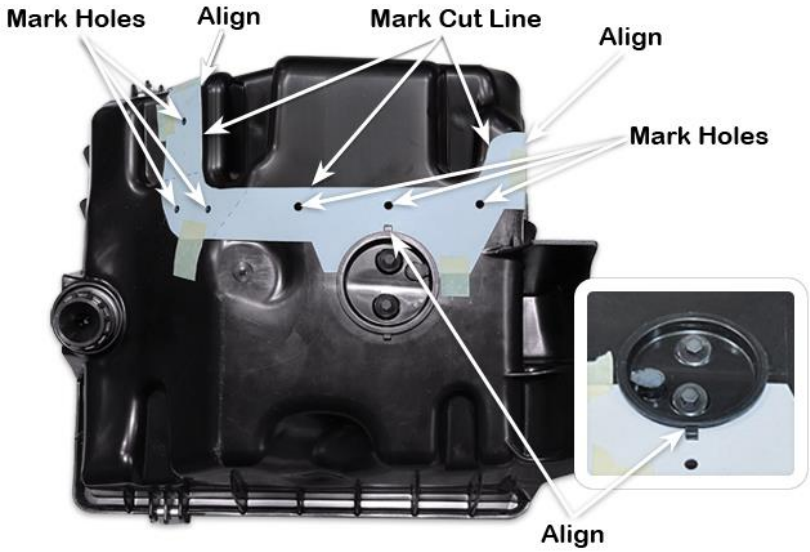


24

Align lower air cleaner template (Item 18) to the keyway on the drain hole structure and the lower edges of the front and side templates (Items 16 & 17). Tape in position.

Mark the six hole positions and the cut line.

Remove all templates for the air cleaner base.



25

Drill a pilot hole at each of the twenty marked hole positions, then drill holes to 4.5mm diameter.

Deburr all holes.

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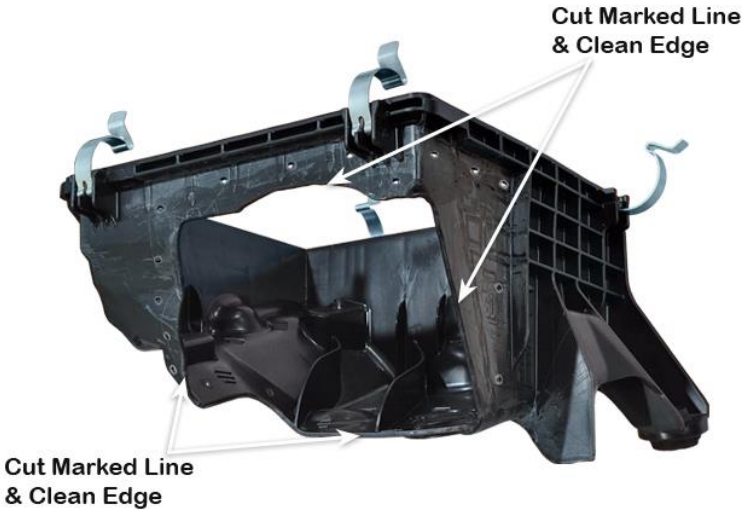
26

Using a body saw, cut the new air cleaner inlet hole as marked in steps 22, 23, 24 & 25.

Neaten up the cut using a file or die grinder.



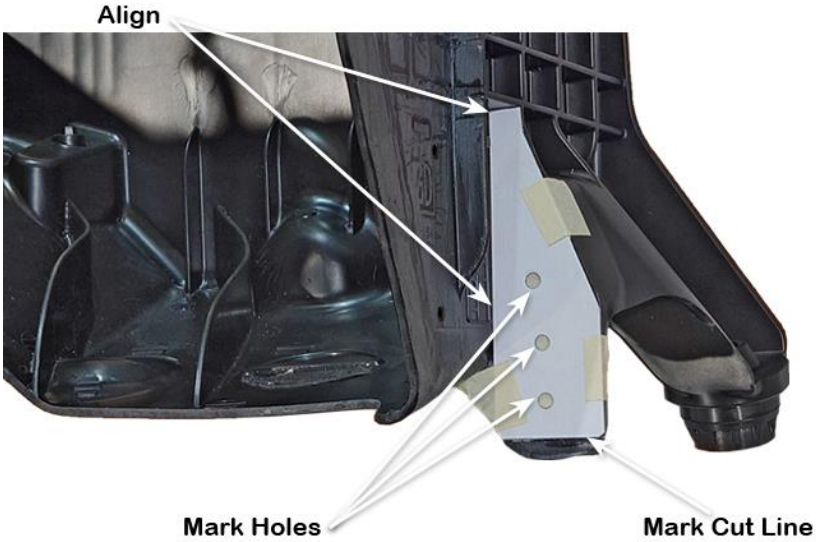
27

Using a body saw and a file, neatly remove the internal rib shown from the air cleaner base.

28

Align the new air cleaner base mount bracket template (Item 19) to the frontside of the central support structure rib, as shown.

Mark the three hole positions and the lower edge cut line, remove template.



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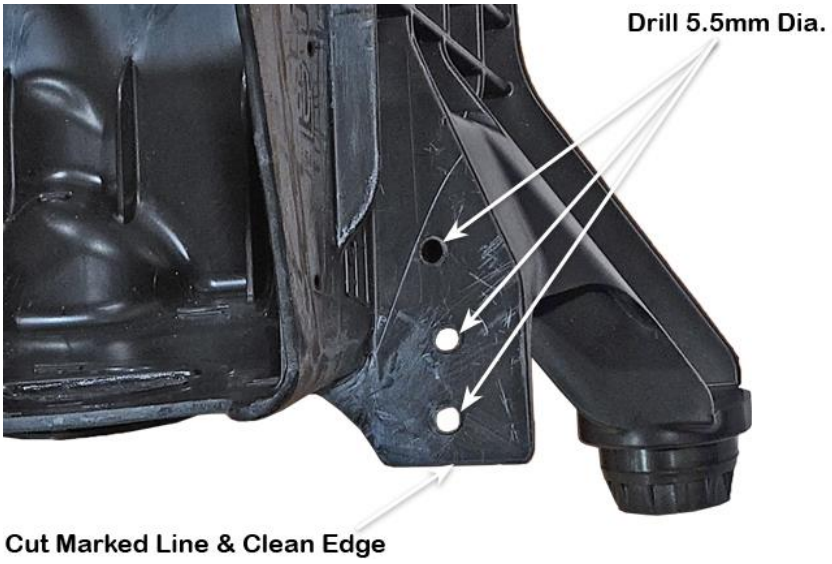
29

Drill a pilot hole for each of the marked hole positions, then drill holes to 5.5mm diameter.

Using a body saw, cut along the marked cut line.

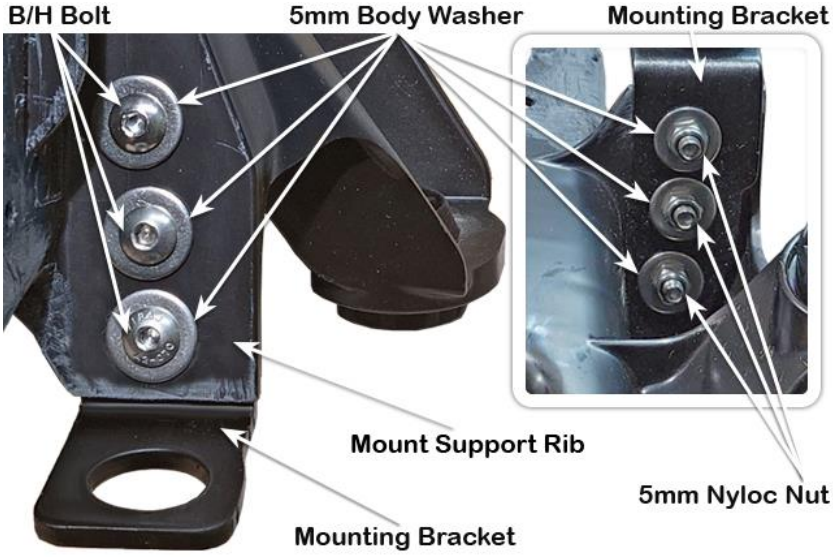
Neaten the cut using a file or die grinder.
Deburr all holes.



30

Install mounting bracket (Item 27) to the rear side of the central support structure rib.

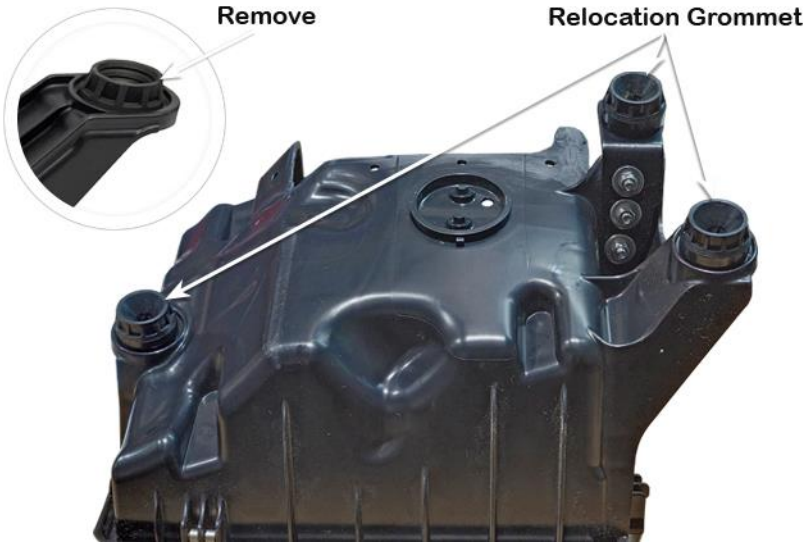
Secure with three 5mmx16mm button head bolts (Item 28), six 5mmx15mm body washers (Item 29) and three 5mm nyloc nuts (Item 30).



31

Remove and discard the two remaining OE mounting grommets.

Install the three new relocation rubber grommets (Item 31) to the original grommet mounting points and the air cleaner base mount bracket (Item 27).



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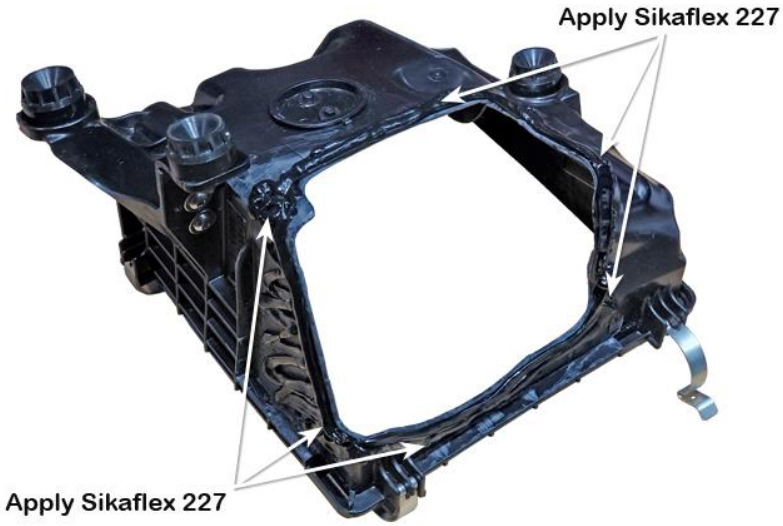
32

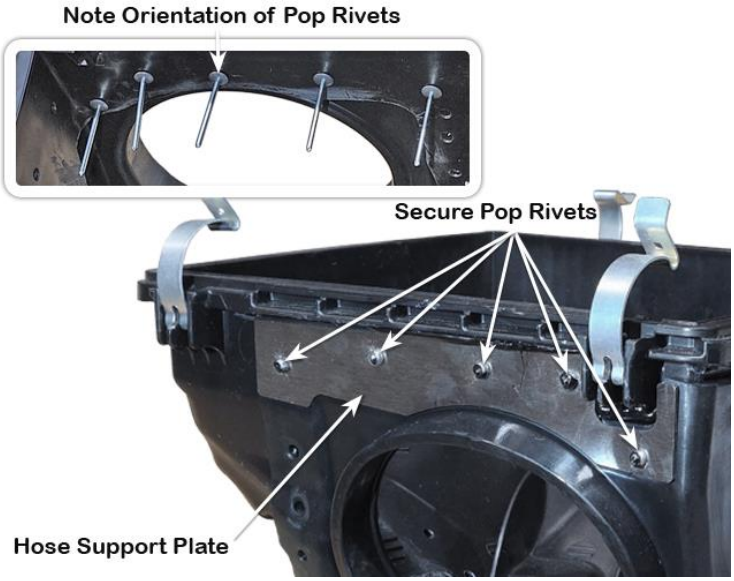
Apply a liberal amount of Sikaflex 227 to the flange of the air cleaner base.



33

Install the flanged air entry hose (Item 12) to the air cleaner base.
Install five pop rivets (Item 25) through the upper side holes of the air cleaner base and air entry hose (Item 12).
Install the upper side hose support plate ‘A’ (Item 20) over the pop rivets and onto the hose flange.
Using a rivet gun, secure the pop rivets.

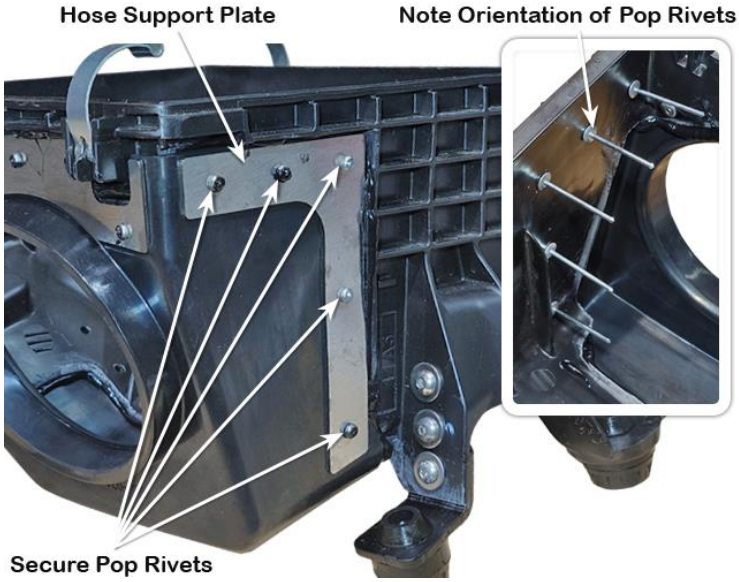
Note: Pop rivet orientation, all pop rivets must be installed from inside of the air cleaner base.



34

Install five pop rivets (Item 25) through the front holes of the air cleaner base and air entry hose (Item 12).
Install the front hose support plate ‘B’ (Item 21) over the pop rivets and onto the hose flange.
Using a rivet gun, secure the pop rivets.

Note: Pop rivet orientation, all pop rivets must be installed from inside of the air cleaner base.



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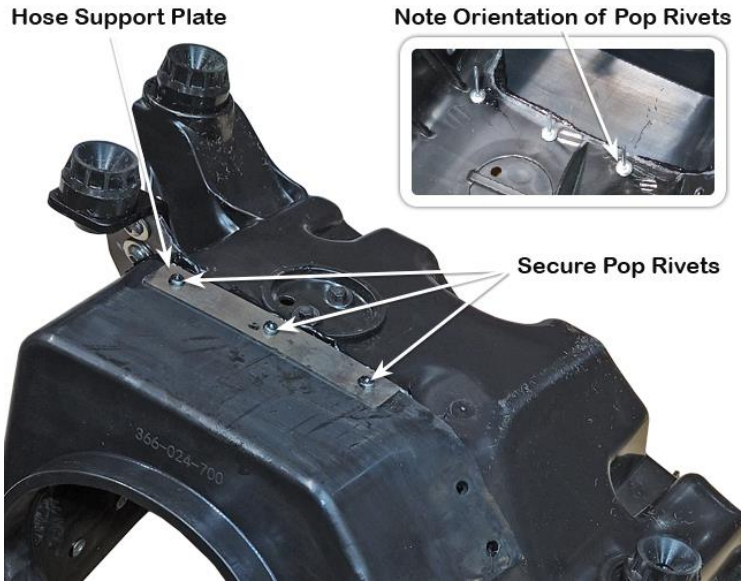
35

Install three pop rivets (Item 25) through the holes on the bottom of the air cleaner base and air entry hose (item 12).
Install the front lower hose support plate ‘C’ (Item 22) over the pop rivets and onto the hose flange.
Using a rivet gun, secure the pop rivets.

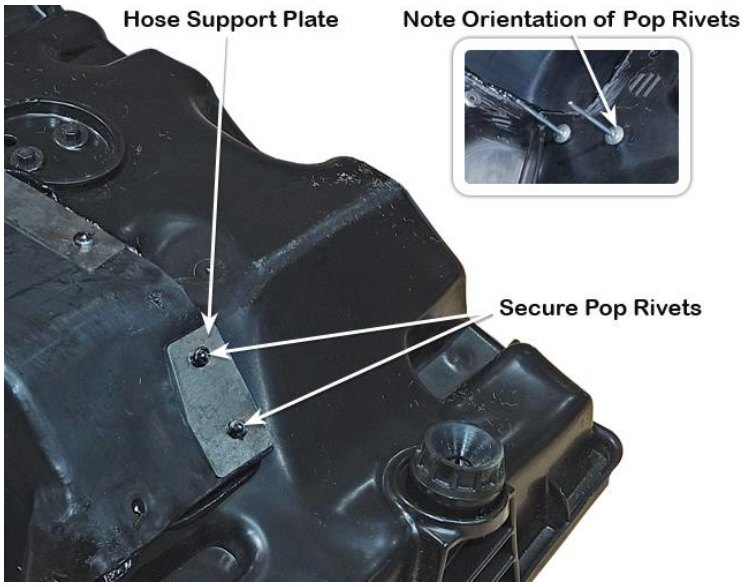
Note: Pop rivet orientation, all pop rivets must be installed from inside of the air cleaner base.



36

Install two pop rivets (Item 25) through the rear holes (parallel with the side face of the air cleaner base) on the bottom of the air cleaner base and flanged hose (Item 12).
Install the rear lower hose support plate ‘D’ (Item 23) over the pop rivets and onto the hose flange.
Using a rivet gun, secure the pop rivets.

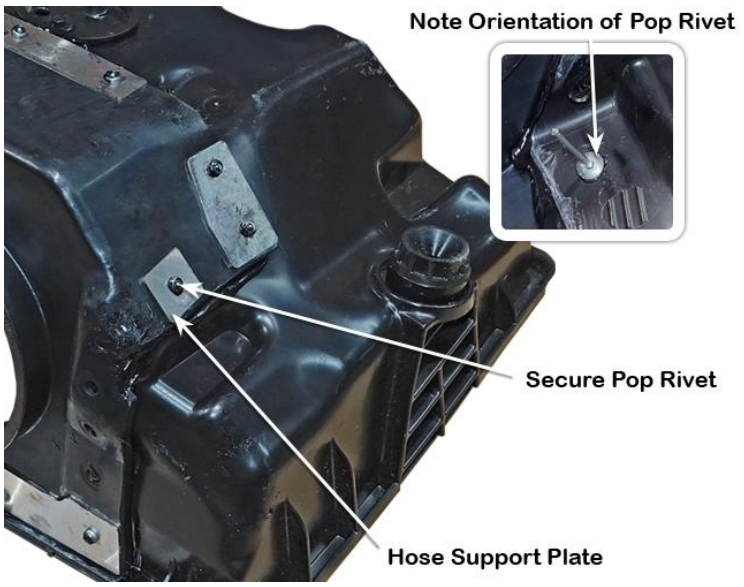
Note: Pop rivet orientation, all pop rivets must be installed from inside of the air cleaner base.



37

Install a pop rivet (Item 25) through the hole on the bottom of the air cleaner base and air entry hose (Item 12).
Install one hose support plate ‘E’ (Item 24) over the pop rivet and onto the hose flange.
Using a rivet gun, secure the pop rivet.

Note: Pop rivet orientation, all pop rivets must be installed from inside of the air cleaner base.



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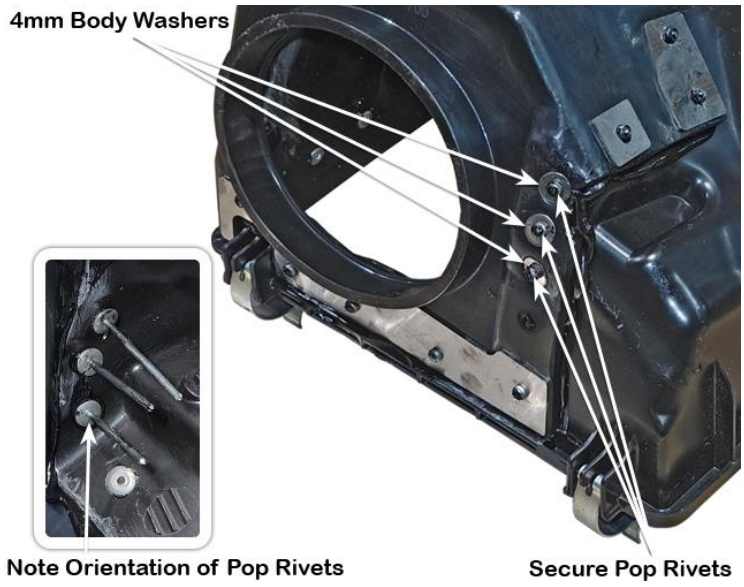
38

Install three pop rivets (Item 25) through the lower 3 rearward side holes of the air cleaner base and air entry hose (Item 12).
Install a 4mm body washer (Item 26) to each pop rivet (Item 25) and onto the face of the hose flange.
Using a rivet gun, secure pop rivets.

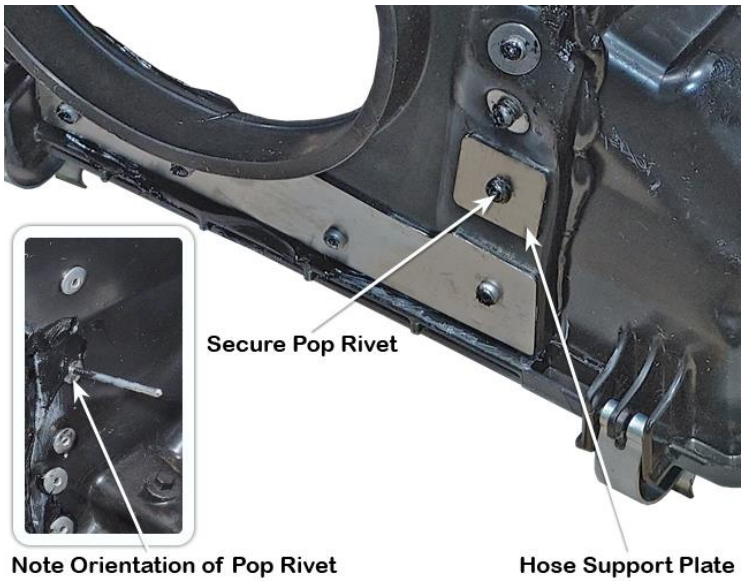
Note: Pop rivet orientation, all pop rivets must be installed from inside of the air cleaner base.



39

Install the final pop rivet (Item 26) to upper rearward side hole of air cleaner base and air entry hose (Item 12).
Install one hose support plate 'E' (Item 25) over the pop rivet and onto the hose flange.
Using a rivet gun, secure pop rivet.

Note: Pop rivet orientation, all pop rivets must be installed from inside of the air cleaner base.



40

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

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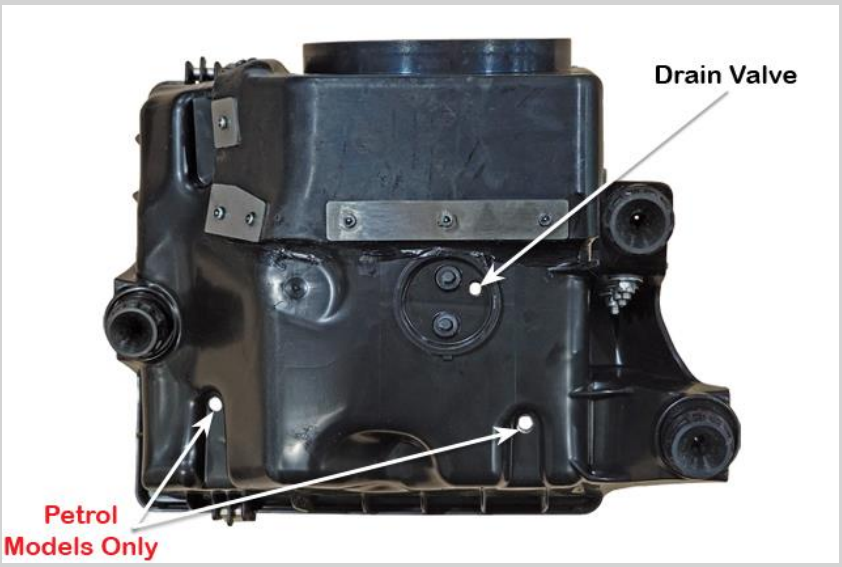
INSTALLER OPTION:

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.

Note: *TJA250 TJH250 petrol variant air cleaner bases have holes used to secure a noise suppressing pad. In the interest of creating a watertight installation, Safari advises that these holes be sealed.*



42

Squash the outlet end of the snorkel outlet hose (Item 11) inwards and tape to hold in position.

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

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43 Carefully install the snorkel outlet hose (Item 11) through the two inner guard panel holes, installing the hose from inside the wheel arch, guiding the outlet end of the hose where required through the two inner panel holes.

Shape the 100/120mm hose clamp (Item 15) to the oval shape of the outlet hose end. Loosely install to the outlet end of the snorkel outlet hose (Item 11).

Shape the 150/170mm hose clamp (Item 14) to the oval shape of the hose inlet. Loosely install to the inlet end of the snorkel outlet hose (Item 11).

<u>N.B:</u> Note hose clamp orientation & position of the hose clamp drive.

44 Install the oval hose joiner (Item 13) hard up against the inlet shoulder of the flanged air entry hose
(Item 12).

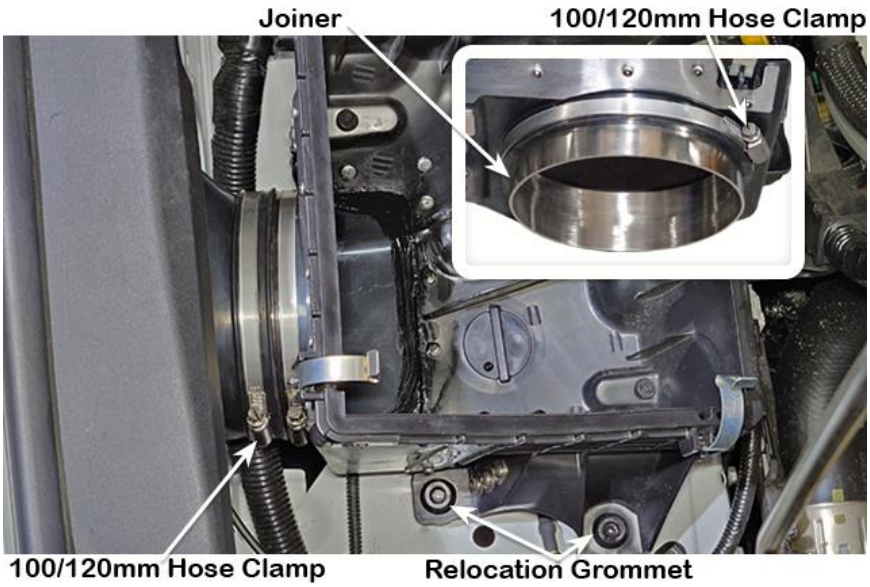
Shape the 100/120mm hose clamp (Item 15) to the oval shaped inlet of the flanged air entry hose (Item 12) and install onto the inlet of flanged air entry hose.
Tighten hose clamp (Item 15).

Re-install the air cleaner base assembly, guiding the joiner (Item 13) into the snorkel outlet hose (Item 11), ensuring the mounting grommets locate properly onto locating pins.

Ensure the joiner is hard up against the shoulder of the snorkel outlet hose (Item 11).

Tighten hose clamp (Item 15).

<u>N.B:</u> hose clamp orientation.



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45

Carefully install the snorkel body (Item 1) to the guard panel, guiding the snorkel body outlet snout into the air entry hose (Item 11).

Lightly secure the snorkel body to the guard panel with the six body washers (Item 9) and six nyloc nuts (Item 10).

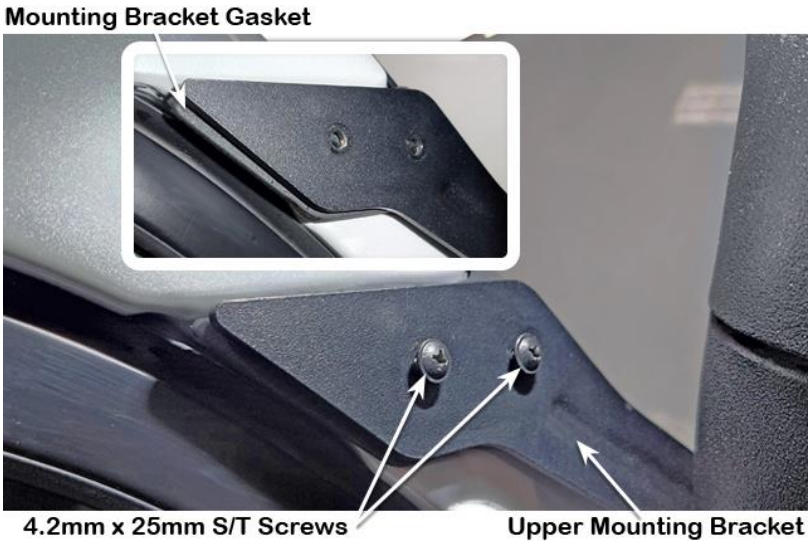
Hint: *Use tape to hold the body washer in place for front snorkel mounting stud.*

Do not fully tighten M8 nuts.

46

Install upper mounting bracket gasket (Item 4) between the A-Pillar and upper mounting bracket (Item 3), aligning the holes of the gasket (Item 4) and bracket (Item 3) with the plastic inserts (Item 7).
Lightly secure with the two 4.2mm x 25mm screws (Item 6).

Do not fully tighten S/T screws.



47

Best position the snorkel body to the guard panel and the A-pillar.
Once correctly positioned, fasten the six nyloc nuts (Item 10), two hex bolts (Item 5) and two 4.2mm x 25mm screws (Item 6).

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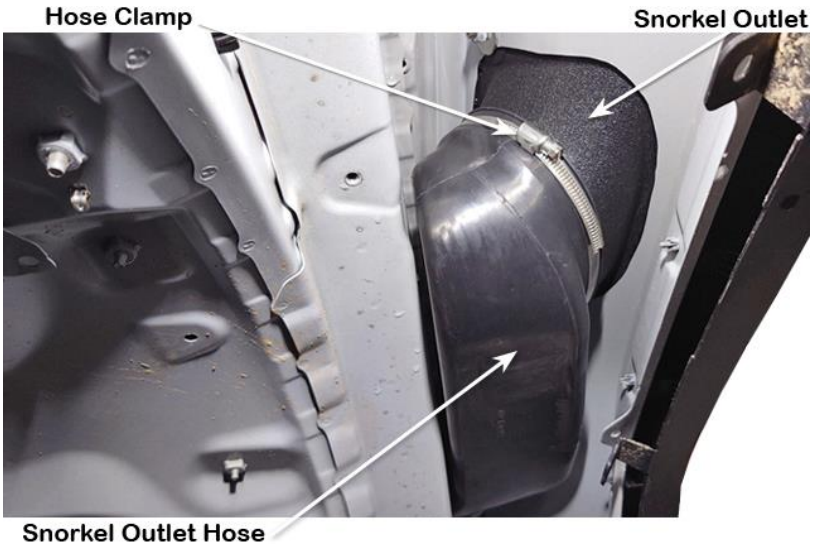
Align the snorkel outlet hose for best fitment *(Ensure the snorkel outlet end face is installed hard up against the internal shoulder of the snorkel outlet hose)*. Correctly position the 150/170mm hose clamp (Item 14) and tighten hose clamp.

Note: The position and orientation of the hose clamp drive.



49

Install the foam baffle, guard liner, mud flap, air cleaner element, air cleaner lid, reconnect sensor wiring and any other components that may have been removed during the snorkel installation process.

50

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

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