

# SS89HPE

#### SAFARI ARMAX SNORKEL

To Suit: Toyota LandCruiser URJ200L (MY16 Facelift Model) 5.7L V8 DOHC VVT-i Gasoline (3UR-FE Engine)



#### 01/08/2018

### **Parts List**

ITEM	PART NO.	DESCRIPTION	QTY
1	370-133-600	BODY - SNORKEL (SS89HP)	1
2	000-135-960	4" AIR RAM ASSEMBLY	1
3	370-032-600	BRACKET - UPPER MOUNTING	1
4	000-002-100	BOLT - HEX - 6mm x 1.0 x 14mm (SEMS) - S/S	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	6
8	000-376	WASHER - RUBBER - 8mm x 33mm x 3mm	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	370-024-400	HOSE - AIR ENTRY	1
12	000-1911	CLAMP - HOSE - 100/120mm - S/S	1
13	000-1913	CLAMP - HOSE - 120/140mm - S/S	1
14	000-1931/B	CLAMP - HOSE - SIZE 64 (BLACK)	1
15	370-016-600	GASKET - FOAM BODY (SELF ADHESIVE)	1
16	370-017-600	TEMPLATE - FENDER	1



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#### **Installation Guide**

#### Fitment to:

Right Hand Side

#### Fitting Time:

• 180min

#### **Special Tools:**

- Body saw (reciprocating)
- Step drill
- Files

- Loctite 243 (thread lock)
- Touch-up paint
- Prep-wash
- Masking tape

Prior to commencing the installation, it is the installer's responsibility to verify that all components and particularly the template (Item 16) are correct.

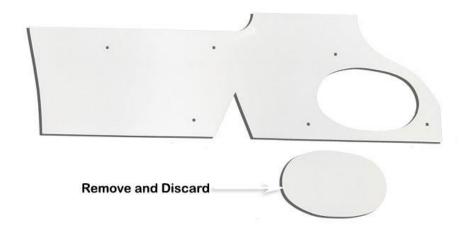
1

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

2

Remove and discard the air cleaner inlet duct from the inner fender panel.





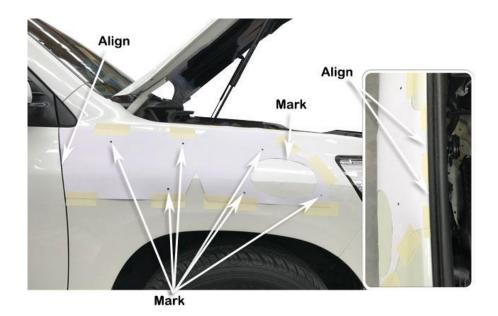
4

Align the fender template (Item 16) 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 cut out section with a felt tip pen.

Remove the template.



6

Drill a pilot hole for each of the marked positions.

Use a step drill to drill the 6 mounting holes to 16mm diameter.

Drill 2 or 3, 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 fender as marked from the template cut-out in step 4.

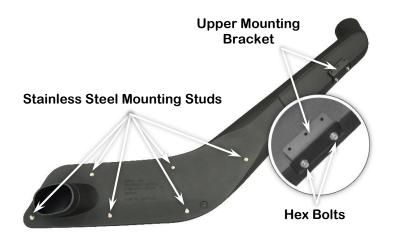
Deburr and paint holes.



Drill 16mm Dia

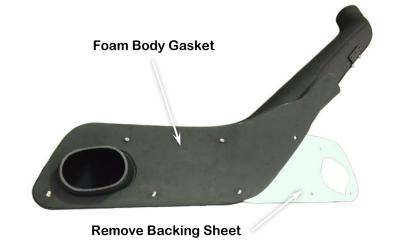
Install the upper mounting bracket (Item 3) to the snorkel body (Item 1) with hex bolts (Item 4).

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.



Remove the self-adhesive backing sheet from the foam body gasket (Item 15).

Align the foam body gasket (adhesive side down) to the back of the snorkel body and press down on the foam body gasket to adhere to the snorkel body (Item 1).

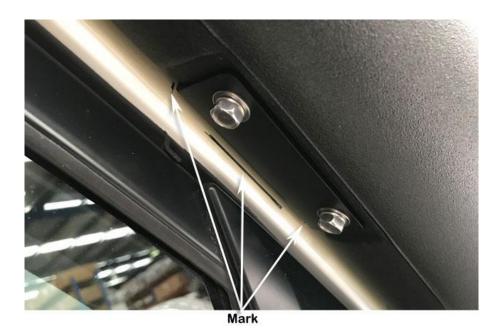


8

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, mark the outline of the upper mounting bracket (Item 3) onto the masking tape.



9

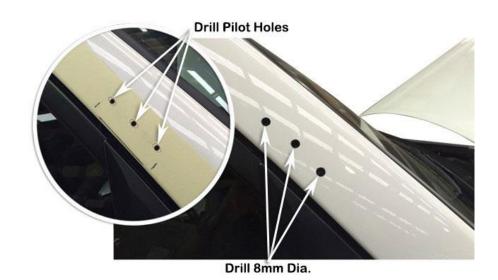
Remove the snorkel body (Item 1) from the vehicle, remove the upper mounting bracket (Item 3) from the snorkel body.

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.



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

Deburr and paint holes.



11

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).



**Upper Mounting Bracket** 

Plastic Inserts

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



13

Using a scribe or paint pen, scribe or mark a line 20mm in from the end of the air cleaner inlet snout around the entire circumference as shown.

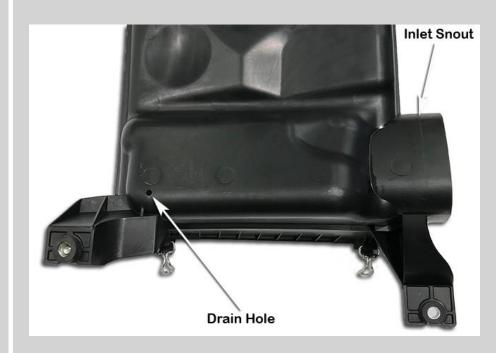


## **INSTALLER OPTION:**

The air cleaner base contains one 5.0mm drain hole as shown.

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

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



15

Install the air entry hose (item 11) through the hole in the inner fender panel, loosely install a 100/120mm hose clamp (item 12) over the air entry hose (Note the orientation of the hose clamp).

Apply a small amount of lubricant to the outlet of the air entry hose (item11).

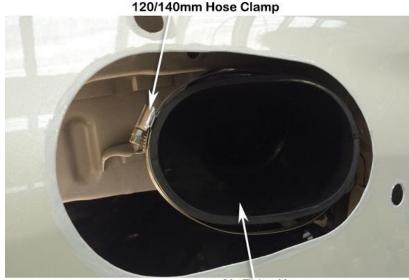
Install the air cleaner base into the vehicle guiding the air cleaner inlet snout into the air entry hose. Fasten the air cleaner base with the original mounting hardware.



Air Entry Hose

Loosely install the 120/140mm hose clamp (Item 13) onto the air entry hose (Item 11), (Note the orientation of the hose clamp).

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



Air Entry Hose

17

Carefully install the snorkel body (item 1) to the fender, guiding the snorkel body outlet snout into the air entry hose (item 11).

Align the snorkel body to the fender and upper mounting bracket, fasten the snorkel body to the fender with rubber washers (item 8), body washers (item 9) and nyloc nuts (item 10).

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



Rubber Washers, Body Washers & Nyloc Nuts

Align the air entry hose (item 11) for best fitment, ensure the hose is correctly installed onto the air cleaner inlet snout, aligning the end of the air entry hose to the marked line around the air cleaner inlet snout (confirm the hose is correctly installed onto the air cleaner inlet snout using an inspection mirror), correctly position the 100/120mm hose clamp onto the air entry hose and tighten.

Correctly position and orientate the 120/140mm hose clamp onto the air entry hose and tighten (there will be a 6.0 – 8.0mm gap between the air entry hose to the snorkel body outlet shoulder).



Air Entry Hose

**Snorkel Body Outlet** 

19

Loosely install the black hose clamp (Item 14) 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 14).



20

Install inner fender 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.