

SS70HP

SAFARI ARMAX SNORKEL To Suit: Toyota Land Cruiser 70 series (Narrow Nose) HZJ75R, HZJ79R & HDJ79R

(August 1999 to January 2007) - Replaces Factory Toyota Raised Air Intake (Genuine Snorkel)



Parts List

01/09/2015

ITEM	PART NO	DESCRIPTION	QTY
1	330-133-900	BODY - SNORKEL (SS70HP)	1
2	000-135-960	4" AIR RAM ASSEMBLY	1
3	330-032-850	BRACKET - UPPER MOUNTING	1
4	000-002-100	BOLT - HEX - 6mm x 1.0 x 14mm (SEMS)	2
5	000-951-300	SCREW - S/T - 4.2mm x 16mm - S/S	3
6	000-960	INSERT - PLASTIC	3
7	330-032-950	BRACKET - REAR MOUNTING (LOWER)	1
8	000-038-300	BOLT - B/H CAP SCREW - 6mm x 1.0 x 12mm	2
9	000-442G	GROMMET - M8 - RUBBER	1
10	000-442S	FERRULE - M8 x 11.15mm LONG - S/S	1
11	000-110	STUD - 8mm x 1.25 x 25mm - S/S	5
12	000-311-300	WASHER - BODY - 8mm x 30mm - S/S	5
13	000-205-300	NUT - NYLOC - 8mm x 1.25mm - S/S	5
14	330-024-900	HOSE - AIR ENTRY	1
15	330-217-900	TEMPLATE - AIR CLEANER HOUSING	1
16	330-025-900	PLATE - HOSE SUPPORT	1
17	000-958-150	POP RIVET - 4mm x 13mm	12
18	000-1911	CLAMP - HOSE - 100/120mm	1
19	330-435-000	RUBBER PAD	1
20	330-704-000	PLATE - BLANK-OFF	1
21	000-1931/B	CLAMP - HOSE - SIZE 64 (BLACK)	1
22	330-017-900	TEMPLATE - GUARD PANEL	1



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Installation Guide

Fitment to:

1

Special Tools:

- Right Hand Side
- Fitting Time:

180 min

- - Body Saw (Reciprocating)
 - Step Drill •
 - Loctite 243 (Thread Lock) •
 - 6mm Spot weld drill / 6.5mm drill bit
- Masking Tape
- **Touch-up Paint**
- Black Spray Paint (Satin Black) •
- Sikaflex 227 Adhesive Sealant

Prior to commencing the installation, it is the installer's responsibility to verify that all components and particularly the guard panel template (Item 22) are correct.

- 2 Remove the following in accordance with the factory service manual:
 - Air Cleaner Assembly
 - **Fuel Filters**
 - Fuel Filter Mounting Bracket

3

Remove and discard the Factory Toyota Raise Air Intake components (shown). The following hardware must be retained, two A-pillar bracket mounting bolt assemblies and one of the rear mounting bolt assemblies as shown.



The factory mounting stud assembly must be removed.

4

The assembly is spot welded to the guard panel normally in two places. Firstly identify where the assembly has been spot welded to the guard panel as the position of the spot welds may vary as shown.

Drill a pilot hole in the centre of each spot weld and drill out the spot welds using a 6.5mm drill bit. Use a small pry bar or flat blade screwdriver to break the spot welds from the guard panel and remove the stud assembly.

Deburr the two holes.

5 Align the guard panel template (Item 22) to the rear edge, upper edge and to the factory holes of the guard panel as shown. Tape the template to the guard panel with masking tape, mark all five hole positions and the snorkel body outlet hole section with a felt tip pen.

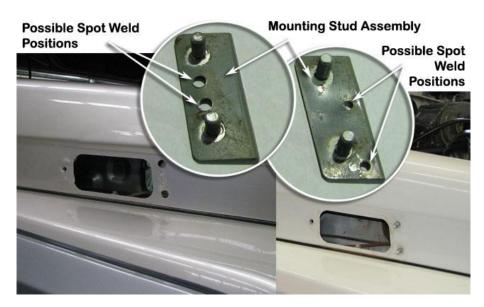
Remove the template.

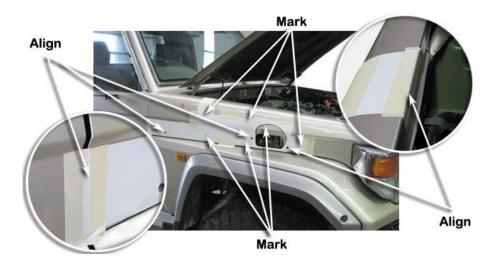
Drill a pilot hole for each of the marked hole positions.

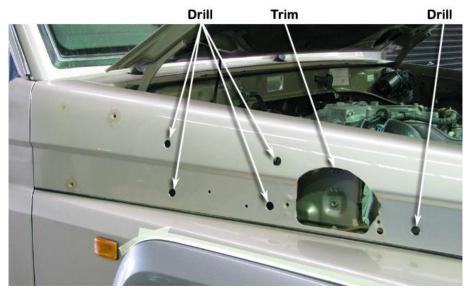
Use a step drill to drill the five mounting hole positions to 16mm diameter.

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

Deburr and paint all holes to prevent rust.





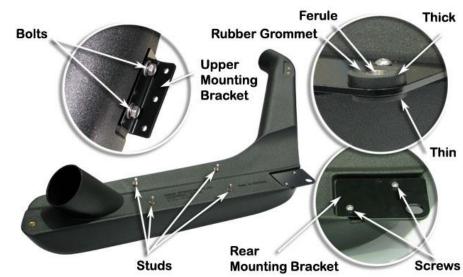


6

Install the upper mounting bracket (item 3) to the snorkel body (item 1) with 6mm hex bolts (item 4).

Apply loctite 243 to 4 of the 5 stainless steel mounting studs (item 11) and install the four studs finger tight into the snorkel body (item 1) mounting inserts shown.

DO NOT INSTALL THE FRONT STAINLESS STEEL MOUNTING STUD INTO THE SNORKEL BODY MOUNTING INSERT.



Apply loctite 243 to the two 6mm button head cap screws (item 8) and secure the rear mounting bracket (item 7) to the snorkel body as shown.

Install the rubber grommet (item 9) into the lower mounting bracket (item 7) with the thicker side of the grommet facing the panel side of the snorkel body.

Install the stainless steel ferule (item 10) into the grommet as shown.

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 three upper mounting bracket hole positions as shown.

Hint: if necessary push the top of the snorkel body towards the windscreen rubber, so that the edge of the upper mounting bracket has approximately 1mm gap to the windscreen rubber.



Remove the snorkel body (item 1) from the vehicle and remove the upper mounting bracket (item 3) from the snorkel body.

9

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.

10 Install the plastic inserts (item 6) into the upper mounting bracket holes in the A-pillar.

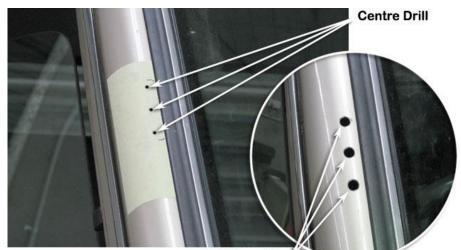
Secure the upper mounting bracket (item 3) to the Apillar with three stainless steel self tapping screws (item 5).

Install the blank-off plate (item 20) and rubber pad (Item 19) to the A-pillar, secure with standard Toyota bolt assemblies removed in step 2.

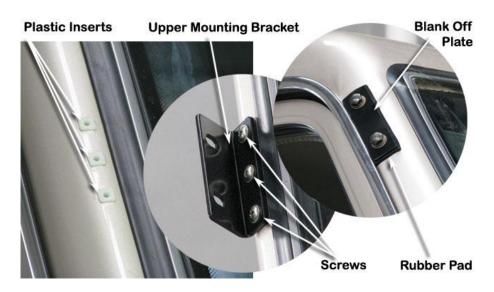
11 Carefully install the snorkel body (item 1) to the guard panel. Align the snorkel body to the guard panel and upper mounting bracket. When correctly aligned, install the front mounting stud (item 11) finger tight into the snorkel body mounting insert (do not apply loctite to the mounting stud). Fasten the snorkel body to the guard panel with body washers (item 12) and nyloc nuts (item 13).

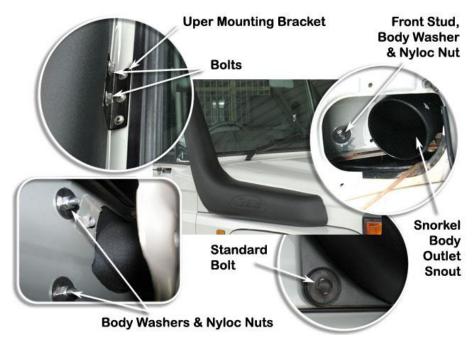
> Fasten the rear mounting bracket with a standard Toyota bolt assembly removed in step 2.

Fasten the snorkel body to the upper mounting bracket with 6mm hex bolts (item 4).



Drill 8mm Dia.

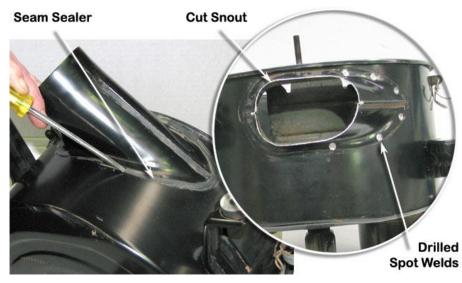




12 Remove the seam sealer from around the air cleaner housing inlet snout with a hammer and small chisel or flat blade screw driver.

> Centre punch all of the spot welds around the inlet snout. Using a 6.0mm spot weld drill, drill out all of the spot welds retaining the inlet snout to the air cleaner housing (if using a standard drill bit, drill a pilot hole through each spot weld then use a 6.5mm drill bit).

Hint: removing the inlet snout as shown with a body saw will give easier access to all of the spot welds.



13 With all the spot welds drilled out use a small pry bar or flat blade screwdriver to remove the inlet snout from the air cleaner housing. Take care to avoid damaging the air cleaner housing.

14

Use a spot weld drill to drill out the three spot welds retaining the air deflector plate to the air cleaner housing.

Use a small pry bar or flat blade screwdriver to remove the deflector plate. Discard the deflector plate.

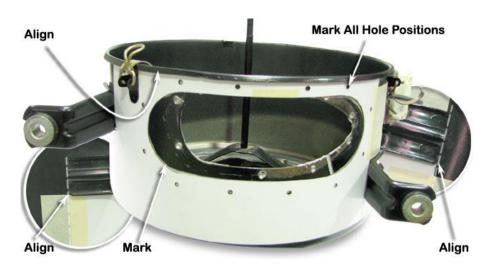
15 Clean-up the remainder of the seam seal from under the lip of the air cleaner housing to allow the air cleaner template (Item 15) to be positioned correctly under the lip.

Align the air cleaner housing template (item 15) to the two air cleaner housing mounting brackets and under the lip as shown.

Mark all twelve hole positions and the air inlet hole section.

Remove the template.





16 Use a 4.0mm drill bit to drill all twelve marked hole positions.

Use a body saw to trim away the marked inlet hole section of the air cleaner housing.

Trial fit the air entry hose (Item 14) to ensure that the inlet hole size is correct. Remove the hose.

Deburr all holes and the air inlet hole.

Use prep-wash or a similar solvent to clean the air cleaner housing body. Prime all bare metal surfaces and spray the air cleaner housing with satin black spray paint.

17 Apply a light coating of adhesive sealant to the flange of the air entry hose (Item 14).

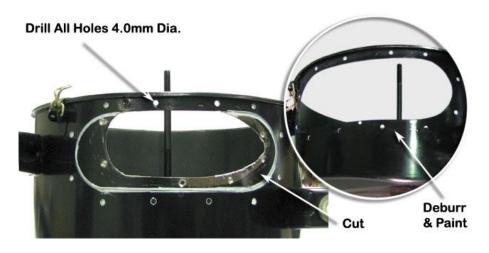
Insert the air entry hose (Item 14) through the air inlet hole in the air cleaner housing. Position the hose support plate (Item 16) over the air entry hose flange.

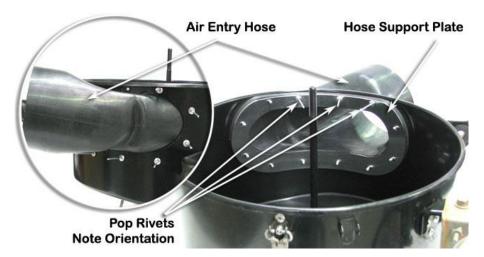
Insert all of the twelve pop rivets (Item 17) into position. Note the orientation of the three upper pop rivets.

When all of the pop rivets are in place and the hose aligned correctly, work from the centre outwards and fasten the pop rivets with a pop rivet gun.

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

Ensure that the drain flap at the base of the particle canister is in a <u>serviceable</u> condition in order to prevent water from entering the air intake.





18	Reinstall the fuel filter mounting bracket and fuel filters that were removed in step 1. Install the 100/120mm hose clamp (Item 18) loosely	Hose Clamp
	over the air entry hose (Item 14). Note hose clamp orientation.	
	assembly whilst guiding the air entry hose over the snorkel body outlet snout.	
	Secure the air cleaner base with the original mounting hardware and tighten the 100/120mm hose clamp (Item 18).	Air Cleaner Base Assembly
19		Air Ram
	Install the black hose clamp (Item 21) loosely to the base of the air ram assembly (Item 2).	
	Install the air ram assembly onto the snorkel body.	Black Hose Clamp
	Align the air ram and tighten the black hose clamp (Item 21).	

20 Install the standard air filter element, air cleaner lid and any other components that may have been removed during the snorkel installation process.

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