

V-SPEC

# SS792HFGD

SAFARI V-SPEC SNORKEL To Suit: Toyota LandCruiser 70 series MY24 Facelift 2.8L 4CYL Turbo Diesel (1GD-FTV Engine) 09/23 - Onwards 4.2L Diesel (1HZ Engine) 09/23 - Onwards Fits Both Factory & Non-Factory Fitted Raised Air Intake Vehicles

Not compatible with (LC78) Troop Carrier Non-Factory Fitted Raised Air Intake Vehicle Models



31/10/2024

Parts List						
ITEM	PART NO	DESCRIPTION	QTY			
1	334-133-000	BODY - SNORKEL (SS792HF)	1			
2	000-135-800	3.5" AIR RAM ASSEMBLY	1			
3	334-032-100	BRACKET - UPPER MOUNTING	1			
4	334-435-000	GASKET - RUBBER BRACKET	1			
5	000-914/B	CLAMP - HOSE - BLACK	1			
6	000-002-100	BOLT - HEX - 6.0mm x 1.0 x 14mm (SEMS) - S/S	2			
7	334-032-200	BRACKET - REAR MOUNTING (LOWER)	1			
8	000-038-450	BOLT - TORX SCREW - 6mm x 1.0 x 12mm - Black S/S	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	4			
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	000-042-520	BOLT – HEX DRIVE – 8.0mm x 1.25 x 20mm (Black)	2
15	000-042-530	BOLT – HEX DRIVE – 8.0mm x 1.25 x 30mm (Black)	1
16	000-954-400	RIVET NUT – 8.0mm x 1.25 x 17.5mm – STEEL Z/P	2
17	334-992-000	SPACER – 8.5mm x 30mm x 3.0mm – BLACK	1
18	334-024-000	HOSE - AIR ENTRY	1
19	000-909	CLAMP - HOSE - 80/100mm - S/S	1
20	000-910	CLAMP - HOSE - 90/110mm - S/S	1
21	334-017-000	TEMPLATE - GUARD PANEL	1



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### **Installation Guide**

Fitment to:	Special Tools:	
<ul><li> Right Hand Side</li><li>Fitting Time:</li><li> 150 min</li></ul>	<ul> <li>Body Saw (Reciprocating)</li> <li>Rivet Nut Gun</li> <li>Step Drill</li> <li>Loctite 243 (Thread Lock)</li> <li>6mm Spot Weld Drill / 6.5mm Drill Bit</li> <li>9mm, 10mm &amp; 11mm Drill Bits</li> </ul>	<ul> <li>T30 Torx Drive</li> <li>Files / Grinder</li> <li>Masking Tape</li> <li>Touch-up Paint</li> <li>Sikaflex 227 Adhesive Sealant</li> </ul>

Prior to commencing the installation, it is the installer's responsibility to verify that all components and particularly the guard panel template (Item 21) are correct.

### 1

Remove the following in accordance with the factory service manual:

Air Cleaner Assembly

2

Remove and discard the perforated section from the guard panel template (Item 21) as shown.



### Factory Fitted Raised Air Intake Vehicles:

Follow steps 3 – 9.

(For <u>Non</u>-Factory Fitted Raised Air Intake Vehicles Skip to Steps 11 - 20)

3

Remove and discard the Factory Toyota Raised Air Intake components (shown).

The following hardware must be retained,

- x2 A-pillar bracket mounting bolt assemblies (20mm long)
- Rear mounting bolt assembly (30mm long).



The front factory captive mounting nut assembly must be removed from the front RH guard panel.

The assembly is spot welded to the guard panel 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 from vehicle to vehicle.

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



4

Align the guard panel template (Item 21) to the rear edge and upper edge of the guard panel.

Ensure to align the rear edge of the front template slot to the rear edge of the front factory hole of the guard panel as shown.

Tape the template to the guard panel with masking tape.

Mark all three hole positions and front slot profile with a felt tip pen.

Remove the template.



Mark

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

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

Use a body saw to trim away the front marked slot on the guard panel as shown.

Deburr and paint all holes and cut sections of guard panel to prevent rust.

Hint: Prior to any cutting or drilling, place a strip of masking tape along the flare seal and guard panel to prevent metal filings being trapped between the seal and guard panel. Drill 16mm Dia.



6



Apply Loctite 243 to the two M6 x 12mm Torx bolts (Item 8) and secure the rear mounting bracket (Item 7) to the snorkel body (Item 1) as shown.

Install the rubber grommet (Item 9) into the rear mounting bracket (Item 7) with the thicker side of the grommet facing the panel/backside side of the snorkel body.

Install the stainless-steel ferrule (Item 10) into the grommet as shown.



### **Body Washers & Nyloc Nuts**

Install the upper mounting bracket (Item 3) to the snorkel body (Item 1), with the M6 Hex SEMS Bolts (Item 6).

Align the upper mounting bracket (Item 3) in the relief as shown and finger tighten the M6 Hex SEMS bolts (Item 6).

Apply Loctite 243 to each of the stainless-steel mounting studs (Item 11) and install the studs finger tight into the snorkel body (Item 1) mounting inserts as shown.

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

When correctly aligned, fasten the snorkel body to the guard panel with the body washers (Item 12) and nyloc nuts (Item 13).

Fasten the rear mounting bracket (Item 7) using the 30mm long genuine Toyota rear mounting bolt assembly retained in step 2. Position the rubber bracket gasket (Item 4) between the upper mounting bracket (Item 3) and A 'Pillar panel. Ensure gasket is aligned to the x2 factory captive nut locations in the vehicle A 'Pillar.

Secure the upper mounting bracket (Item 3) to the A 'Pillar using the x2 20mm long genuine Toyota A-pillar bracket mounting bolts retained in Step 2. Snorkel Body Standard Bolts Rubber Gasket

### Proceed to Step 21.

**Non- Factory Fitted Raised Air Intake Vehicles:** Follow steps 11 – 20.

11

Align the guard panel template (Item 21) to the rear edge and upper edge of the guard panel.

Tape the template to the guard panel with masking tape.

Mark all three hole positions, the snorkel body outlet hole, and the front slot with a felt tip pen.

Remove the template.



12

13

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

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

Drill 1 or 2, 10mm diameter holes in the snorkel body outlet section & front marked slot as start/stop points for the body saw.

Use a body saw to cut the marked snorkel body outlet section & front marked slot on the guard panel as shown.

Deburr and paint all holes and cut sections of guard panel to prevent rust.

*Hint: Prior to any cutting or* drilling, place a strip of masking tape along the flare seal and quard panel to prevent metal filings being trapped between the seal and guard panel.

Install the upper mounting

SEMS Bolts (Item 6).

SEMS bolts (Item 6).

shown.

bracket (Item 3) to the snorkel

(Item 3) in the relief as shown and finger tighten the M6 Hex

stainless-steel mounting studs (Item 11) and install the studs

(Item 1) mounting inserts as



Drill 16mm Dia.

**Cut Snorkel Outlet Section** 

Cut Slot



Apply Loctite 243 to the two M6 x 12mm Torx bolts (Item 8) and secure the rear mounting bracket (Item 7) to the snorkel body (Item 1) as shown.

Install the rubber grommet (Item 9) into the rear mounting bracket (Item 7) with the thicker side of the grommet facing the panel/backside side of the snorkel body.

Install the stainless-steel ferrule (Item 10) into the grommet as shown.

### Body Washers & Nyloc Nuts



**Snorkel Body** 



Marked Hole Centre

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

When correctly aligned, fasten the snorkel body to the guard panel with the body washers (Item 12) and nyloc nuts (Item 13).

Position the rubber grommet & ferrule assembly (Item 9 & 10) central to the rear mounting bracket (Item 7) slot.

Mark the centre point of the rear mounting bracket (Item 7) through the rubber grommet & ferrule assembly (Item 9 & 10) as shown.

### 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

16



Mark the centre point of the two slots in the upper mounting bracket (Item 3) onto the vehicle A 'Pillar as shown.

17

Remove the snorkel body (Item 1) from the vehicle along with the upper mounting bracket (Item 3) & rear mounting bracket (Item 7).

Drill a pilot hole at the center of the two marked hole positions in the A 'Pillar. Drill each hole position to 11mm diameter with a step drill or 11mm drill bit.

Deburr & paint holes to prevent rust.

Install the two M8 Rivet Nuts (Item 16) into the 11mm holes as shown.



Drill a pilot hole at the rear mounting brackets (Item 7) lower marked hole position in the guard panel.

Drill the hole position to 9mm Dia. with a step drill or 9mm drill bit.

Deburr & paint holes to prevent rust.



Drill 9.0mm Dia.



M8x30mm Bolt & Mount Spacer

**Snorkel Body** 



### 19

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

When correctly aligned, fasten the snorkel body to the guard panel with the body washers (Item 12) and nyloc nuts (Item 13).

Fasten the rear mounting bracket (Item 7) using the M8 x 30mm Hex drive flange bolt (Item 15), Black Mount Spacer (Item 17), body washer & nyloc nut (Items 12 & 13).

### 20

Position the rubber bracket gasket (Item 4) between the upper mounting bracket (Item 3) and A 'Pillar panel.

Ensure gasket is aligned to the two installed M8 Rivet Nuts (Item 16) in the A 'Pillar panel.

Secure the upper mounting bracket (Item 3) to the A 'Pillar using the two M8 x 20mm Hex drive flange bolts (Item 14).

### Proceed to Step 21.

All Vehicles:

Follow Steps 21 – 27

### 21

22

Loosely install the black hose clamp (Item 5) to the base of the air ram assembly (item 2).

Install the air ram assembly onto the snorkel body.

Align the air ram and tighten the black hose clamp (item 5).

Remove the foam seal from air

Clean any residual glue that may

cleaner inlet snout.

be left behind.





Air Cleaner Inlet

23

### **INSTALLER OPTION :**

The air cleaner housing 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.



# <image>

Air Entry Hose Shoulder

### 80/100mm Hose Clamp



Air Entry Hose /

Air Cleaner Base Inlet

### 26

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

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

24

25

Loosely install the 80/100mm hose clamp (Item 19) onto the air entry hose (Item 18).

## Note the orientation of the hose clamp

Loosely install the 90/110mm hose clamp (Item 20) over the inlet of air entry hose (Item 18).

Note the orientation of the

(Item 18) onto the snorkel body

Install the air entry hose

hose clamp.

outlet snout.

Install the air cleaner base back into position guiding the air cleaner inlet snout into the air entry hose (Item 18).

Fasten the air cleaner base with the original mounting hardware.

Fully tighten both the 80/100mm & 90/110mm hose clamps (Item 19 & 20).