

**SS970HF** SAFARI V-SPEC SNORKEL

Ford Ranger 3.0L Turbo Diesel Intercooled



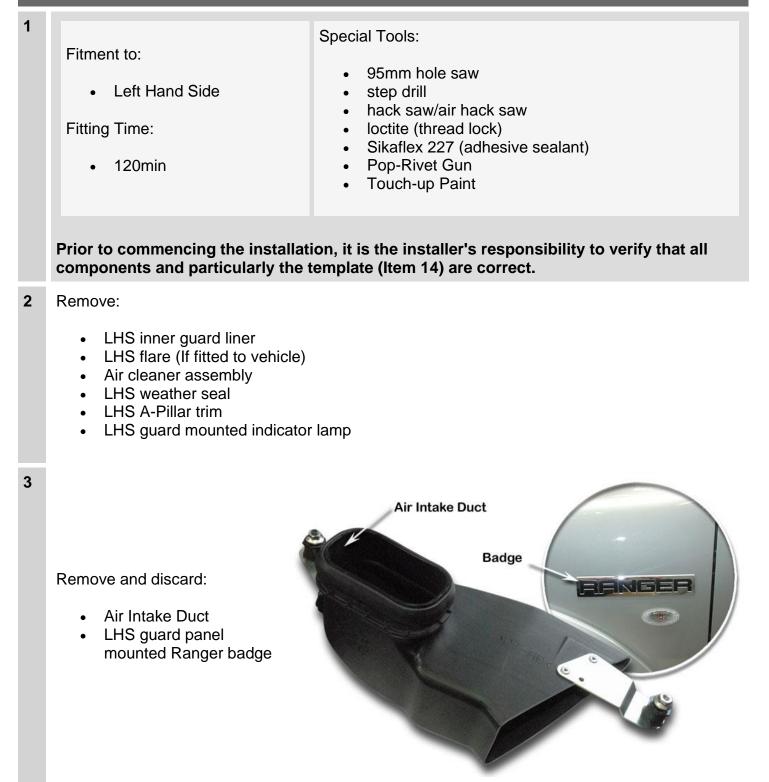
·			01/04/2015
ITEM	DESCRIPTION	QTY	PART NO
1	BODY - SNORKEL	1	630-133-200
2	3 1/2" AIR RAM ASSEMBLY	1	000-135-800
3	HOSE - AIR ENTRY	1	630-024-200
4	ADAPTOR - AIR CLEANER	1	630-023-000
5	BRACKET - UPPER MOUNTING	1	630-032-200
6	POP RIVET - 4.8mm x 12mm	4	000-958-300
7	BOLT - HEX - 6mm x 1.0 x 14mm (SEMS)	3	000-002-100
8	STUD - S/S - 8mm x 1.25 x 25mm - O/L	7	000-110
9	WASHER - BODY - 8mm x 30mm	7	000-311-300
10	NUT - NYLOC - 8mm x 1.25mm	7	000-205-300
11	POP RIVET - 4.8mm x 21mm	2	000-958-400
12	CLAMP - HOSE - 80/100mm	2	000-909
13	HOSE CLAMP - SIZE 56 (BLACK)	1	000-914/B
14	TEMPLATE	1	630-017-200



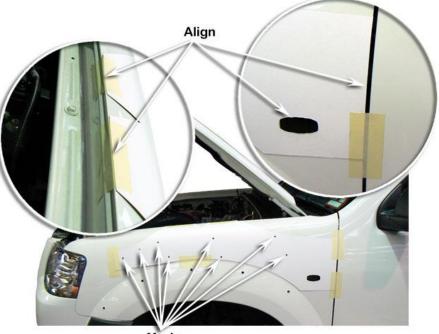
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#### **Installation Guide**



Tape the template (Item 14) to the rear and upper edges of the left hand guard. With the template correctly positioned on the guard, use a felt tip pen to mark all hole positions, then remove the template.



Mark

**Drill 16mm Diameter Holes** 

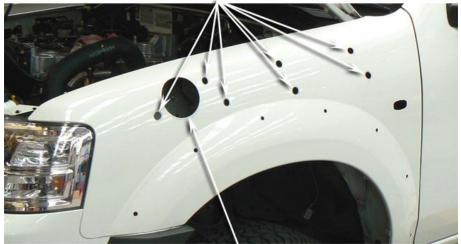
Drill a pilot hole for each marked hole position.

Using a 95mm hole saw, drill the snorkel body outlet hole.

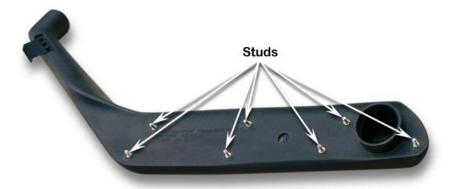
Using a step drill, drill the seven mounting hole positions to 16mm.

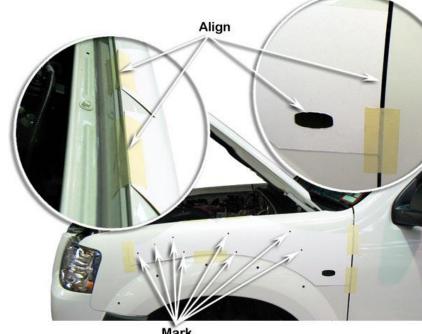
Deburr and paint holes to prevent rust.

Apply loctite to all seven studs (Item 8) and install the studs into the snorkel body mounting inserts (Item 1).



**Drill 95mm Hole** 





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

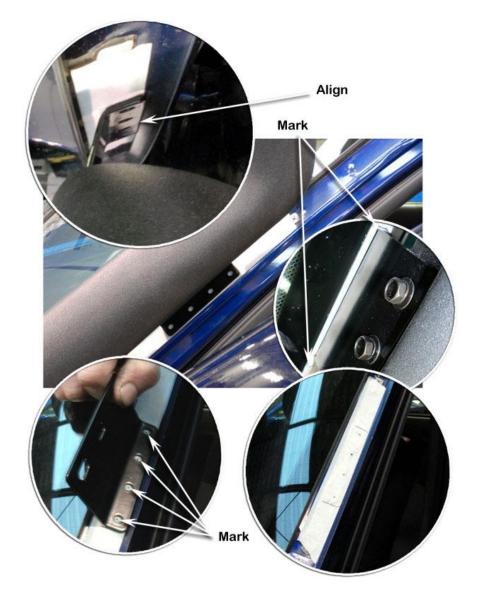
Safari have developed 2 methods of Snorkel A pillar attachment, for the conventional method please proceed with the current document alternatively please see the link below for further instructions.

www.safari4x4.co.nz/apillarmounting

Fasten the upper mounting bracket (Item 5) to the snorkel body (Item 1) with three bolts (Item 7).

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

With the left hand door of the vehicle open, carefully install the snorkel body onto the guard. With the snorkel body correctly positioned, mark the four upper mounting bracket hole positions on the 'A' Pillar. N.B: The upper mounting bracket should be inline with the crease in the "A" pillar panel.



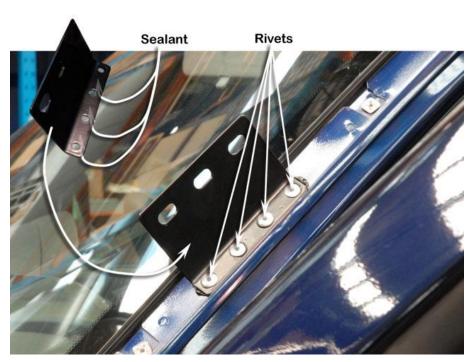
Stick a piece of masking tape along the windscreen and mark the position of the upper mounting bracket on the tape. Remove the snorkel body from the guard. Remove the upper mounting bracket from the snorkel body.



Drill a 5mm hole for each marked hole position on the 'A' pillar panel (deburr and paint the holes).

Stick a piece of masking tape onto the A-Pillar trim, position the A-Pillar trim onto the A-Pillar.

With the A-pillar trim correctly positioned, transfer the upper mounting bracket position onto the masking tape. Remove the A-Pillar trim Apply sikaflex adhesive sealant to the under side of the upper mounting bracket, secure the bracket to the A-Pillar using pop-rivets (Item 6).



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Drill a series of 3.5mm holes in the A-Pillar trim to make the slot for the upper mounting bracket. Make the slot approximately 5mm longer at either end for clearance to the upper mounting bracket. Using the air hacksaw or hacksaw blade, cut out the slot in the A-Pillar trim (check the fitment of the trim over the bracket and if required, make the slot longer or wider). Use a file to neaten up the

## **Snorkel Mounting Bracket**



14

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Remove and discard the air intake duct from the air cleaner housing.

**Remove Air Intake Duct** 



Replace the A-Pillar trim and fasten into position.

Refit the weather seal.

cuts.

**15** Position the air cleaner adaptor (Item 4) over the air cleaner inlet snout. With the adaptor correctly positioned, mark the two hole positions.

Remove the adaptor and drill the two hole positions to 5mm.

Apply sikaflex sealant to the inside of the adaptor and around the air cleaner inlet snout. Fit the adaptor onto the air cleaner inlet snout and secure using pop rivets (Item 11).

Clean up any excessive sealant.

Install the air cleaner housing into position.





Check the clearance between the adaptor and the inner guard hole.

If required enlarge the hole to ensure there is adequate clearance to the adaptor.



## 18

Loosely Install the two 80/100mm hose clamps (Item 12) onto the air entry hose (Item 3).

Ensure that the hose clamp position is as shown.

With the hose clamps in position, install the air entry hose onto the air cleaner adaptor.

Hose Clamp Note Position



Hose Clamp

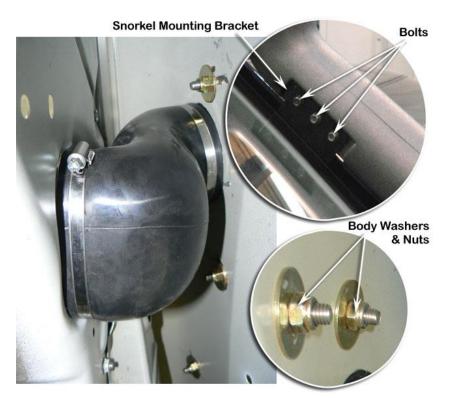
**Connection Hose** 

With the hose loosely positioned, carefully install the snorkel body to the guard.

Align the snorkel body to the upper mounting bracket and the guard.

When correctly aligned, fasten the snorkel body to the guard with body washer (Item 9) and Nyloc nut (Item 10).

Fasten the snorkel body to the upper mounting bracket with hex bolts (Item 7).



- 20 Ensure that the air entry hose is correctly positioned onto the snorkel snout and air cleaner adaptor. Orientate the 80/100mm hose clamps (Item 12) into position and tighten.
- 21

Loosely install the black hose clamp (Item 13) to the base of the air ram (Item 2) and install the air ram onto the snorkel body.

Align the air ram and tighten the black hose clamp (Item 13).



22 Install the LHS inner guard liner, the LHS guard panel mounted indicator lamp and any other items that may have been removed during the snorkel installation process.

23 It is the installer's responsibility to ensure that all connections are watertight.