



SAFARI R-SPEC SNORKEL

SS106R

1/04/2015

ITEM	DESCRIPTION	QTY	PART No.
1	BODY-SNORKEL	1	310-133-000R
2	3" AIR RAM ASSEMBLY	1	000-135-050
3	BRACKET-UPPER MOUNTING	1	310-032-000
4	BOLT-HEX 6mm x 1.0mm x 14mm	3	000-002-100
5	BODY CLIP - PLASTIC	3	000-960
6	SCREW - S/T 4.2mm x 13mm	3	000-951
7	STUD - S/S 8mm x 1.25mm x 25mm O/L	2	000-110
8	BOLT-HEX - 8mm x 1.25mm x 16mm	2	000-011
9	WASHER-BODY 8mm x 30mm	4	000-311-300
10	NUT-NYLOC 8mm x 1.25mm	2	000-205-300
11	WASHER - STAR - 8mm	2	000-305
12	NUT - NYLOC - 6mm x 1.0	4	000-204
13	WASHER - FLAT - 6mm	8	000-301
14	PLATE - INNER SUPPORT	1	310-967-000
15	PLATE - OUTER SUPPORT	1	310-967-200
16	DUCT - RUBBER	1	310-024-000
17	CLAMP - HOSE 60/80mm	1	000-907
18	CLAMP - HOSE 70/90mm	1	000-908
21	BOLT - HEX - 6mm x 1.0 x 30mm	4	000-005
22	SLEEVE - AIR INLET	1	315-025-000
23	GASKET FOAM BODY	1	310-016-000
24	TEMPLATE	1	310-017-000
25	GASKET - UPPER BRACKET	1	310-435-000
26	SPRING - DUCT SUPPORT	1	310-125-000
27	HOSE CLAMP-SIZE 48 (BLACK)	1	000-918/B

WARNING!!

**IT IS AN INSTALLER
RESPONSIBILITY TO VERIFY
ALL COMPONENTS, AND
PARTICULARLY THE
TEMPLATE ARE CORRECT,
BEFORE STARTING ANY PART
OF THE SNORKEL
INSTALLATION.**

**(CHECK TEMPLATE AGAINST
SNORKEL BODY)**



SAFARI R-SPEC SNORKEL

SS106R

TOYOTA HILUX LN106

3L DIESEL (2.8L)

Fitment to: Left hand side

Fitting time: Approximately 100 minutes

Comments: Will fit 4-runner models with some modification.

Special Tools: 83mm hole saw
89mm hole saw
WD-40 or similar

Instructions:

1. Remove the left hand front wheel arch liner and the air cleaner from the vehicle. On models with an indicator light in the side of the guard, the Hilux 2.8L badge will need to be removed and the excess glue cleaned off with wax and grease remover to prevent contact with the snorkel body.
2. Tape the template to the upper, rear corner of the left hand guard and mark the hole positions with a felt pen. Remove the template.
3. To mark the inner hole position, use the inner support plate. Use the recess in the plate to locate it on the inner guard, opposite the main outer hole. With a felt pen, outline the large hole in the plate on the paintwork. Hold the 89mm hole saw inside the outline and mark the hole centre through the centre hole of the holesaw.

4. Drill a 4mm pilot hole for each of the inner and outer holes. Drill the four mounting hole positions to 16mm. The main outer hole should be cut to 83mm using a holesaw. The inner hole should be cut using an 89mm holesaw. The holesaw should be held horizontal (parallel to the ground) while cutting these holes. Deburr all holes to leave a smooth edge.
5. Hold the inner support plate in position and mark the 4 mounting holes. Remove the plate and drill the mounting holes to 8mm.
6. Bolt the upper mounting bracket to the snorkel body. Screw the 2 stainless steel studs into the 2 lowest hole positions in the back of the snorkel body. Smear a light film of silicone on the back of the snorkel body. Position the foam body gasket on the back of the snorkel. Use a light smear of silicone to adhere the upper bracket gasket to the upper mounting bracket.
7. Locate the snorkel on the vehicle and mark the upper mounting hole positions on the "A" pillar. Remove the snorkel. Drill the upper holes to 8mm. Paint all the upper and lower mounting holes to prevent rust.
8. Insert the plastic clips in the upper mounting holes. Bolt the inner and outer support plates to the wall of the engine bay using 4, 6mm x 30mm bolts, washers and NYLOC nuts.

On Forerunner vehicles, the outer ring will have to be cut to allow for the reinforcing brace running along the wheel arch cavity.

9. Position the snorkel on the vehicle and fasten using the appropriate hardware. It is essential that all the mounting studs and bolts are clear of the mounting hole edges. Any contact between the mounting hardware and the bodywork, may result in excessive noise and vibration during operation. If necessary, slot the mounting holes to allow clearance.
10. Lubricate inside each end of the rubber connecting duct. Slide the duct onto the snorkel snout. Refit the air cleaner to the vehicle and connect the rubber duct to the air cleaner inlet snout. You may need to rotate the rubber duct until it lines up neatly. Secure each end of the duct with clamps. It is crucial that the rubber duct is not under any strain as this may push the snorkel body away from the vehicle. Ensure that the rubber duct does not touch the sides of the inner or outer holes.
11. Remove the rubber duct connecting the air cleaner to the engine. Insert the duct support spring by rotating in a clockwise direction. Once the spring is inserted, centralise it by pushing and pulling it from each end. Refit the duct to the car.

12. Install Item No: 22 sleeve-air inlet to the inlet of the snorkel body, apply silicone to secure into position (refer to drawing). Fit air ram to snorkel body and fasten.
N.B.: Do not fit Item No:22 to turbocharged vehicles.
13. Refit the wheel arch liner.

Special Note :

After installation, it is advisable to test drive the vehicle and check for excessive noise. If noise is a problem :

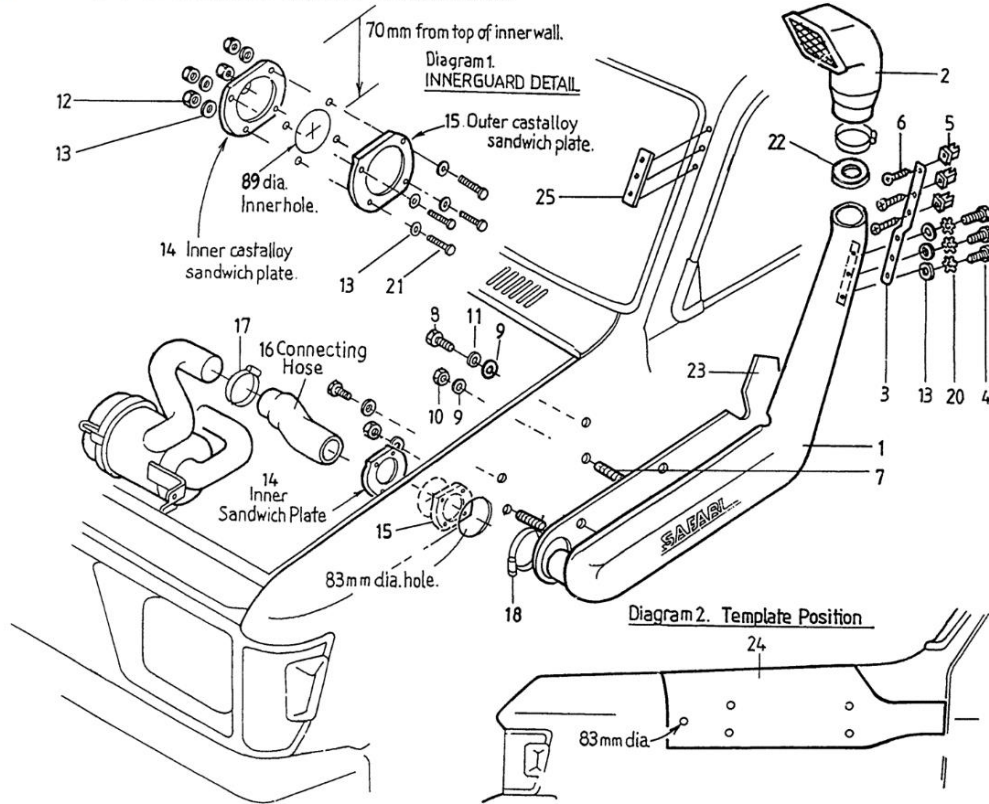
- Check the snorkel is sitting correctly and unstressed on the vehicle. Incorrect positioning may cause the snorkel to resonate.
- Check the upper mounting bracket bolts to ensure they have clearance from the "A" pillar.
- Check that the lower mounting studs, bolts and rubber duct all have adequate clearance in the mounting holes, this is the most likely problem.

SAFARI

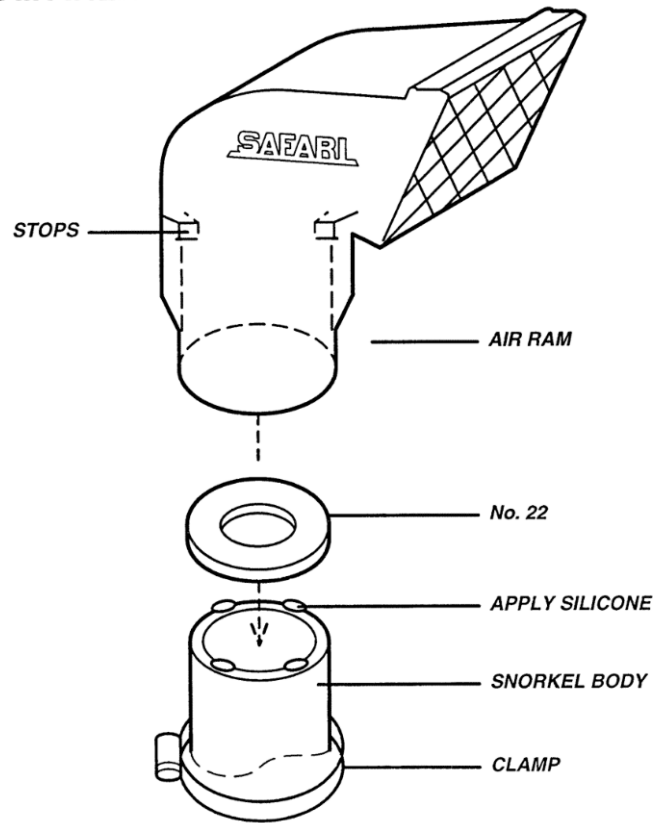
4X4 ENGINEERING

SS106R

Swifts mix 2.0ltr Diesel - single cab, extra cab, dual cab



SLEEVE - AIR INLET



N.B: Item No. 22
Should NOT be
installed if the
vehicle is
turbocharged.

