

## **SAFARI R-SPEC SNORKEL**

SS105R 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	11	000-907
18	CLAMP - HOSE 70/90mm	1	000-908
19	POP RIVET – 4mm x 12mm	6	000-958
21	BOLT - HEX - 6mm x 1.0 x 30mm	4	000-005
22	ADAPTOR – AIR CLEANER	1	310-023-400
23	GASKET FOAM BODY	1	310-016-000
24	TEMPLATE	1	310-017-000
25	GASKET - UPPER BRACKET	1	310-435-000
26	BOLT – HEX – 6mm x 1.0 x 16mm	1	000-002
27	WASHER – FLAT – 6mm x 20mm	3	000-321
28	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

# **SS105R**

#### **TOYOTA HILUX RN105**

**22R PETROL (2.4L)** 

Fitment to: Left hand side

**Fitting time:** Approximately 150 minutes

**Comments:** Does not fit 4 runner

Does not fit fuel injected vehicles

Some air cleaner modification required on later versions

Engine bay components may have to be moved

Special Tools: 83mm holesaw

89mm holesaw Air hacksaw Pop rivet gun WD-40 or similar

### Instructions:

- 1. Remove the left hand front wheel arch liner and the air cleaner assembly from the vehicle. Unbolt the coil and the power steering reservoir if necessary. On models with an indicator light in the side of the guard, the Hilux badge may have to be removed and excess glue cleaned away with wax and grease remover.
- 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 ring 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 of the holesaw.
- 4. Drill a 4mm pilot hole for each of the inner and outer holes. Open the outer mounting holes 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 drill 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. Smear a light film of silicone on the back of the snorkel body and position the foam gasket on the snorkel body. Position the snorkel on the vehicle and mark the upper mounting holes on the "A" pillar. Remove the snorkel.
- 7. Drill the upper holes to 8mm. Paint all holes to prevent rust. Insert the plastic body 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.
- 8. Position the snorkel on the vehicle and fasten using appropriate hardware. Lubricate inside the large end of the rubber duct. Slide the duct onto the snorkel snout and secure with a hose clamp.
- 9. Remove the air cleaner snout from the air cleaner by drilling out the spot welds. A sharp chisel will then be needed to separate the snout from the air cleaner body. Reposition the air cleaner in the car, lubricate the small end of the rubber duct and slide the snout of the casting into the hose. The other end of the casting should line up with the air cleaner. Mark the casting location on the air cleaner body, then remove both from the vehicle.
  - N.B.: On vehicles equipped with a cold start mechanism on the air cleaner snout, a portion of the air entry hole remains exposed with the casting correctly in place. A blank off plate will need to be made by the installer to cover this hole.

- 10. Mark out a new air cleaner outlet hole and cut it using an air hacksaw. Sit the casting in position and fasten it to the air cleaner using pop rivets. Seal the joint with silicone. Refit the air cleaner assembly to the car. Secure the rubber duct to the casting using a hose clamp.
- 11. Refit the coil and power steering reservoir to the car. New holes may need to be drilled to do this. Blank off the vacuum line for the cold start mechanism of applicable.
- 12. Fit the air ram to the snorkel and secure with the clamp provided. Refit the wheelarch liner to the left hand guard.



