

## INSTALLATION GUIDE

## **ISNORKEL023**

TO SUIT TOYOTA LANDCRUISER 70 SERIES 2007+ 1HZ and 1VD-FTV (With or Without Factory Snorkel Fitted)



- Ironman 4x4 Snorkel to suit Toyota Landcruiser 70 Series and fits to the right hand side of the vehicle.
- It will take about 3 hours to install.
- Below is a list of some required tools for installing your Ironman 4x4 Snorkel:
- Hole Saw (89mm)
- Step Drill
- Air Hacksaw

NOTE: Only use "sensor safe" sealant during installation

**IMPORTANT:** Snorkel installations should only be done by a qualified person and it is the responsibility of this person to ensure correct and water tight fitment.

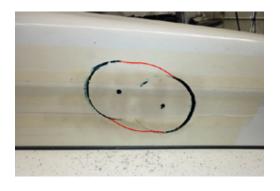
- **1.** Before installation check snorkel application is compatible with your vehicle.
- 2. Remove air box and air intake duct to air box. If applicable remove factory snorkel, Landcruiser badge and temporarily remove fuel filter and cover plate from inner guard.
- **3.** Apply masking tape to right hand front mudguard and right hand windscreen pillar.



**4.** Hold template in position on the right hand mudguard and mark all holes and outer edges of two 'triangles' using a felt tipped pen or marker.



5. For vehicle without factory snorkel cut two semi circles holes using a 89mm hole saw as shown.
Using an air hacksaw cut between holes along lines marked in the previous step.



6. For vehicles with factory snorkel, hold the back of the 89mm hole saw centrally in position over holes marked with template and trace around the outer edges in line with previously marked cut lines. Using an air hacksaw cut along lines as shown.





**7.** Drill all mounting holes to 16mm.



**8.** De-burr and rust-proof all holes (this applies to all holes drilled after this step).



**9.** Apply rubber edging to large hole as shown.



**10.** Using thread lock, screw all mounting studs into snorkel. Attach upper pillar mounting bracket as shown using M6 hardware.



**11.** Hold snorkel in position on mudguard and mark position of upper mounting holes.





**12.** Remove snorkel body from mudguard and drill upper mounting holes to 7.5mm. De-burr and rust proof holes. Apply silicone to holes and insert mounting plugs.



**13.** Attach snorkel to vehicle using M8 Nyloc nuts, body washers and self tapping screws for pillar bracket.



**14.** For vehicles without factory snorkel, attach rubber hose to snorkel outlet and secure with hose clamp provided.

NOTE: For vehicles with factory snorkel, shorten rubber hose to 200mm as shown and attach to snorkel outlet using hose clamp provided.



**15.** Refit air box, attach and secure to air inlet with hose clamp provided.



**16.** Refit fuel filter if applicable.

Refit factory bolts to factory snorkel holes if applicable.



**17.** Check all connections and air box are air and water tight, seal as required.

**18.** Fit Ironman 4x4 Air Ram and secure with hose clamp provided.



