



# INSTALLATION GUIDE

## ISNORKELO11

NISSAN PATROL / FORD MAVERICK  
TD-42 Diesel (4.2L) 1990-94,  
TB-42 Petrol (4.2L), All RB-30 Petrol (3.0L)



- Ironman 4x4 Snorkel fits to the left hand side of the Nissan Patrol GQ & Ford Maverick.
- It will take about 2-3 hours to install.
- Additional parts are supplied in this kit for model variations which will leave some left-overs.
- Below is a list of some required tools for installing your Ironman 4x4 Snorkel:
  - **Hole Saw (89mm)**
  - **Long Arbour Bit (150mm)**
  - **Step Drill**
  - **Air Hacksaw**
  - **Heat Gun**

**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 fitment and to ensure the installation is water tight.

1. Before installation check snorkel application is compatible with your vehicle.

2. Remove left hand front mudguard liner, flare (if fitted), badge from left hand front mudguard, precleaner assembly and air intake duct to cleaner.

NOTE: On later model vehicles an air deflector is fitted over the air inlet hole in inner guard. This will need to be removed by drilling out four spot welds and levering away from inner guard.



3. Apply masking tape to left hand front mudguard and windscreen pillar.

4. Tape template to mudguard making sure it is lined up with top of mudguard (bonnet opening) and rear of mudguard (door opening).



5. Using a felt tipped pen, mark all holes through template onto mudguard. Remove template.



- Using an 89mm hole saw cut hole for snorkel outlet and using an air hacksaw elongate lower section of hole as indicated on template.

NOTE: A 150mm Arbour Bit is required for this step.



- Drill all mounting holes to 16mm.

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

- Using thread-lock screw all studs into snorkel body and attached pillar mounting bracket to snorkel using M6 bolts provided.

- Hold snorkel body in position on mudguard and mark position of holes in bracket on pillar and remove snorkel.



11. Drill pillar mounting holes to 7.5mm. Apply silicone sealant to holes and insert mounting plugs.

## Vertical PreCleaner

12. Turn precleaner upside down and enlarge three mounting holes to 13mm. Using silicone sealant seal plastic air outlet to the base of air cleaner housing.

13. Install aluminium adaptor through air intake hole in inner guard and secure in place with 6mm bolts supplied.



14. Slide rubber joiner over snout of aluminium adaptor with hose clamps, but DOT NOT tighten.



15. Fit snorkel body to mudguard and secure in place using M8 Nyloc Nuts and Body washers making sure snorkel outlet engages with rubber joiner. Then secure to pillar bracket using self tapping screws.

16. Centralise rubber joiner and tighten hose clamps.

## TD-42 With Vertical PreCleaner

17. Apply foam tape to outside of square air intake for air cleaner and refit factory air intake duct to air cleaner. Secure with factory bolt.

18. Apply a liberal bead of silicone sealant to flange on precleaner air intake and refit precleaner making sure that the flange is sealed the against aluminium adaptor and secure with original hardware.



## TB-42 & RB-30 Carburettor

19. Remove plastic clip from inner guard flange on factory air duct. Hold flange against flat face of aluminium adaptor, two mounting holes will line up but the third will need to be marked and drilled to 8mm,

20. Apply silicone sealant to face of aluminium adaptor. Place aluminium adaptor in position through adaptor hole in inner guard. Secure air duct flange through aluminium adaptor inner guard using factory bolt holes.

21. Reconnect ducting in engine bay, sealing each joint with silicone sealant. Fit hose clamps where require.

22. Vacuum hose for heat riser butterfly will need to be blocked off. And butterfly assembly will need to be sealed with silicone to prevent water entry.

23. Slide rubber joiner over snout of aluminium adaptor with hose clamps, but DOT NOT tighten.



24. Fit snorkel body to mudguard and secure in place using M8 Nyloc Nuts and body washers making sure snorkel outlet engages with rubber joiner. Then secure to pillar using self tapping screws.

## TB-42 Fuel Injected

25. Remove plastic clip from inner guard flange on factory air duct. Hold flange against flat face of aluminium adaptor, two mounting holes will line up but the third will need to be marked and drilled to 8mm.

26. Apply silicone sealant to face of aluminium adaptor. Place aluminium adaptor in position through adapter hole in inner guard. Secure air duct flange through aluminium adaptor inner guard using factory bolt holes.

27. Reconnect ducting in engine bay, sealing each joint with silicone sealant. Fit hose clamps where require.



# Horizontal PreCleaner

28. Fit snorkel body to mudguard and secure in place using M8 Nyloc Nuts and body washers making sure snorkel outlet engages with rubber joiner. Then secure to pillar using self tapping screws.

29. Attach convoluted rubber hose through inner guard to snorkel outlet and secure with hose clamp supplied.

30. Remove plastic duct from air cleaner and apply foam tape to outside of square air intake for air cleaner and refit air intake duct. Then secure with factory bolt.

Using convoluted rubber hose as a guide cut factory duct to length and join together securely with hose clamp.

## All Models

31. Refit mudguard liner and flare.

32. Check all hose connections for potential leaks and seal as required.





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

