INSTALLATION GUIDE



Toyota 4 Runner 4th Gen V6/V8 SN59-3471



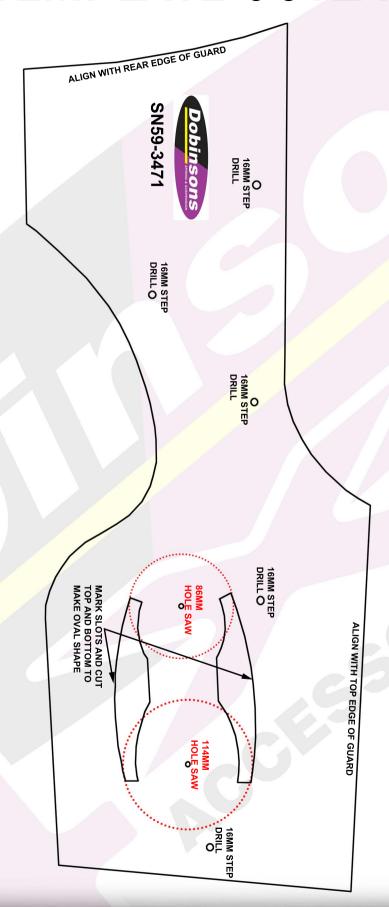
This Snorkel will take approximately 3 hours to install and is installed to the Righjt Hand Side of the vehicle.

Tools required are:

- 86m & 114mm hole saw
- Step Drill, drill bits and drill
- Masking Tape
- Sensor safe Sealant (Sikaflex 227 Recommended)
- Touch up Paint and small brush or cotton bud

- Allen keys & Spanners
- Pop rivet gun
- Screw Drivers & torx bits
- Centre Punch and Hammer
- Bodysaw or similar

TEMPLATE OUTLAY





Fitting Guide

1. Remove the RH Flare liner, mud flap and plastic wheel arch guard by removing the screws and clips on the guard edge and plastic clips inside the wheel arch. Take care when removing the flare liner as the plastic clips can be damaged easily, the flare can remain attached.



2. Remove the air box lid and air filter.



- 3. Remove the airbox. Discard the small entry section to the airbox
- 4. Masking tape the guard, it is best to tape the whole guard to prevent scratches whilst working and to prevent metal shavings falling between the body and flare.
- 5. Check the template against the snorkel body. Align the template on the vehicle as seen in picture on page 2, and tape it down ensuring it is aligned with the top and rear guard edges and then pulled tight to the outer guard edge, and double check again.
- 6. Once you are happy with the alignment of the template centre punch the 7 holes. Mark the slots for the cutting between the large holes



- 7. Drill the 7 holes with a small pilot drill.
- 8. Remove the template and using the step drill, drill the 5 stud holes out to 16mm to clear the studs to ensure the studs clear the body.
- 9. Drill the rear hole between the 2 slots with an 86mm hole saw
- 10. Drill the front hole between the 2 slots with an with a 114mm hole saw
- 11. With the 2 hole saw holes drilled this should now be touching the top of the front and rear of the marked slots. Use a body saw or pneumatic hacksaw to now cut the top of the top slot and bottom of the bottom slot between the 86mm and 114mm holes to make an oval.







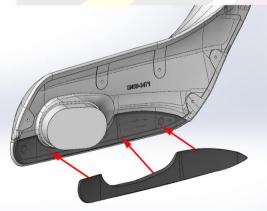
- 12. Remove the burrs from all holes with file or deburrer.
- 13. Fit the upper snorkel body mount to the snorkel with the bolts supplied. Only do up finger tight for now as this will be removed shortly.



- 14. Fit the 6 studs to the snorkel body with thread lock and tighten with Allen key, DO NOT over-tighten.
- 15. PRE-FACELIFT MODELS ONLY, FOR FACELIFTED MODELS PLEASE SKIP THIS STEP Align the rubber fender infill on the bottom of the snorkel the bottom should be aligned with the bottom of the snorkel body. Take note roughly of this area and then apply adhesive sealant (such as Sikaflex 291 or similar) to the snorkel body in the area that the rubber infill will sit.

Install the rubber infill to the snorkel body to and tape in place, ensuring the bottom of the rubber infil is aligned with the bottom of the snorkel. Allow to cure.

16. Put some masking tape on the A-Pillar approximately where the upper bracket will mount.



- 17. Test fit the snorkel carefully and loosely fit the washers and nyloc nuts.
- 18. Mark the top Mounting bracket by marking the inside edge with a pen and the top and bottom edges.
- 19. Remove the snorkel body and remove the bracket from the snorkel body.
- 20. Sit the bracket back in the marked position and mark the holes and centre



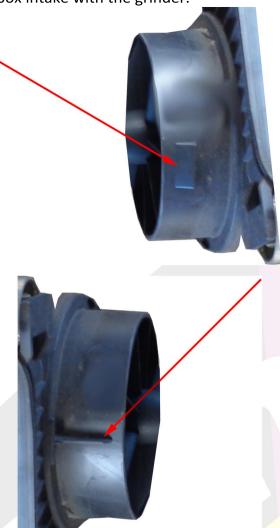
21. Pilot drill the holes, and then drill to suit the rivets supplied. It is a good idea when doing this to drill through a block of wood or equivalent spacer so that only about 5mm of the drill tip sticks out so you do not drill through your interior or air bags.



- 22. Remove the burs from these holes, remove masking tape, paint all bare metal surfaces including the holes drilled in the quarter panel, and remove all metal fillings from the A-Pillar gutter and quarter panel.
- 23. Apply a small amount of sealant to each hole.
- 24. Using rivets supplied, attach the top bracket to the holes drilled in previous steps.
- 25. Use a grinder and remove the locating lug from the airbox intake.



26. Remove the 2 x retaining lugs from the airbox intake with the grinder.



- 27. The installer may choose to seal the 3 x airbox drain holes and inspection hole. this is recommended.
- 28. Test fit the rubber joiner on the airbox inlet pipe as the snorkel is designed for multiple airboxes, the reducer sleeve supplied may be required.
- 29. From inside the wheel arch, Install the supplier rubber joiner hose into the vehicle so that the round end protrudes into the engine bay and install the smaller hose clamp loosely. Align the oval end with the oval hole in the guard.
- 30. Apply some sensor safe sealant to the inside of the oval end of the rubber joiner hose.
- 31. Re-install the airbox aligning the airbox with the rubber joiner hose leaving the hose clamp loose.



- 32. Form the larger hose clamp around the oval outer end of the rubber joining hose so that the grub screw for the hose clamp is toward the rear top corner pointing backward and down slightly.
- 33. Fit the snorkel body to the quarter panel and on each stud put a large flat washer supplied and a nyloc nut and do up finger tight aligning the snorkel body outlet with the rubber joining hose. Install the upper bracket mounting bolts.
- 34. Tighten the nyloc nuts on the studs and upper bolts on mounting bracket.
- 35. Tighten the hose clamps on both ends of the rubber joiner hose ensuring the hose is seated properly on the snorkel.
- 36. Fit your Dobinsons 4x4 Ram Head to the top of the snorkel with the black hose clamp supplied.



- 37. Refit all nuts and bolts to the air box, refit the air filter and air box cover and any other items removed during installation.
- 38. Refit the inner guard, flare liner and mud flap.
- 39. Allow the sealant to cure before running the vehicle.

