

INSTALLATION GUIDE



Nissan Navara D40 2.5l Tdi

SN45-3397

DOES NOT SUIT RX SINGLE CAB MODELS



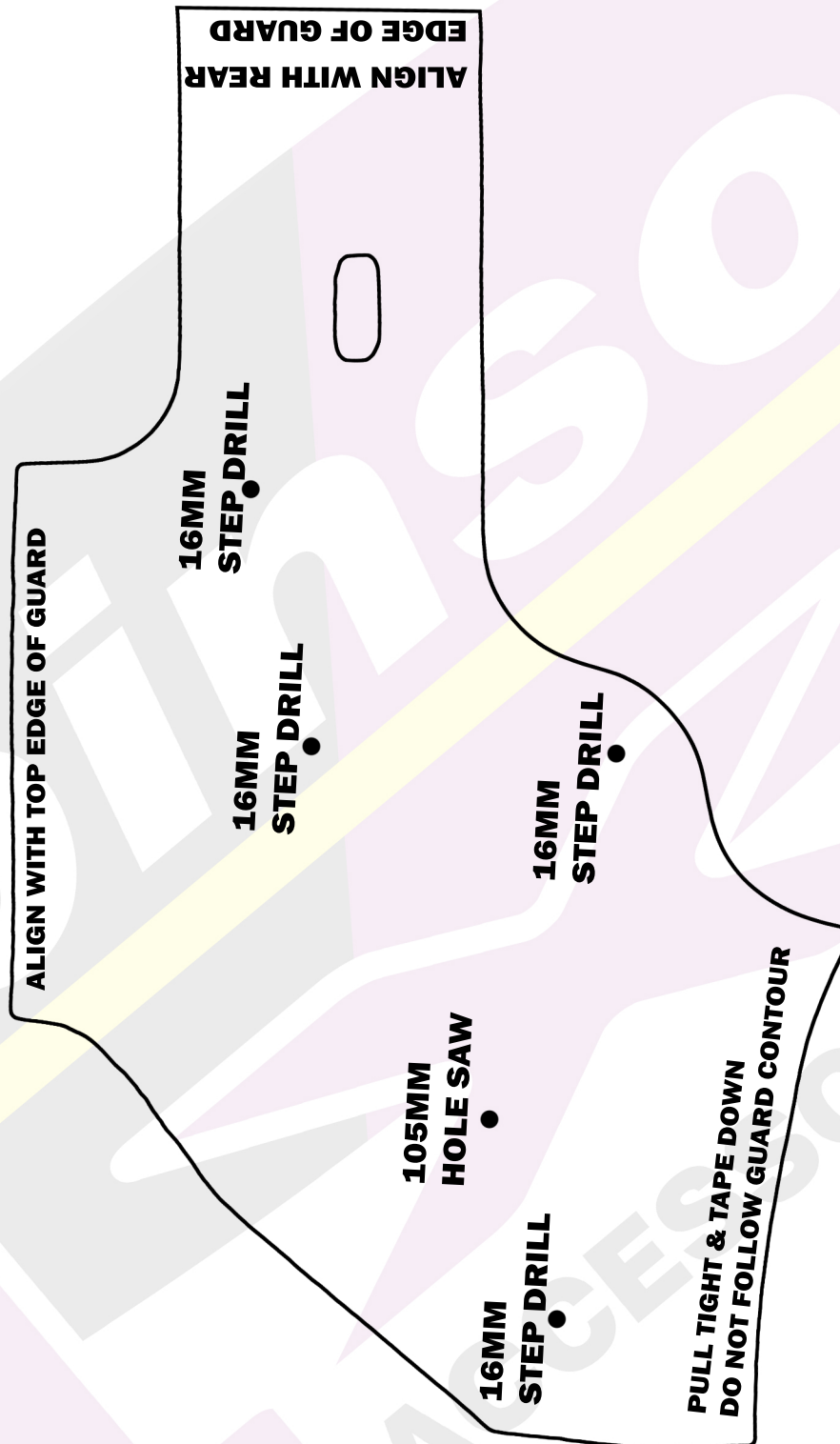
This Snorkel will take approximately 3 hours to install and is installed to the Left Hand Side of the vehicle.

Tools required are:

- 105mm 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

Dobinsons 4x4 Snorkels should only be installed by a qualified technician. It is the installer's responsibility to ensure all bare metal is suitably rust proofed and all connections are water tight and sealed only with a "SENSOR SAFE" type sealant (Sikaflex 227 Recommended). Fully read and understand the instructions before beginning the installation.

TEMPLATE OUTLAY



Important Fitting Note:

2.5L Diesel D40 Navara's are released with 3 different styles of air box. Check your type before proceeding.

Air Box Style A



Air Box Style B



Air box style C skip to page 8 (Smooth bumper – 05/2010 on Spain built - VSK Vin number)



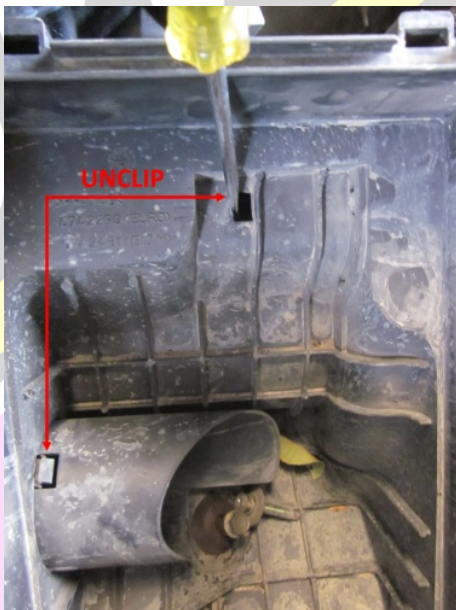
Fitting Guide

See below for Air boxes "A" and "B" Skip to Page 8 for "C"

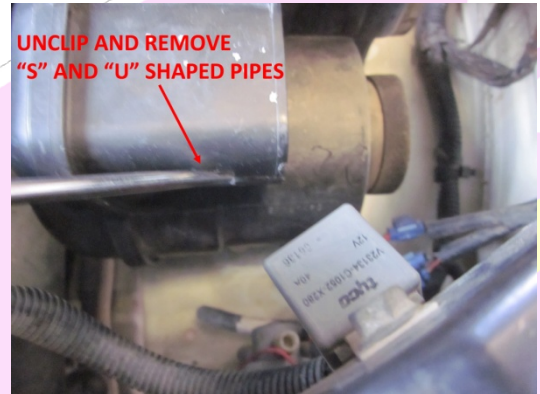
1. Remove the LH mud flap and plastic wheel arch guard by removing the screws and clips on the guard edge and plastic clips inside the wheel arch.



2. Remove the foam pre filter from inside the guard.
3. Remove the air box lid and air filter. Unclip the breather hose attached to the air box.
4. Remove the bolt inside the air box and at the rear of the air box.
5. Then from inside the air box unclip the lower pipe and the pipe towards the front of the vehicle.



6. Then on the front of top pipe on the front of the air box hold in the clip and remove the pipe. This will allow all piping from the air box to be removed.



7. With the piping removed, reach down to the front bolt holding the air box in place and loosen. This is best done with a 10mm ratchet ring spanner.
8. Remove the air box.
9. Masking tape the guard, it is best to tape the whole guard to prevent scratches whilst working.
10. 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.



11. Once you are happy with the alignment of the template centre punch the 5 holes.
12. Drill the 5 holes with a small pilot drill.
13. Remove the template and using the step drill, drill the 4 stud holes out to 16mm to clear the studs to ensure the studs clear the body. Using a 105mm hole saw on low speed drill the remaining hole to clear the snorkel body outlet.

14. Remove the burrs from all holes with file or deburrer.



15. Inside the guard you will see a metal reinforcing brace with a gap behind it. Slide a large zip tie through the gap and on the surface of the brace, clean and apply the small section of self adhesive foam.
16. Slide the inner plastic guard duct into the inner guard and align the larger hole with the hole cut in the guard. The back of the duct should be in-contact with the foam applied in step 15.
17. Wrap the zip tie around the duct and lightly fasten.
18. 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.
19. Fit the 4 studs to the snorkel body with thread lock and tighten with Allen key, DO NOT over-tighten.
20. Put some masking tape on the A-Pillar approximately where the upper bracket will mount.
21. Test fit the snorkel carefully, aligning the snorkel body outlet with the duct fitted earlier.
22. Mark the top Mounting bracket by marking the inside edge with a pen and the top and bottom edges.
23. Remove the snorkel body and remove the bracket from the snorkel body.
24. Sit the bracket back in the marked position and mark the holes and centre punch.



25. Pilot drill the holes, and then drill 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.
26. 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.
27. Apply a small amount of sealant to each hole.
28. Using rivets supplied, attach the top bracket to the holes drilled in previous steps.
29. Remove the backing paper from the self adhesive foam and stick to the snorkel body taking particular care along the top and front edges for a neat finish this may require trimming the foam slightly. Ensure it is pushed into the steps of the snorkel body. (NOTE: you may have to slightly trim the holes for the studs to get the correct fitment.)
30. Using gloves apply a bead of sealant around the inside of the guard duct and the outside of the snorkel body outlet.
31. 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 inner guard duct. Insert the upper bracket mounting bolts
32. Tighten the nyloc nuts on the studs and upper bolts.
33. Tighten the zip tie holding the duct.

Air Box Style "A"

For Air Box Style "B" Skip to Step 36.

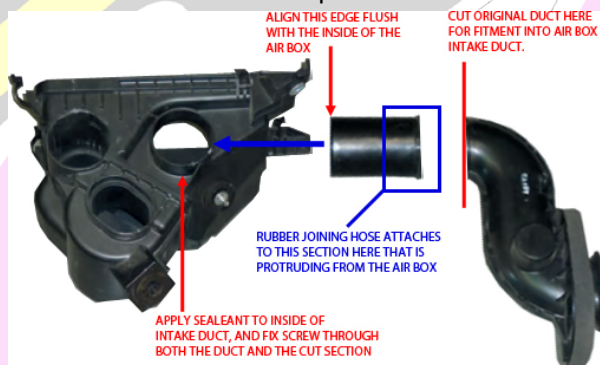
34. With the U-Shaped pipe removed from the air box, cut the U-Section of the pipe leaving the flange behind to seat against the air box.



35. Using gloves apply a bead of sealant the inside of the airbox intake and the outside of the pipe cut in step 35 and re-fit the cut pipe aligning the locating lug in the recess. Skip to Step 41.

Air Box Style "B"

36. (NOTE: there is a small piece of rubber that may also be used to reduce the diameter in the hose which is an alternative method to the next steps).
37. Cut the section of pipe from the original air box intake duct as seen in picture.



38. Apply a bead of sealant around the inside of the air box intake duct and insert the cut

section of pipe so that it is flush with the inside of the airbox.

39. Install a screw through both sections to secure the pipe to the air box. The section of the pipe that is protruding from the air box is where the rubber joining elbow will attach.
40. Seal all holes in the airbox where required.



41. Slide the large end of the rubber joining elbow onto the inner guard duct and carefully test fit the air box back into position aligning the small end of the rubber elbow to the air box outlet to ensure correct fitment.
42. Once happy with the fitment remove the air box and using gloves apply a bead of sealant around the outside of the air box intake and inner guard duct, and around the inside of each end of the rubber elbow.
43. Slide the small hose clamp over the small end of the rubber elbow and the large hose clamp over the large end.
44. Refit the rubber joining elbow taking care not to touch the sealant anywhere.
45. Refit the air box and bolts.
46. Tighten both hose clamps on the rubber elbow.
47. Tighten the 3 air box bolts, using a ratchet ring spanner on the hard to get front bolt.
48. Install a self tapping screw into the rear of the plastic inner guard duct and the snorkel body outlet to secure the connection.



49. Fit your Dobinsons 4x4 Ram Head to the top of the snorkel with the black hose clamp supplied.
50. Refit all nuts and bolts to the air box, the breather hose, refit the air filter and air box cover and any other items removed during installation.
51. Refit the inner guard and mud flap.
52. Allow the sealant to cure before running the vehicle.

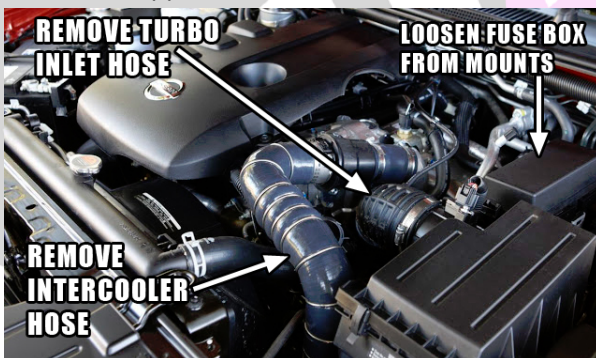
ACCESSORIES

Air box style "C"

1. Remove the LH mud flap and plastic wheel arch guard by removing the screws and clips on the guard edge and plastic clips inside the wheel arch.



2. Remove the air box assembly.
3. To allow easier fitment of the air box at a later stage remove the Fuse box from its mounts and put aside, remove the turbo inlet hose and the LH upper intercooler hose.



4. Remove the foam piece from inside the guard.
5. Masking tape the guard, it is best to tape the whole guard to prevent scratches whilst working.
6. 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.



7. Once you are happy with the alignment of the template centre punch the 5 holes.
8. Drill the 5 holes with a small pilot drill.
9. Remove the template and using the step drill, drill the 4 stud holes out to 16mm to clear the studs to ensure the studs clear the body. Using a 105mm hole saw on low speed drill the remaining hole to clear the snorkel body outlet.
10. Remove the burrs from all holes with file or deburrer.



11. 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.
12. Fit the 4 studs to the snorkel body with thread lock and tighten with Allen key, DO NOT over-tighten.
13. Put some masking tape on the A-Pillar approximately where the upper bracket will mount.
14. Test fit the snorkel carefully, aligning the snorkel body outlet with the duct fitted earlier.

15. Mark the top Mounting bracket by marking the inside edge with a pen and the top and bottom edges.
16. Remove the snorkel body and remove the bracket from the snorkel body.
17. Sit the bracket back in the marked position and mark the holes and centre punch.



18. Pilot drill the holes, and then drill 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.
19. 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.
20. Apply a small amount of sealant to each hole.
21. Using rivets supplied, attach the top bracket to the holes drilled in previous steps.
22. Remove the air intake duct from the air cleaner assembly but rotating the duct anti clockwise.
23. Tape the small air intake template supplied to the outer face of the air intake duct and mark the 10 holes and drill to 4mm.
24. Using a hacksaw or equivalent remove the rear lug on the on the mounting face of the air intake duct.
25. Install the rubber grommet supplied into the large hole in the air cleaner intake duct.
26. Install the metal hose support plate around the rubber air intake duct supplied so that the holes align with the holes in the rubber intake duct.
27. Apply a small amount of sensor safe sealant to the mating surfaces of both the original plastic air intake duct and the rubber air intake duct supplied.
28. Align both intake ducts together aligning the holes.
29. Insert the 3 pop rivets into the holes at the front side of the plate and the 1 hole at the top side at the front from the rubber hose end and place the 4mm washers on the other end of them (the original plastic intake duct side of the rivet – these are used to prevent the plastic splitting).
30. Insert the remaining 6 pop rivets into the remaining holes from the original plastic intake duct side.
31. Using a pop rivet gun, fasten the rivets working from the centre outward.
32. Remove any excess sealant for a neat finish.
33. The original plastic air intake duct is a 2 piece part which must be sealed to prevent water entering in the intake. Apply a generous amount of sensor safe sealant to the joins and seams in the duct to ensure a completely sealed unit.
34. Apply sealant over the top of the rubber grommet.
35. Apply sealant to the inside of the air cleaner assembly inlet and the outside of the plastic air intake duct and reinstall the plastic air intake duct to the air cleaner assembly ensuring it locks back into place correctly.
36. Turn the air cleaner assembly upside down and seal the 2 small drain holes and the drain vent.
37. To re-fit the airbox with the newly attached rubber intake duct it can be made easier by spraying silicone spray or similar lubricant to the outside of the rubber duct to allow it to slide easier. Install the airbox with new rubber duct hose through the hole in the inner guard. It can be quite difficult to do this and you may need to rotate the assembly towards the front of the vehicle until the rubber duct is completely through and aligns with the hole in the quarter panel and the airbox locates on the 2 mounting pins.

38. Refit the airbox bolts and tighten.
39. Re-install the air filter, airbox lid and attach wiring harness and other items removed.
40. Re install the fuse/relay box and turbocharger air entry hose and intercooler hose.
41. Slide the hose clamp over the entry end of the newly installed rubber duct ensure the inside of the duct is completely free from lubricant in the previous step.
42. 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 new rubber intake duct.
43. Install the upper mounting bolts to the bracket installed earlier.
44. Ensure the rubber intake duct is aligned correctly tighten the hose clamp joining the rubber intake duct to the snorkel body outlet.
45. Tighten the nyloc nuts on the studs and the upper mounting bolts and the upper snorkel mounting bolts.
46. Fit your Dobinsons 4x4 Ram Head to the top of the snorkel with the black hose clamp supplied.
47. Refit the inner guard and mud flap and any other parts removed during installation.
48. Allow the sealant to cure before running the vehicle.

DOBINSONS
ACCESSORIES