

FITTING INSTRUCTIONS

Vehicle: Toyota Prado 150 Series

SNS150B

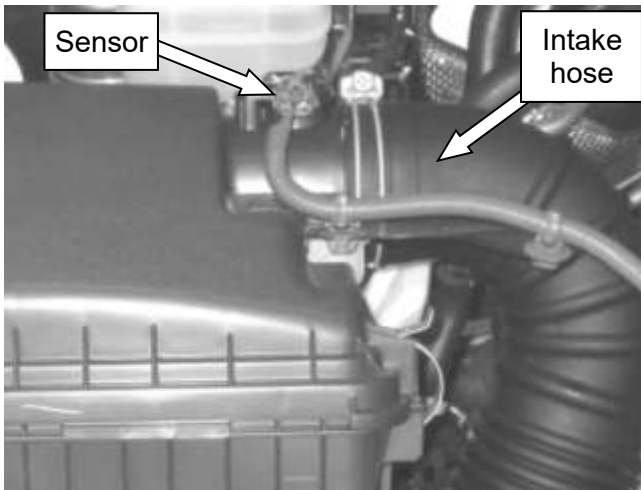


- Fitting Time ~ 3hrs
 - Before installation ensure that airbox is as shown in the images and snorkel box contains all components.
 - Ensure that all exposed surfaces resulting from drilling or cutting are properly painted or treated with rust protection.
 - Always ensure that all joints are properly sealed. If the vehicle is equipped with a one-way water drain valve, do not seal it, as water entering through the snorkel head must also have a way to drain out.
- We recommend periodically checking that the air filter housing does not retain water, especially after water fording.

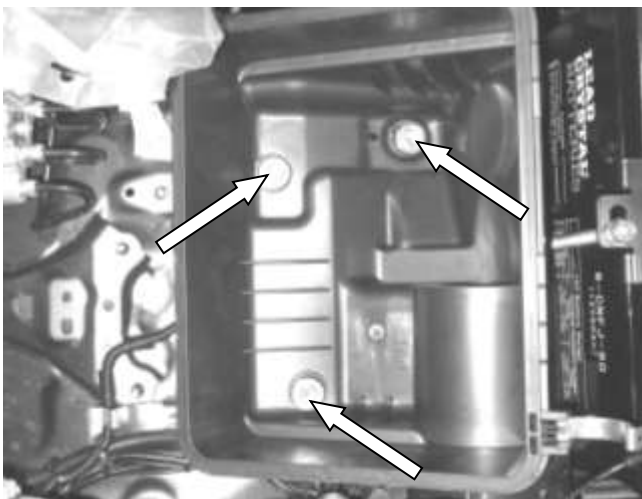
PARTS LIST:

Snorkel body x1
Inlet Tube x1
Stainless Hose Clamp x1
Gasket x2
Snorkel bracket x1
Bolts kit x1
Template x1

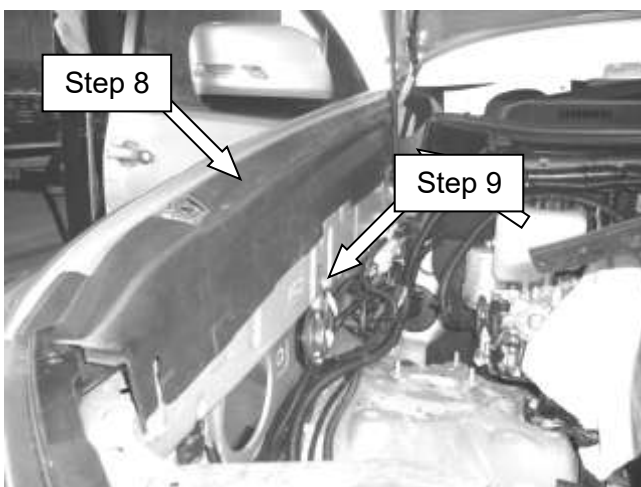
Bolt tensions	Dia. (mm)	Nm	ft.lbs	Dia. (inch)	Nm	ft.lbs
All bolt tensions are as follows unless otherwise specified.	5	5	4	1/4"	9	7
	6	9	7	5/16"	22	15
	8	22	16	3/8"	33	27
	10	44	32	7/16"	55	43
	12	77	57	1/2"	86	66



1. Place the outer guard template over the snorkel body and check that the stud and hole positions match.
2. Disconnect the air-flow sensor and harness from the air box.
3. Loosen the intake hose clamp and remove the intake hose from the air-filter assembly.
4. Cover the engine intake hose with a clean plastic bag so no foreign matter can enter the engine.
5. Unclip (and remove) the top section of the air-filter assembly and remove the air filter.



6. Remove (& retain) the three fasteners shown in the base of the air-filter assembly.
7. Remove (& retain) the lower section of the air-filter assembly, ensuring that all the air-filter assembly components are retained for re-fitment.



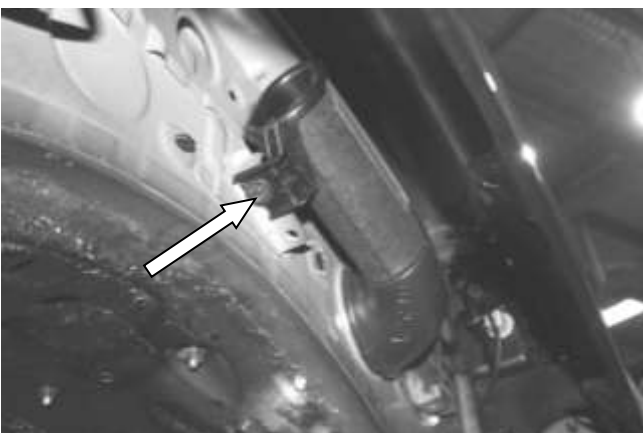
8. Remove (& retain) the side fire-wall plastic panel by removing the securing clips.
9. Remove the horn and lay it to one side.



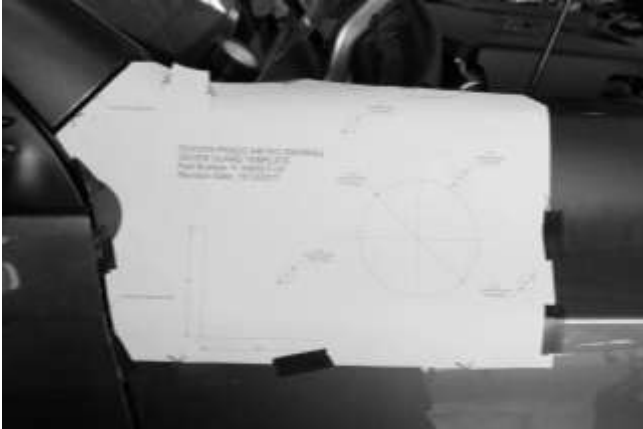
10. Remove (& retain) the mud-flap, retaining all fasteners.



11. Remove (& retain) the plastic inner guard, retaining all fasteners. Three clips are accessed via the engine bay and the remainder are accessed via the guard cavity.

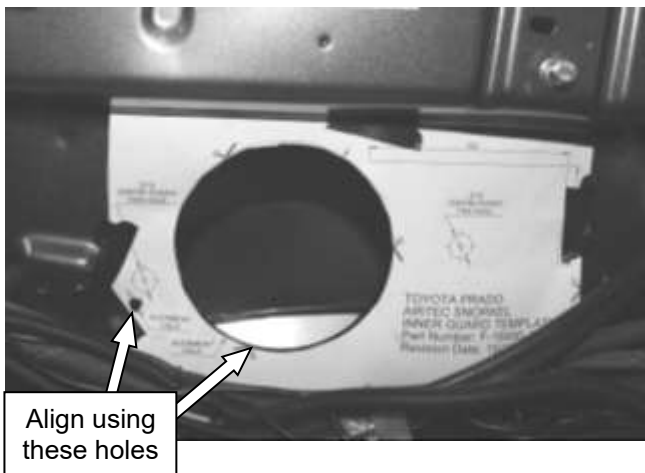


12. Remove (& retain) the O.E. intake tubing to be used in step 21.



13. Trim the outer guard template to shape.
14. Accurately align the template with the rear and top edges of the outer guard and tape it in place.
15. Carefully centre-punch and pilot drill all holes.
16. Drill the four stud holes out to 14mm, then using a 108mm hole saw, drill out the intake hole.

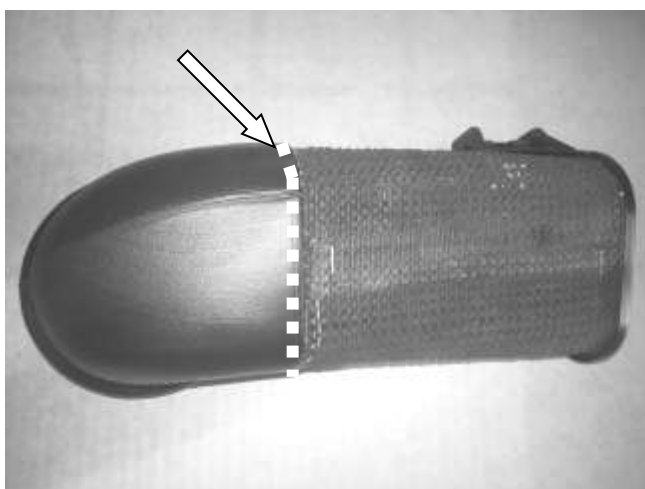
Tip: Use a step drill to drill the stud holes out to 14mm.



17. Trim the inner guard template to shape.
18. Accurately align the indicated holes with the holes in the fire wall and tape it in place.

Tip: Use a M6 fastener to assist in aligning the small hole.

19. Carefully centre-punch and pilot drill the two holes. Then drill the holes out to 12mm.
20. Deburr all holes and edges, clean any swarf from the areas and apply rust preventative to all exposed surfaces.

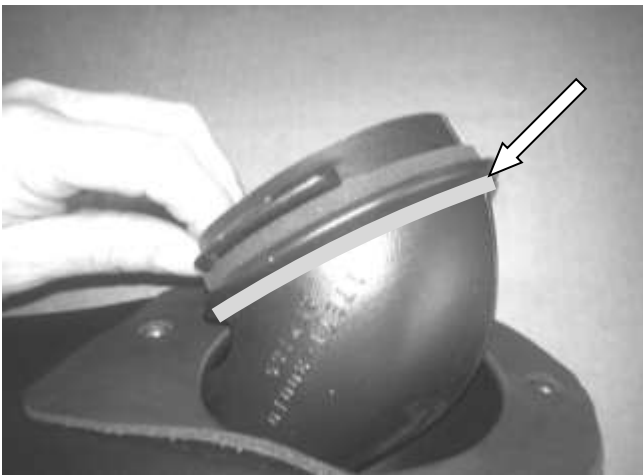


21. Cut the O.E. intake tubing along the indicated line.





22. Using the hole pattern as a guide, affix the gasket to the airbox end of the intermediate tube.



23. Apply neutral cure silicon to the outside of the modified O.E. intake tubing as shown and insert it into the intermediate tube.

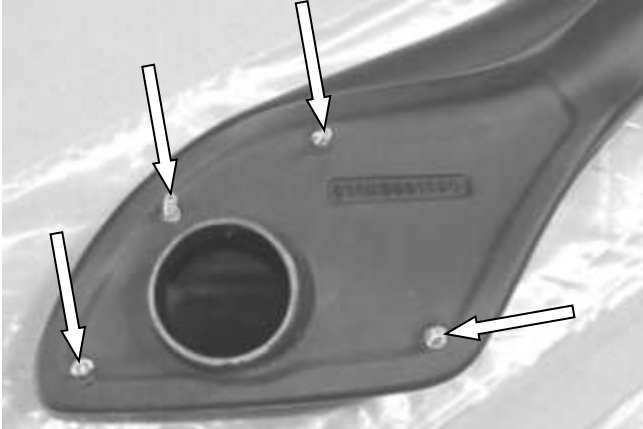
24. Position the hose clamp on the snorkel body end of the intermediate tube.



25. Position the intermediate tube in place in the wheel arch cavity.

Note: Ensure that the O.E. intake tubing is seated correctly in the inner guard as shown.

26. Apply Loctite to the M8 x 1.25 x 30mm studs (2) and secure them into the intermediate tube.
27. Loosely fasten the intermediate tube using M8 mudguard washers (2) & M8 nyloc nuts (2) over the studs in the intermediate tube.



28. Apply Loctite to the M8 x 1.25 x 30mm studs (4) and secure them into the snorkel body.

29. Using the studs as a guide, affix the snorkel body gasket to the snorkel body.

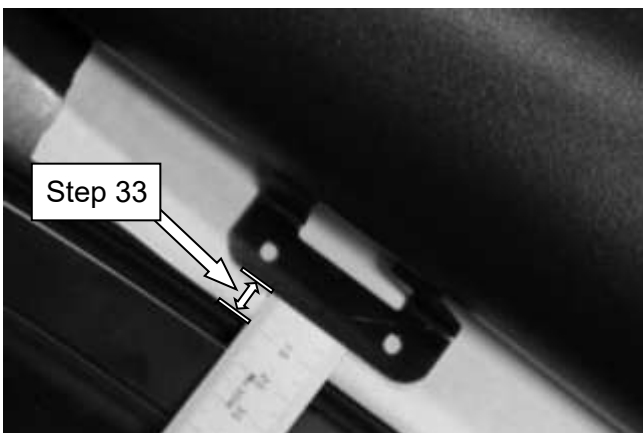
30. Secure the door pillar bracket to the top of the snorkel body using M8 x 1.25 x 16mm bolt (1), M8 spring washer (1) & M8 x Ø19mm flat washer (1).



31. Apply masking tape to the RHS A pillar to avoid damaging the vehicle when positioning the snorkel body on the outer guard.

32. Using the snorkel body studs and the intermediate tube as a guide, temporarily position the snorkel body on the outer guard.

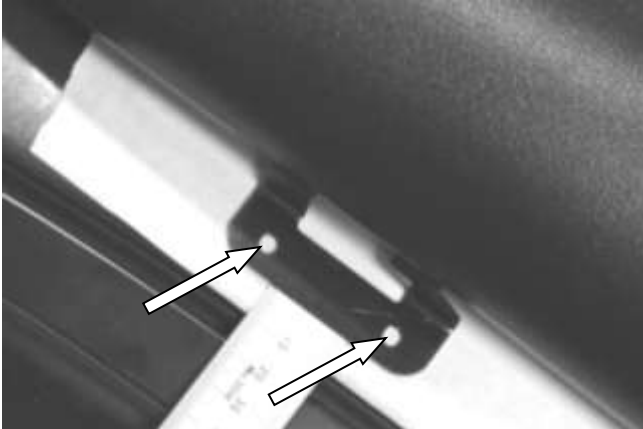
Tip: Locate the forward most stud in the outer guard first, then locate the remaining studs .



33. Position the bottom edge of the door pillar bracket approximately 10mm above the inner surface of the A pillar as shown.

Note: Ensure the contour of the A pillar and the bottom edge of the door pillar bracket are aligned.

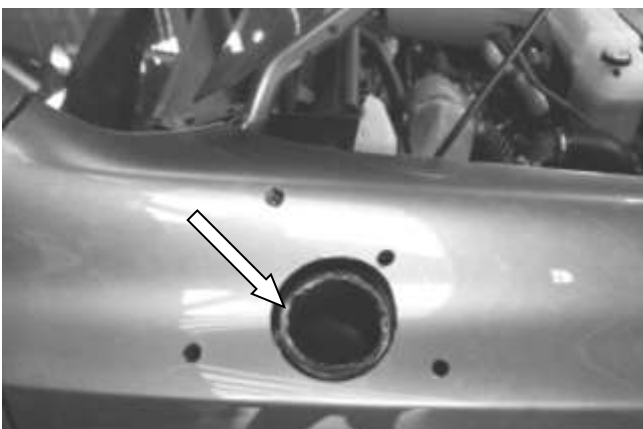




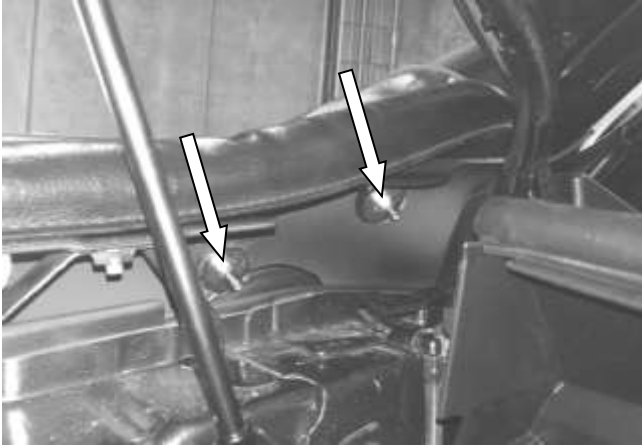
- 34. Use the door pillar bracket as a template and mark the two hole positions on the A pillar.
- 35. Remove the snorkel body from the vehicle.
- 36. Centre-punch and drill 4mm pilot holes at the positions marked.
- 37. Drill these two holes out to 8mm.



- 38. Deburr the holes, clean any swarf from the area and apply rust preventative to all exposed surfaces.
- 39. Carefully apply neutral cure silicone to the 8mm holes and insert the nylon plugs.



- 40. Apply neutral cure silicone along the inside edge of the intermediate tube shown.
- 41. Position the snorkel body on the outer guard.
- 42. Secure the door pillar bracket to the vehicle using 3/4" x 8G stainless PK screws (2).



43. Secure the snorkel body to the outer guard, using M8 mudguard washers (4) and M8 nyloc nuts (4).

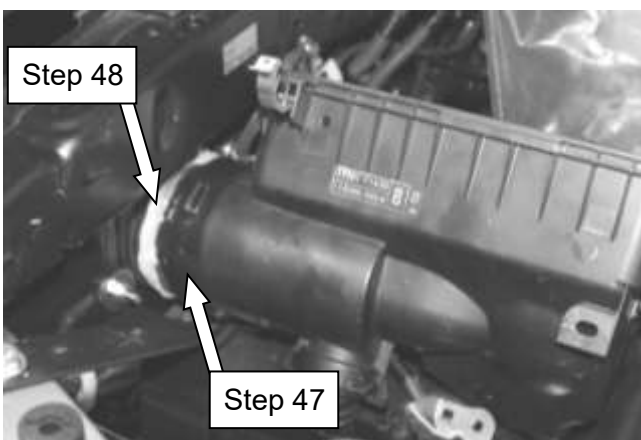
Note: The two lower studs can be accessed from the guard cavity and the two upper studs are accessed from the engine bay.

44. Tighten the fasteners securing the intermediate tube to the inner guard.



45. Tighten the hose clamp ensuring it remains in position on the intermediate tube.

46. Refit the horn removed in step 9, ensuring that it does not contact the fastener securing the intermediate tube.



47. Remove the O.E. airbox connector, apply neutral cure silicon to the mating surfaces and refit it to the airbox.

48. Apply neutral cure silicon to the mating surfaces of the O.E. airbox connector and the intake tubing.

49. Refit the airbox using the fasteners retained in step 6.



- 50. Refit the air filter and airbox lid.
- 51. Re-connect the air-flow sensor and intake hose to the air filter assembly.
- 52. Re-fit the side fire-wall plastic panel.



- 53. Refit the plastic inner guard.
- 54. Refit the mudguard.



- 55. Check that all the fittings are secure, and all the fasteners are tensioned to the appropriate torque settings listed on page 1.
- 56. Ensure that, as a result of fitting the snorkel, no vehicle components are crushed or will chafe.