



FITTING INSTRUCTIONS

Product:	TJM Snorkel				
Vehicle:	Nissan D22 Navara ZD30 10/01+				
011SAT01090					

READ INSTRUCTIONS CAREFULLY BEFORE COMMENCING ANY WORK

TO SUIT VEHICLE: D22 Navara

ENGINE: ZD30

AIR CLEANER FORMAT: Left hand side front corner

SNORKEL POSITION: Left hand side

BEFORE COMMENCING FITTING, CHECK THE VEHICLE TO ENSURE THE AIRCLEANER CONFIGURATION IS AS SHOWN IN THE DIAGRAMS.

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



Warranty

REV A 26.11.02

Checked

Approved

1. If any product or part of a product manufactured by TJM is found to be defective during a period of twelve (12) months after the date of purchase, TJM shall repair (at TJM's discretion) the defective product or part.

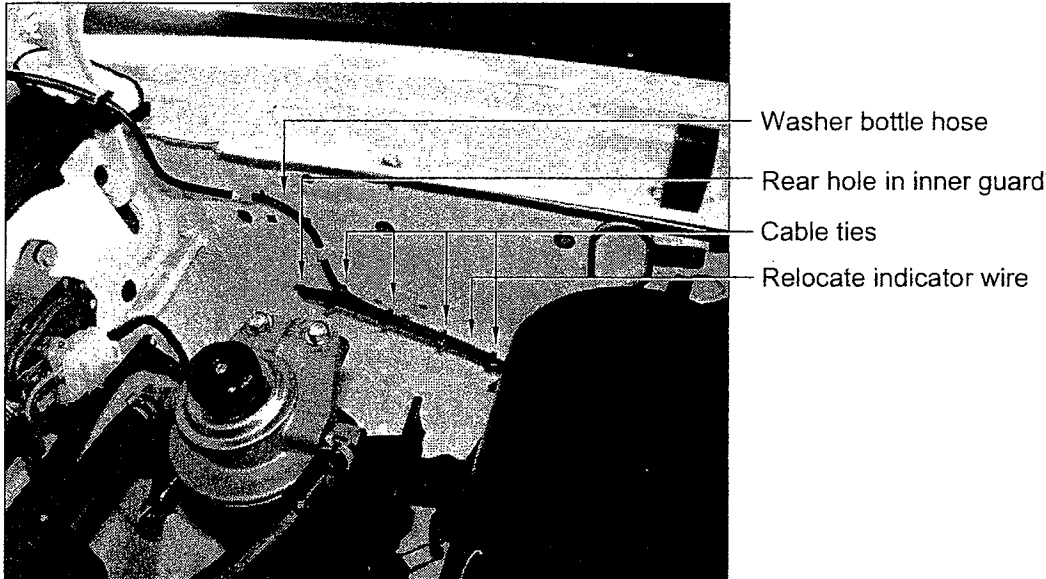
2. Any defect in a product distributed by TJM, but not manufactured by TJM, shall be dealt with in accordance with, and to the extent of, the warranty offered by the manufacturer of that product.

3. TJM does not warrant that the products manufactured by it comply with the laws of the place where those products are purchased or used. It is the sole responsibility of the Purchaser to ascertain whether products being purchased - or the affixation of those products to any other object - comply with local laws.

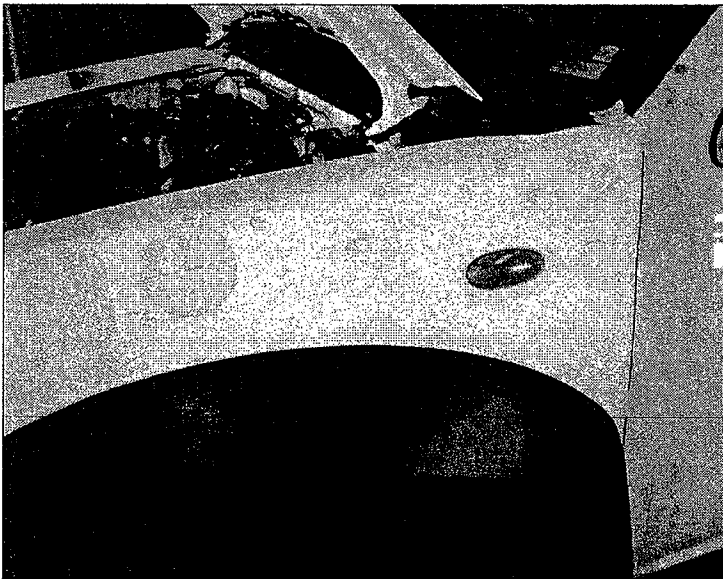
4. Except to the extent described in this warranty, TJM shall not be liable for any other claim, including those claims arising from faulty design, the use of the product on any indirect special or consequential damage or injury to any person, company or other entity.

5. Modification or alteration to any product manufactured by TJM to enable fitment in conjunction with other vehicle accessories or modifications (eg lift kits) will void any warranty claims.

1. Jack up and support the front left hand corner of the vehicle. Remove left hand front wheel assembly, this will provide a clearer work area.
2. From under the front left hand side wheel arch remove the plastic wheel arch liner. Remove indicator on the passenger side front panel. Disconnect the plug on the back of the indicator assembly. Relocate the indicator wire to run inside the engine bay, along the inner guard, and through the rear hole in the inner guard. Secure indicator wire to washer bottle hose using the four cable ties supplied. Refer Diagram One. Refit indicator assembly.

DIAGRAM ONE: Relocating Indicator Wire

3. Remove the air cyclone assembly from engine bay and the air intake duct that mounts against the inner guard. Discard the air intake duct. Retain the air cyclone assembly and the 3 bolts that secure it to the engine bay.
4. Cut out large paper guard template according to template instructions.
5. Place paper template over snorkel body to ensure that stud and hole positions line up. Position paper template on the left hand side outer guard and secure with masking tape. Refer Diagram Two. Centre punch all seven hole positions. Remove template and drill Ø3mm pilot holes for all holes. Drill the six small holes out to Ø11mm and the large hole out to Ø90mm using a Ø90mm holesaw.

DIAGRAM TWO: Align and Secure Paper Template to Guard

6. Apply a Locktite compound to the five M8 x 1.25 x 30 studs and secure into the five rear nutserts in snorkel body.

7. Open the passenger's side door and peel away the door seal from the bottom of the windscreen to the top of the windscreen. Turn the seal over to view the inside face of the seal. Cut out the small paper template supplied. Align the bottom edge of the template with the top of the slot in the inside face of the door seal (refer Diagram Three). Secure the template with masking tape. Using a Stanley knife remove the cross hatched section of the rubber door seal as indicated on the template. Refer Diagram Four.

WARNING: WHEN CUTTING THE INNER SEAL LIP ON THE INSIDE FACE OF DOOR SEAL, DO NOT CUT THROUGH THE SEAL.

DIAGRAM THREE: Aligning Template

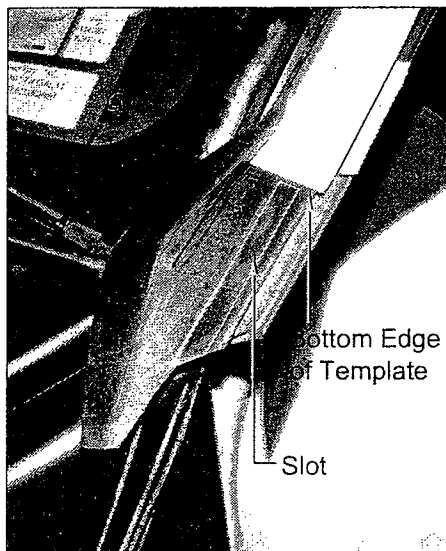
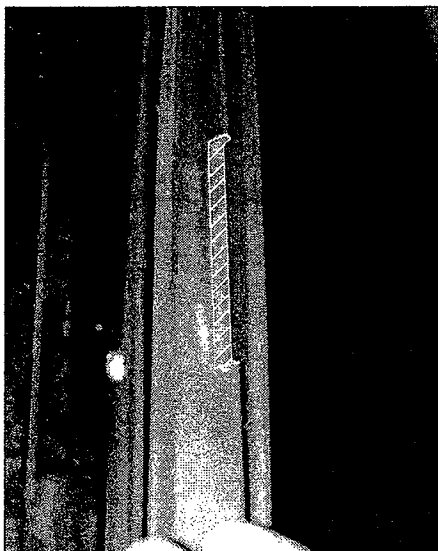


DIAGRAM FOUR: Trim Section



8. Secure the upper snorkel bracket (N163) to nutserts in top of snorkel body using two M8 x 1.25 x 16 stainless steel button head socket screws, spring washers and flat washers. Refer Diagrams Nine and Ten.

9. Fit snorkel body to vehicle. With the snorkel aligned on the vehicle mark the position of the two holes in the upper snorkel bracket on the windscreen pillar. Remove snorkel body from vehicle and centre punch the two holes previously marked. Drill two Ø3.5mm holes.

CAUTION: BE SURE TO DRILL THROUGH OUTER PANEL OF WINDSCREEN PILLAR ONLY. DO NOT DRILL THROUGH INNER PANEL.

10. Deburr all edges of the holes drilled in the windscreen pillar and guard using wet/dry sandpaper or a file. Wipe down and clean guard and windscreen pillar to remove all metal shavings and dust.

11. Treat all raw metal surfaces left after drilling with a rust preventative.

12. Remove upper snorkel bracket from snorkel body and secure to windscreen pillar using two 3/4" x 8G stainless steel screws. Overlay the rubber door seal and clip seal into position. Refer Diagrams Five and Six.

DIAGRAM FIVE: Securing Upper Snorkel Bracket

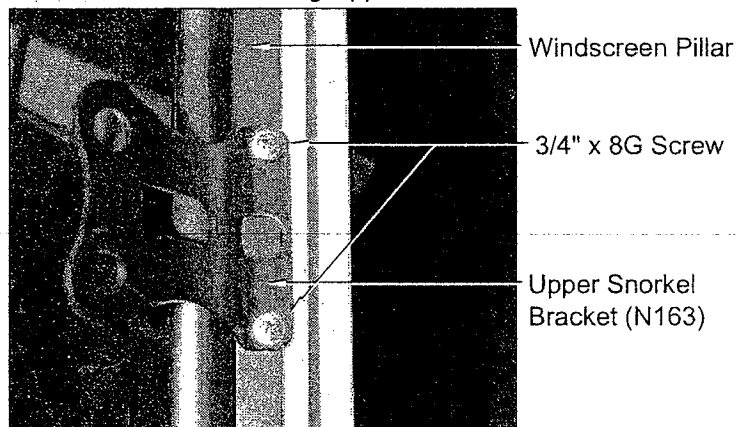
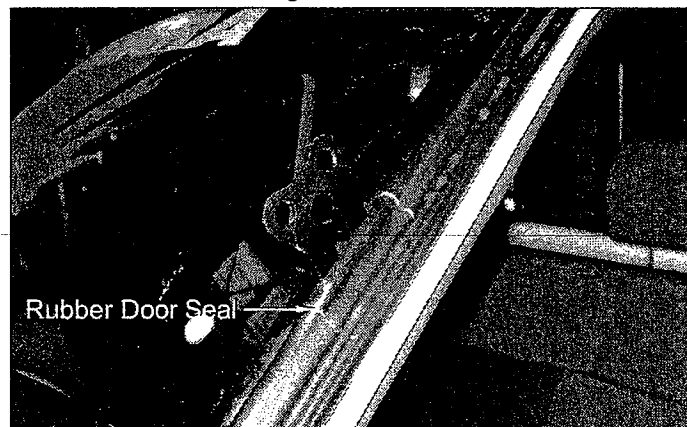


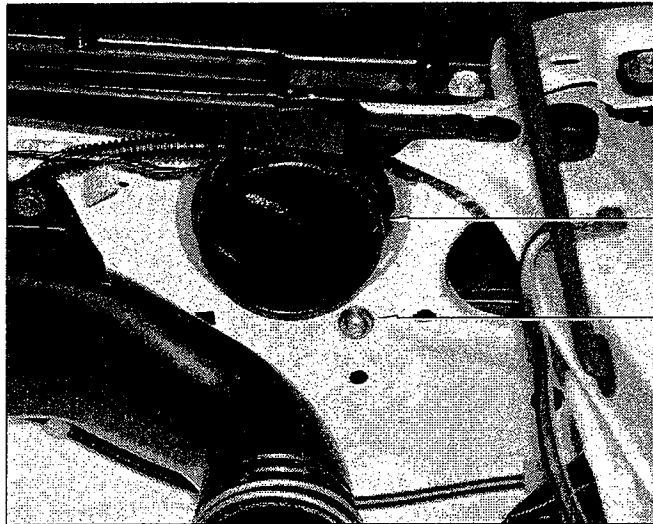
DIAGRAM SIX: Refitting Rubber Door Seal



13. Put a hose clamp on the snorkel body end of the intermediate tube and position the intermediate tube between the outer and inner guard. Do not remove the foam inside the guard cavity.

14. Align the nutsert in the intermediate tube with the hole in the inner guard wall, which is below the hole that the intermediate tube protrudes through. Finger tighten using one M8 x 1.25 x 12 button head socket screw, spring washer and 19mm O.D. flat washer. Refer Diagram Seven.

DIAGRAM SEVEN: Securing Intermediate Tube to Inner Guard Wall



Intermediate Tube

M8 x 1.25 x 12 button head socket screw,
spring washer and flat washer

15. Peel backing tape off snorkel body foam gasket. Align foam gasket over studs and adhere to snorkel body.

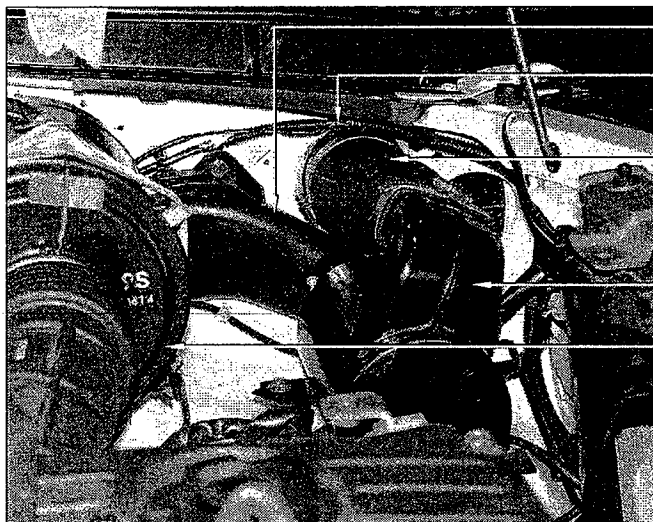
16. Apply neutral cure silicone or urethane on the inside of the intermediate tube protruding from the outer guard. Fit the snorkel body to vehicle, sliding tube section at bottom of snorkel body into intermediate tube. Loosely secure the upper snorkel bracket to the snorkel body using two M8 x 1.25 x 16 stainless steel button head socket screws, spring washers and flat washers. From inside the guard cavity, secure the front nutsert in the snorkel body to the outer guard using one M8 x 1.25 x 20 bolt, spring washer and 32mm O.D. flat washer. Secure the two lower studs using M8 x 1.25 nuts, spring washers and 32mm O.D. flat washers and the three top studs using M8 x 1.25 nuts, spring washers and 19mm O.D. flat washers. Tighten the upper snorkel bracket bolts. Refer Diagrams Nine and Ten.

17. Secure the intermediate tube to the snorkel body with hose clamp supplied.

18. Secure the intermediate tube to the inner guard by tightening the bolt previously fitted.

19. Apply neutral cure silicone or urethane to the inside of both ends of the air cyclone assembly adaptor tube and push the tube onto the air cyclone assembly. Push the other end of the air cyclone assembly adaptor tube onto the intermediate tube protruding through the inner guard wall and secure using hose clamp supplied. Attach the original air cleaner adaptor tube to the air cyclone assembly. Refer Diagram Eight.

DIAGRAM Eight: Air Cyclone Assembly Adaptor Tube Fitment



Original Air Cleaner Adaptor Tube

Intermediate Tube protrudes through inner guard wall

Air Cyclone Assembly Adaptor Tube

Air Cyclone Assembly

Air Cleaner

20. Resecure air cyclone assembly to engine bay using the three original bolts.

21. Secure the air cyclone assembly and air cyclone assembly adaptor tube together with hose clamp supplied. Secure original air cleaner adaptor tube to air cyclone assembly using original hose clamp.

22. Place the air ram into position on top of the snorkel body and secure using the hose clamp supplied. Refer Diagrams Nine and Ten.

23. Refit plastic wheel arch liner and wheel assembly.

NOTE: To provide a totally sealed intake system it will be necessary to remove all under bonnet air cleaner plumbing and provide a seal to all original equipment joints using neutral cure silicone or urethane.

Notes:

*It is important to check all joints are correctly sealed

*Thoroughly clean the vehicle around the snorkel work area.

BOLT KIT SUPPLIED:

- 1 - Snorkel Body (Part No. 011MB001090) + foam sealing gasket
- 1 - Intermediate Tube (Part No. 011AC001090) fitted with
 - 1 - 65/89mm Hose Clamp stainless steel (K1116)
 - 1 - 59/82mm Hose Clamp stainless steel (K1489)
- 1 - Air Cyclone Assembly Adaptor Tube (Part No. 011IP001090) fitted with
 - 1 - 65/89mm Hose Clamp stainless steel (K1116)
- 1 - Air Ram (Part No. 011AIR0497T) fitted with
 - 1 - 71/95mm Hose Clamp stainless steel black (K1488)
- 1 - Upper Snorkel Bracket (marked N163)
- 5 - M8 x 1.25 x 30 studs (K1673)
- 5 - M8 x 1.25 nuts (K0585)
- 4 - M8 x 19 x 1.2 flat washers (K0628)
- 3 - M8 x 32 x 1.6 flat washer (K0859)
- 7 - M8 x 3.2 x 2.4 medium spring lock washer (K0614)
- 1 - M8 x 1.25 x 20 bolt (K0552)
- 1 - M8 x 1.25 x 12 button head socket screw (K3153)
- 2 - M8 x 1.25 x 16 stainless steel button head socket screw (K0858)
- 2 - M8 x 17 x 1.2 stainless steel flat washer (K0923)
- 2 - M8 x 3.0 x 2.0 stainless steel medium spring lock washer (K0924)
- 2 - 3/4" x 8G stainless steel pan head STS screw (K0724) fitted with
 - 2 - screw grommet plastic F1031 (K0665)(fitted for packaging purposes only)
- 4 - cable tie black 100mm (K1149)
- 1 - LHS Guard Template
- 1 - LHS Rubber Door Seal Template

DIAGRAM NINE: Snorkel Layout

