

Product: TJM Airtec Snorkel (Short Body)
Vehicle: Mazda BT 50 - 2020 Onward

Part No. **011SAT0146H & 011SATW0146H**

- Before commencing installation of this product Please read the instructions carefully, ensure that the Air Box configuration is the same as shown in the images of these instructions. Check all listed components are supplied in the kit.
- Do Not Use this Product as a Hand Hold to enter the Vehicle.
- Left hand and Right-hand components are determined as seated in the vehicle looking forward.
- Always place the product on a flat level bench or surface, cover with a soft cloth or blanket to prevent damage to parts prior to installation.
- When removing protective coatings, ensure all new edges are deburred, clean any swarf from the area and apply rust preventative product to exposed painted surfaces where applicable.
- To provide adequate sealing of the snorkel system all joints and openings must be sealed using neutral cure silicone.
 - IMPORTANT: If the vehicle has a one way drain valve Do Not seal it As water entering through the snorkel head needs to drain. TJM recommend frequent inspections of the valve to confirm the air box is not retaining water Especially after water crossings.
- The fitment of this TJM product does not nullify the OE manufacturer's operating guidelines and/or warnings. Ensure you are familiar with and adhere to the usage instructions specified by the manufacturer in the owner's manual or other official documentation.
- Tools Needed for Installation: Metric Socket & Spanner Set, Screwdriver Set, Electric Drill, Metric Drill set, Ø 108 Hole Saw, Soft Face Hammer, Trim Removal tool, Tube of Black Neutral cure silicone and Loctite or similar product.
- Safety glasses hearing protection and gloves should be used / worn when performing relevant Tasks during this installation







For product warranty please refer to our website www.tjm.com.au



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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
	14	121	90	-	-	-

PARTS LIST					
DESCRIPTION	QTY	PART No.			
Snorkel Body	1	011MB00146H			
Intermediate Tube	1	011IP000134G			
Airbox Pipe / Connector		011AC00234G			
Door ("A") Pillar Bracket	1	F-13816			
Hose Clamp - (S/S) attached Air box pipe to Intermediate	1	HC060			
Hose Clamp – (S/S) attached To Intermediate Pipe	1	HC052			
Fitting Instructions	1	F-31300			
Paper Template – Outer Guard	1	F-31301-T			
Paper Template – Inner Guard	1	F-31301-T			

BOLT KIT		
DESCRIPTION		
M8 x 1.25 x 16mm Hex Head Bolt		
M8 Spring Washer		
M8 Flat Washer (Small)		
M8 x 16mm Button Head (Black)	1	
M8 Spring Washer (Black)		
M8 x Ø17mm Flat Washer (Black)		
M8 x 1.25 x 30 Stainless Steel Studs		
M8 x large Mudguard Washer		
M8 Nyloc Nut		
5/8" x 8G Stainless Steel PK Self tap Screw		

011SAT0146H ONLY				
Air Ram Top	1	011AIR14B97T		

011SATW0146H ONLY				
Wedgetail Top		011AIRWT450		



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- Position the vehicle on a hoist (where possible) for access to inner guard area.
 A Flat Level Concrete surface is also suitable if a Hoist is not available.
- 2. Access to the mud flap and Wheel arch (inner fender liner) will be Required.
- Jack up the front of vehicle and remove the Right-hand side front wheel - If Required to access the Mud Flap and Wheel arch (inner fender liner) Clips and fasteners. Alternatively Place the steering on full Lock for access to the Clips.



Remove all fasteners

- Remove the Mud Flap from the vehicle Mud flap is held on with screws in four places.
 - Also Remove all the Visible clips holding the wheel arch liner (Inner Fender) From the Vehicle - Retain all of fasteners / plastic clips for re-use.



5. With the wheel arch liner (Inner Fender) clips Removed from the Vehicle – Access to the inner fender Area is now accessible.



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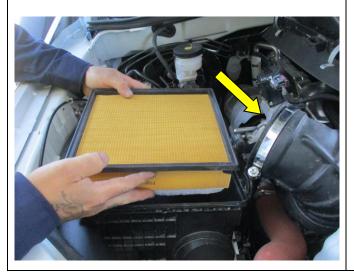
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- 6. Remove the forward-facing air intake from the vehicle by removing the front two plastic clips and uncoupling it from the air box.
- 7. Discard the O/E air intake as it is no longer required. Reinstall the two plastic Clips into the existing holes.



- 8. Loosen the hose clamp securing the intake hose to the airbox lid and disconnect. It is recommended to Cover the intake hose with a plastic bag or similar so no foreign matter can enter the engine.
- Disconnect / unplug the Sensor and any additional sensor fittings from the airbox lid. Place out of the way as the air box needs to be fully Removed.



- 10. Unclip the clamps on the Front and rear of the airbox to remove the airbox lid and remove the air filter element. Remove / unclip the wiring Loom that is attached to the airbox lid.
- Relocate / Move the Engine intake pipe to enable the next step – Removal of the Air box Base.



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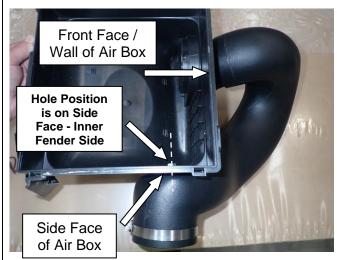
12. Cover the Exposed End of the Engine Air Intake Pipe, with a clean Plastic Bag to prevent Foreign objects & Dirt or swarf entering the engine.



- 13. Remove the bolts that secure the airbox base to vehicle and retain for refitting bolts are located at the front and rear of the airbox base.
- 14. Totally Remove the airbox base from the engine bay area to provide access to the inner guard (Fender).

Hole Position for Air box Refer Step 15 Next (Below)





- 15. New Airbox Pipe to Airbox Base a Ø 14 mm hole is to be drilled into the airbox base to retain the New airbox pipe to the Airbox.
- 16. Important: The out Board / Side face of the Air box Adjacent to the inner fender is where the hole is located. Check before drilling Hole is in the Right-Hand face when viewed from the front of the Vehicle. Refer to the Picture for the Airbox Base Orientation & Face /surface that is to be



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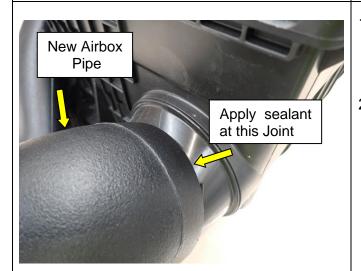


Step 17 **Down**40 mm

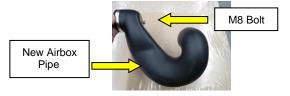
Step 18
Across
10 mm



- 17. On the RH face of The Air Box base Measure down 40 mm from the Horizontal
 molded Ridge line and mark as shown.
- 18. Then on the same surface but from the vertical ridge this time measure towards the outside 10 mm and mark as shown. Using a Ø14 mm Drill Bit, Drill a hole through the air box in the marked position.



- 19. Apply a bead of neutral cure silicone to the inlet pipe section of the Airbox base where the New Inlet pipe slides over to totally seal the inlet pipe to the airbox.
- 20. Retain / Bolt the New Airbox Pipe to the Airbox Base with the M8 Bolt and Large washer as shown using the New Hole drilled in step 18 Above.





Step 21



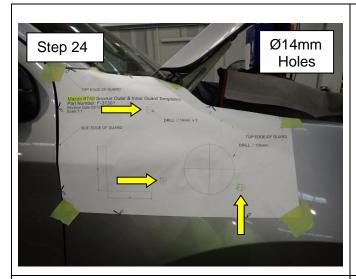
- 21. To attach the snorkel body to the vehicle
 there are three M8 Studs, to access the
 top Stud, the plastic trim panel located at
 the base of the windscreen needs to be
 carefully removed to provide access to the
 top stud.
- 22. The two other Studs are accessible from up under the inner Guard / Fender area (Inner Guard Cavity)



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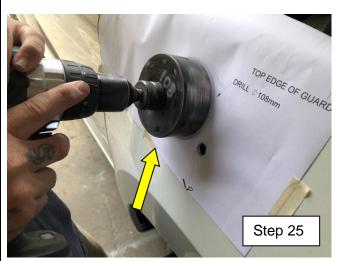
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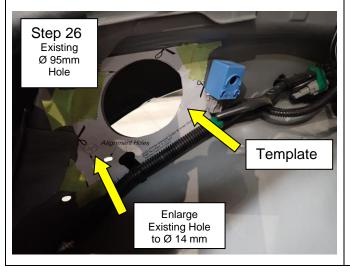
- 23. Main Snorkel Body to Vehicle: Cut out the paper Guard / Fender template supplied in the fitting kit. Confirm the template number is F-31301-T
- 24. Attach the Template to the driver's side Fender using the Template supplied, align to the vehicle using the Marks provided. First Drill the 3 x Ø14 mm holes in the guard (Fender) where marked.

Leave the Template In place – as the Larger Hole is Now to Be Drilled.



25. Use the Reference marks on the template Drill the Ø 108 mm Hole as shown.

Apply rust preventative product to the exposed edges of the hole.



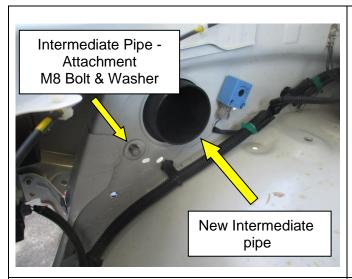
- 26. Cut out the Smaller paper template supplied in the fitting kit. Confirming the template number is F-31301-T, Use the Reference marks & Existing Ø 95 mm Hole to align to the correct position and attach to the inner Fender area.
- 27. Enlarge the existing hole in the Inner guard (Fender) to a Ø14 mm hole, as shown. Apply rust preventative product to the exposed edges of both holes.



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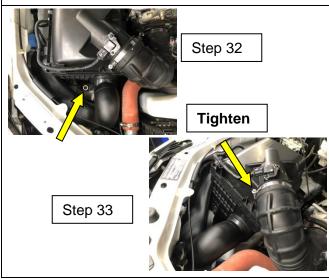
28. The New Intermediate Pipe can now be located & installed - Placing the elbow through the Existing Ø95 mm hole.

NOTE: - The end of the Intermediate pipe with the Brass nutsert is placed at the Airbox end.

29. Retain / bolt the Intermediate Pipe to the inner guard / fender with the M8 Bolt and Large washer as shown.



- 30. Installation of the Airbox base Back into the Vehicle:- Before Re installing the Airbox base to the vehicle Apply a bead of neutral cure silicone to the inlet pipe section where it slides over the intermediate pipe to Totally seal the joint line. Wipe of any excess Sealant.
- 31. Re Install the Airbox Base to the vehicle sliding the Airbox pipe into the Intermediate pipe as shown. Attach the Hose clamp - Finger tight only at this stage.



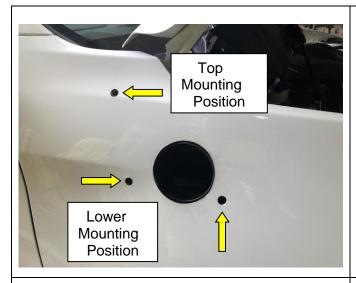
- 32. Bolt the Air box base Back into position as (Removed in step 13), Tighten all bolts. Once the air box is Re Secure - Tighten the Hose clamp on the Engine inlet Pipe.
- 33. Replace the air cleaner element and re attach the airbox lid. Plug in the Sensor, Secure the wiring Loom to the Airbox lid. Ensure all Parts & connections are tight and Secure.



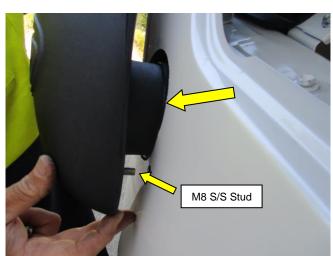
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- 34. With the Holes previously drilled in the Fender the Template can now be removed and wipe off & clean any marks on the Guard / Fender.
- 35. Apply tape / protective film to the vehicle where the "A "pillar bracket area is on the vehicle to avoid scratching the paint.
- 36. Attach the "A "Pillar bracket to snorkel using the black M8 x 1.25 x 16mm button head screw, M8 spring washer & M8 flat washer supplied in the kit.



37. Fitting the Snorkel Body: - Using Loctite or Similar, Screw the three Stainless Steel studs into the snorkel body and Tighten. Place the snorkel onto the Fender & Retain using the Three M8 Nuts supplied - Leave the Nuts finger tight at this stage.

Note: - Top Stud Access is where the plastic trim panel was Removed (refer Step 21) - Lower Studs are accessible from up under the inner Guard / Fender area. As noted in step 22



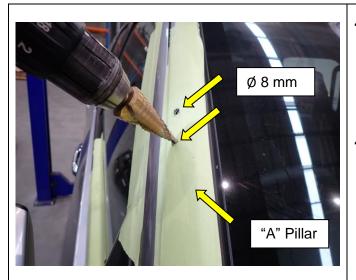
- 38. Using the "A" pillar bracket as a template, mark the two-hole positions on the "A" pillar.
- 39. Note: Bracket Position is approx. 10 to 12 mm from outer Edge of Pillar (For Reference – Check Prior to Drilling)
- 40. Remove the snorkel body and pillar bracket from vehicle to Provide access for drilling into the vehicle.



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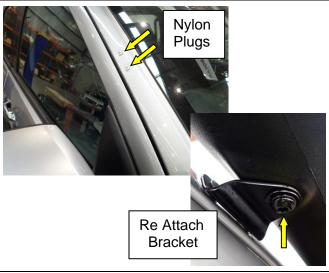
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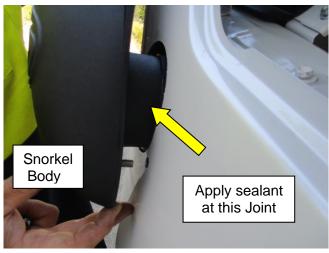


- 41. Centre punch the two holes as marked. Caution when Drilling – Do not Drill too far into the "A" pillar (May Contain Wiring etc) Drill a 4mm pilot hole through the outer skin of the "A" pillar. Note: - Drill through outer skin of the pillar only.
- 42. Drill the skin of both holes out to 8 mm. Remove the protective tape from the "A" pillar.

Deburr all holes, clean any swarf from the areas and apply rust preventative product to exposed surfaces & edges.



- 44. Carefully apply silicone to the Newly Drilled 8mm holes.
- 45. Insert the nylon plugs into the holes in the "A" Pillar as shown, Tap the Nylon plugs Gently (with a soft face hammer) to engage plug until the Plug is flush with the "A" Pillar Surface.
- 46. Re assemble the A Pillar bracket to the snorkel. Fix the snorkel bracket to the vehicle using the 8G S/S screws.



47. Apply a bead of neutral cure silicone to the Main Snorkel Body pipe section where it slides into the intermediate pipe to Totally seal the joint.

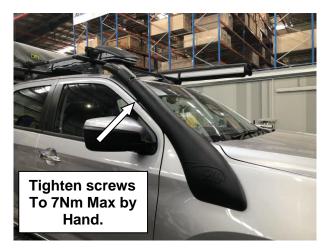
Refit the snorkel body onto the vehicle. Check all the connection points on the snorkel body, intermediate tube and airbox base, Tighten & check all clamps, wipe off any excess sealant.



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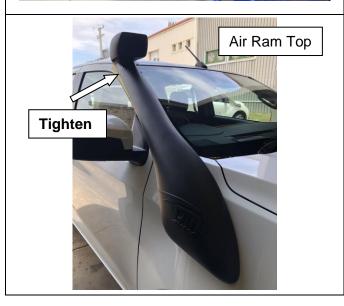


- 48. With the Snorkel body in its final Position on the vehicle and all joints thoroughly sealed Fully tighten the screws that hold the "A" Pillar bracket to the vehicle.

 Torque Screws to a Max of 7 Nm by Hand **Do not use Air Tools**.
- 49. Check & tighten all Fasteners on the snorkel body and all pipe work & clamps. Re-Check all hose clamps & connections. Important: Ensure all plastic joints are watertight and fully sealed.



- 50. Refit the Plastic Inner guard / fender liner, Fender Flare and mud flap as described in steps 3, 4 and 5 above using all the original clips and fittings.
- 51. Refit the front Right-hand wheel to vehicle (if removed) for snorkel fitting at step 1.



- 52. Fix Either the Air Ram Top or Wedge Tail Top to the snorkel Body, secure with the hose clamp provided and Tighten.
- 53. CAUTION: Do Not Use any Silicone on this joint.

Wedge Tail Top



Tighten



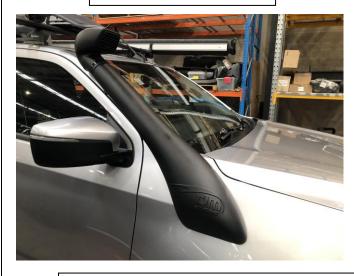
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Air Ram Top – Shown Fitted to Vehicle

Final Fitment to Vehicle





Final Check – Ensure all bolts / Fasteners are Tight and Torqued to the correct torque values as tabled & specified on page 2 of these instructions.

Wedge Tail Top – Shown Fitted to Vehicle



Final Fitment to Vehicle

