

## **Instructions to fit the Snorkel Kit S094**

### **for the Mazda Bravo / Ford Ranger Courier 99-06 2.5L diesel**

#### **1.0 Introduction**

Gibson RM Pty Ltd thanks you for your purchase and the trust you put in our products.

We strive to supply our customers with the highest quality equipment based on the most efficient design and best styling. We are confident that you will enjoy using our Snorkel system.

It should improve the power of your vehicle as well as reduce its fuel consumption

#### **1.1 General instructions**

Follow carefully the instructions listed on these pages and use the template provided, do not over tighten bolts. Do not use silicone on any connections. Use urethane

Ensure that safe work practices are followed when installing your Airflow Snorkel. Protective ear and eye wear should be worn at all times when using power tools.

#### **1.2 Disclaimer**

It is highly recommended that installation is undertaken by a qualified mechanic or panel beater. Gibson RM Manufacturing will not be held responsible for any damage incurred through incorrect fitment of the templates and workmanship. It is the responsibility of the fitter to ensure that particular care is taken when assembling the Snorkel kit to the vehicle as it may cause damage to the windscreen and or electrical components. Safe work practices must be used at all times when undergoing installation.

We guarantee Airflow Snorkel kits against manufacturing defects as long as proof of purchase can be established.

All models produced by Airflow Snorkels are verified to suit right hand drive vehicles according to Australian specifications. Variations in vehicle specifications may occur in other markets.

If you're in doubt about the product suitability, please forward a photograph of the engine bay, air filter housing and of the vehicle at frontal/side position to [info@gibsonrm.com.au](mailto:info@gibsonrm.com.au)

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## 2.0 List of Components



S094 Kit content				
Ref	Designation	Qty	Length	Unit
SP077A F/GF	Snorkel Ranger AirFlow/Global Force	1		
SP064	Air Ram 3.0"	1		
SK012	Bolt kit	1		
SP078A	Under Bonnet Mazda/Bravo	1		
SP142	Hose clamp 70/90mm	2		
SP171	Plastic bag 280x380mm	1		
SD093	Template			
SD094E	Booklet			

Fasteners included		
Ref	Designation	Qty
SP041	A Pillar bracket Ext - bent Ranger	1
SP025	Washer Panel 1/4 x 1.1/4 x 16g Z/P	7
SP024	G/Bolt M6 x 12mm Z/P	1
SP022	Stud M6 x 25mm Z/P	7
SP027	Flange Nut M6 Z/P	7
SP026	Screw Plug Nylon	2
SP029	Screw Self Tap 10gx5/8 Z/P	4
SP023	Washer Spring 1/4 x 1/4 Z/P	1
SP170	Plastic bag 75x125mm	1

Ensure that all parts listed above are included in the parcel before starting any work.

The total expected time of installation is around 2 hours.

## 2.1 List of tools and additional parts required

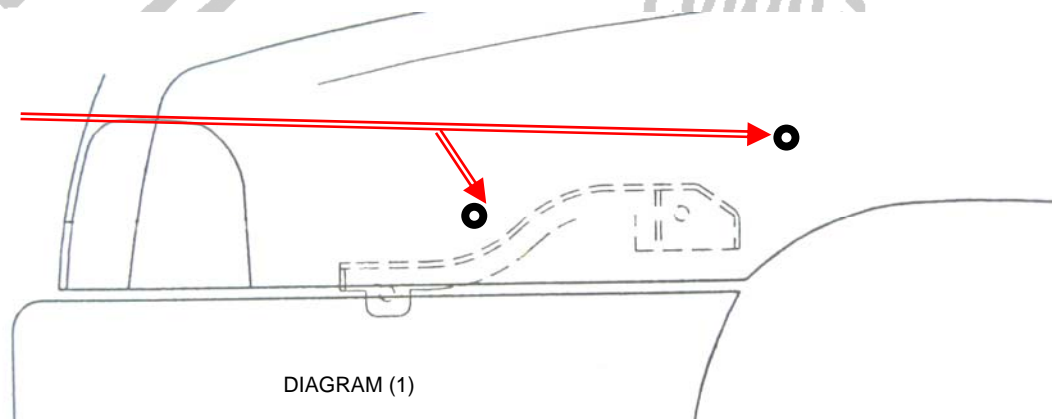
Masking tape, Clear tape, Urethane  
Hammer, Centre punch  
Assorted screw drivers  
80 mm hole saw  
Assorted drill set  
Wet / dry sand paper  
½ round file, small square file

Note: In order to accommodate the cyclone air filter, the snorkel must sit forward of the "A" pillar on the vehicle. This is to avoid interference between the "A" pillar and the cyclone air cleaner

## 3.0 Detailed Instructions

- 1 Remove the left hand side inner guard. Remove the plastic inner guard insert by removing the plastic clips. Refer to Diagram (1). retain for fitment

Remove plastic clips securing the inner guard insert.



- 2 From inside the guard, remove and discard the air cleaner intake tube by removing the 2 nuts located at the front and rear of the tube.
- 3 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 Sikaflex F-11. The air cleaner box will have to be removed to achieve this.
- 4 Place template over snorkel body to ensure that bolts and hole positions match. This is done as a second check to ensure template

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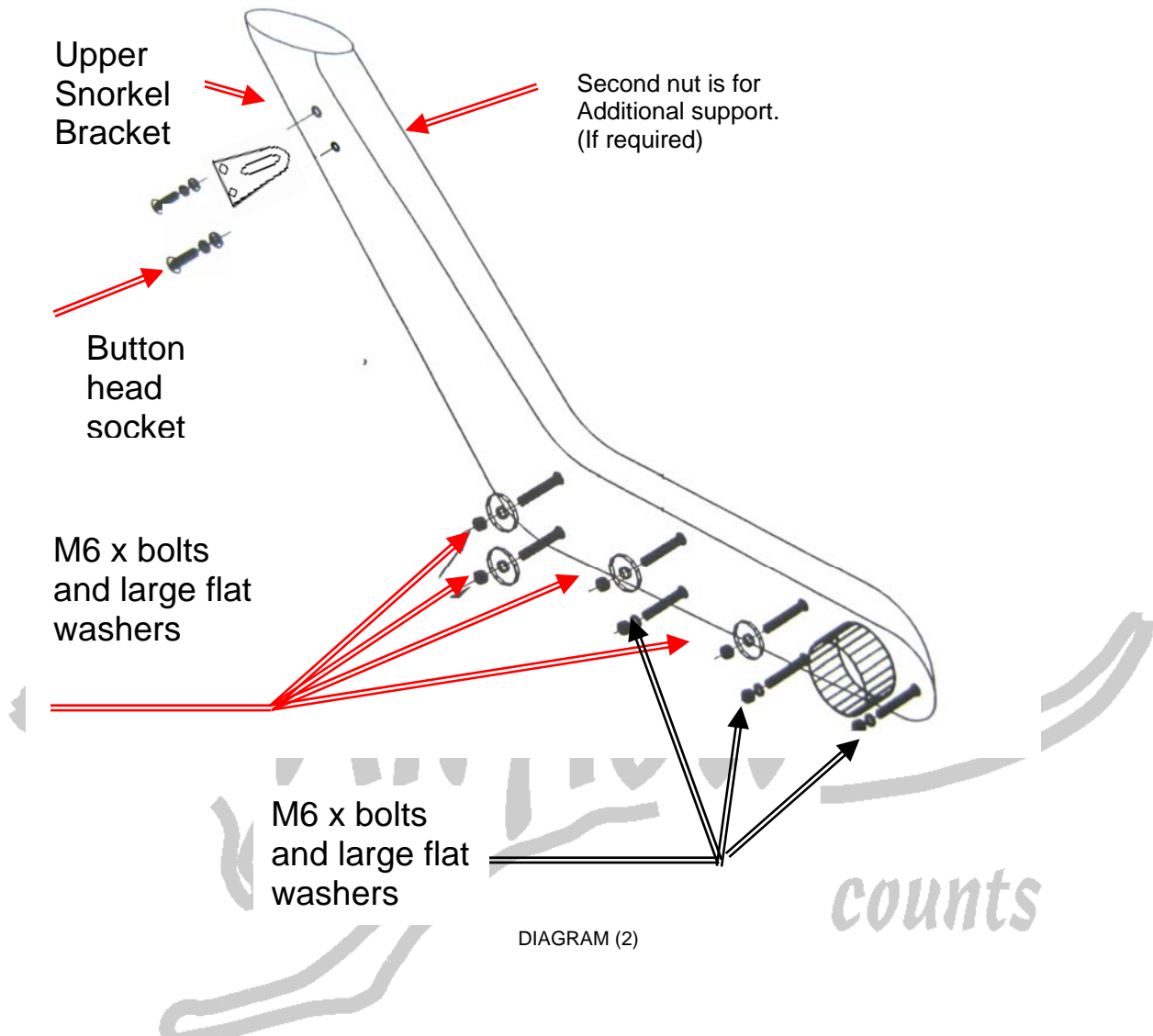
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- and snorkel have been correctly packed and will avoid holes being mis-drilled. Place paper or cut out snorkel template over the left hand side guard and secure using masking tape. Centre punch all eight hole positions. Remove the template and drill 3mm pilot hole for all marked holes. Drill the seven bolt holes out to 10mm and the large hole out to 80mm using a metal hole saw.
- 5 Secure the upper snorkel bracket to the nuts in the top of the snorkel body using 1x M6 bolt with a flat washer and spring washers. Refer to Diagram (2).
  - 6 Open passenger side door and test fit snorkel. With the snorkel aligned on the vehicle position the upper snorkel bracket on the A Pillar of the vehicle. Mark the position of the two holes in the upper snorkel bracket on the windscreen pillar. Remove the snorkel from the vehicle and centre punch the two holes marked. Drill holes out to 3.5mm.
  - 7 Debur all of the edges of drilled holes in the windscreen pillar and guard, using wet/dry sandpaper or a small file. Wipe down and clean the guard and windscreen pillar to remove all metal shavings and any dust.
  - 8 Paint all raw metal surfaces left after drilling.
  - 9 Secure the upper snorkel bracket to the windscreen pillar using 2 x SP26 plugs and 2 x SP28 self tapping screws.
  - 10 Apply Sikaflex F-11 to the inside of both ends of the intermediate tube (SP78).
  - 11 Loosely position hose clamp on round edge of intermediate tube.
  - 12 Position the intermediate tube inside the guard so that the round end protrudes through the outer guard hole.
  - 13 Slide the oval end of the intermediate tube over the air cleaner intake tube
  - 14 From inside the guard, screw a SP28 self tap screw through the bottom of the intermediate tube and air cleaner intake
  - 15 Fit the snorkel body to vehicle, fitting short tube section on the bottom of the snorkel body inside the intermediate tube.
  - 16 From inside the guard, secure the 7 x SP24 M6 bolts using 7 x SP25 flat washers.



- 17 Tighten the hose clamp between the intermediate tube and the snorkel body
- 18 Secure the A pillar snorkel bracket to the snorkel body using M6 bolt, flat and spring washer.
- 19 Where fitting cyclone air filter 2off A pillar Brackets are required
- 20 Ensure that all hose clamps and bolts are tightened and all joints are sealed.
- 21 Replace plastic inner guard insert and secure with original clips.
- 22 Fit air ram to snorkel body, sliding it on as far down as possible, almost to the bend in the snorkel body and secure with hose clamp supplied

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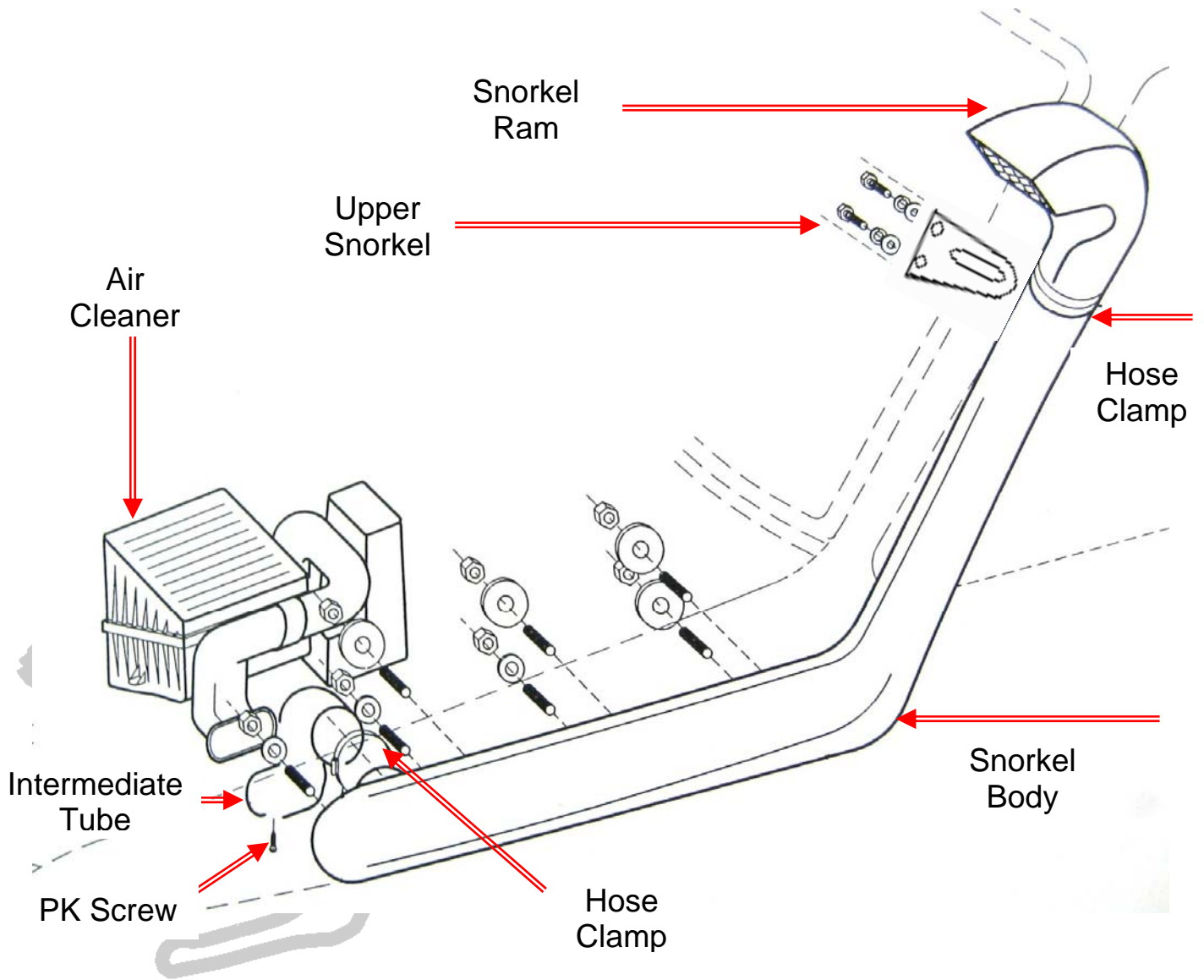
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Snorkels for your 4WD



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## 4.0 Improvement program

We strive to produce documentation and kits free of mistakes, however, should you discover any error or omission, please let us know by quoting the initials shown in the box overleaf.

Furthermore, if you think that a step of this procedure could be improved, please send us at [info@gibsonrm.com.au](mailto:info@gibsonrm.com.au) your suggestions indicating the procedure name, its release date, the step details and the photo if necessary.

We appreciate your support.



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*When the*

<b>This kit has been carefully packed by</b>	
<b>Date</b>	<b>Initials</b>
<i>Airflow</i>	

*counts*

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