

# SNORKELS











# TJM 4X4 EQUIPPED

## ABOUT US

Back in the 70's when 4WD's were few and far between, three adventure seeking mates got their 'off road thrill' with customised FJ40s, F100s & Rovers. Each fitted with custom made bull bars, roll bars and sand tyres – they drew the attention of friends and bystanders. Before long, Lloyd Taylor, Cliff Jones and Steve Mollenhauer were making hand-made custom bars for a growing number of fans. As the demand continued to grow, they decided it was time to get serious.

In 1973, with little more than their combined initials, shared passion and appreciation for quality products - TJM was founded and the rest is history. They were pioneers and TJM became the first company in Australia to manufacture and distribute quality 4WD equipment.

Our product range has extensively grown to include; steel and alloy bull bars, nudge bars, side and rear protection bars, side steps, trade racks, roof racks, TJM recovery equipment, TJM winches, TJM XGS suspension, Airtec snorkels, TJM Pro Lockers and TJM roof top tents & awnings.

While TJM has grown to be a sophisticated operation, we have never forgotten the key elements that resulted in the formation of the brand.

**Trust;** from the quality of manufacturing.

**Pride;** in our innovative designs.

**Adventure;** heading out from suburbia and experiencing the wonders of our unique and breathtaking country, Australia.

Snorkels are commonly the first accessory ever fitted to a four wheel drive. And why wouldn't they be with all these benefits?

Not only do they allow for deep water crossings and hassle free air induction when immersed in dust; they also have other key features.

The air quality at roof level is cleaner and cooler than air travelling via the bonnet, so this means greater fuel efficiency and less clogging of air filters. These are very important factors, particularly when 4WDing on dry, dusty roads.

Even when it rains the TJM Airtec design captures and disperses rain drops through drain holes at the base of the air ram. This feature removes excess rain from mixing with the air stream and preventing water intake during heavy rain.

When it comes to materials, TJM sources only the finest quality to be used in the Airtec range. All products are made with leading Australian polymer materials that exceed the Australian Standard for UV stabilisation of UV8, with ratings at UV20-UV24. The colour pigmentation process doesn't cut any corners giving you an even, dense and bleed-free product.

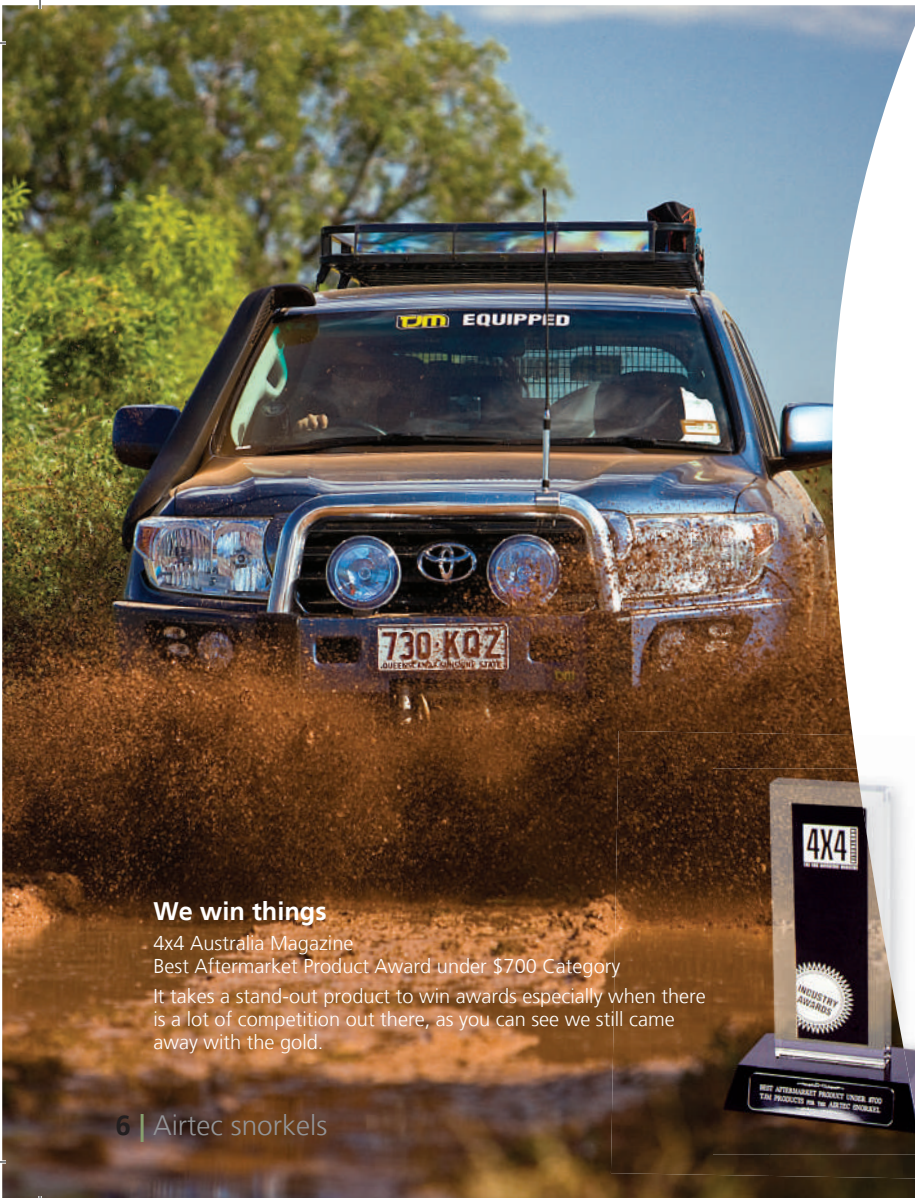
Unlike other manufacturers, TJM individually engineer and design the snorkel to suit the natural shape of the vehicle. Although functionality is important, we want you to look good too!

Proudly Australian made and quality assured, you can have the confidence that a TJM Airtec snorkel will achieve peak performance each and every time.









### We win things

4x4 Australia Magazine  
Best Aftermarket Product Award under \$700 Category

It takes a stand-out product to win awards especially when there is a lot of competition out there, as you can see we still came away with the gold.



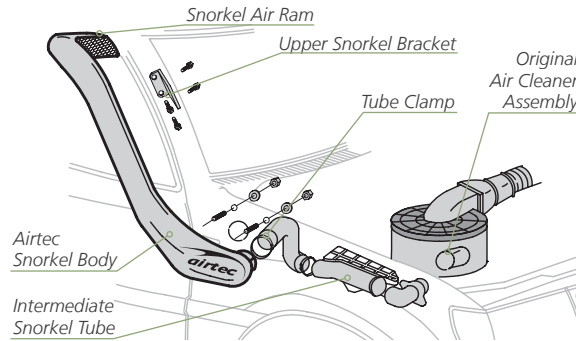
### Every 4WD should enjoy the Airtec advantage

- › Fitting a TJM Airtec snorkel allows air to be drawn from roof level providing a continuous supply of cooler and cleaner air to the engine.
- › Because the air supply is drawn from roof level, dust is not as thick and plentiful in the engine bay or inner guard. This will help extend the life of the air cleaner element, reducing the wear of vital components.
- › With the positively sealed TJM Airtec snorkel well above water level, you can expect worry free water crossings.

### Features & benefits

- › The TJM Airtec intake design separates rain or moisture from the air stream before it enters the engine.
- › The snorkel body is manufactured with a smooth inner wall, harsh corners are avoided in all designs which reduces air turbulence and allows a constant uninterrupted air flow to the engine. All TJM Airtec snorkels are perfectly engineered to supply the correct volume of air or better to the engine which may improve your engines efficiency.
- › Designed, engineered and moulded in Australia from high quality UV-resistant polyethylene for maximum strength and rigidity. All TJM Airtec snorkels incorporate stainless steel hardware.
- › TJM Airtec snorkels are not only well engineered but are carefully designed to be aesthetically pleasing. Each Airtec snorkel is designed to flow with the vehicles natural styling, they are easily the best looking snorkels on the market.
- › Easy installation minimising modifications to vehicle's original components.
- › TJM Airtec snorkels offer a wide range to fit most popular 4WD makes and models.
- › Designed exclusively for TJM and supplied through the TJM Australia wide and international sales and service network.

## Typical Airtec snorkel fitment



## Ensuring optimum snorkel performance

Most modern vehicles have a one-way valve (duck bill) fitted to the air box allowing any water ingress to drain out, whilst blocking any water entering from underneath the vehicle.

Please be aware that many vehicles do not have this valve, instead are fitted with a simple drain hole in the air box. TJM suggests that you plan ahead before a trip. If you plan to enter water deeper than air filter level, the drain hole should be sealed tight to prevent any water entering the air box. Keep in mind that any rain droplets caught in the snorkel cannot be drained. If you desire to do more low key river crossings, then we suggest that the drain hole be left open as the threat of water ingress from below is unlikely. It is also recommended to undertake regular checks of the air filter to ensure it is not blocked and can operate at peak performance. Please discuss your situation with your local TJM expert to determine which alternative suits you best.

## How a TJM Airtec snorkel disperses rain water



- › Rain water drops entering the air ram of a TJM Airtec snorkel is captured at the back of the inside curved surface, pooled around the base of the air ram and dispersing through the drain holes.
- › In the off chance that any minute rain water droplets find their way into the snorkel body, they will be atomized at the air filter.
- › Finally, the last line of defence is the original water drain in the vehicle's air cleaner assembly.<sup>†</sup>



**UV** 20  
24  
**CERTIFIED**  
DESIGNED TO OUTLAST AUSTRALIAN CONDITIONS

### **A TJM Airtec snorkel is manufactured to last**

Significant research and development has been undertaken to ensure every TJM Airtec snorkel is built to last. We take pride in developing top quality product knowing that you can have peace of mind when our products are put to the test.



### **Impact resistant**

TJM Airtec snorkels are designed and manufactured in Australia from Australian plastic materials containing a combination of special additives and strong bonding processes. The result is a product with strong physical properties and tough impact resistance.

In colder temperatures the true strength of the TJM Airtec snorkel becomes apparent. Some competitors snorkels are invariably weaker in the cold because of the manner in which they are manufactured. A simple knock from an overhanging branch can crack the snorkel body rendering it useless.





## Designed for extreme temperatures

Snorkel components out of sight, underneath the bonnet are an integral part of the complete snorkel system and are relied upon to transfer air from the snorkel body to the vehicle's air box. These components are exposed to extreme temperatures often exceeding 100° C. TJM understands the importance of using materials that can withstand extreme temperatures as well as being tough enough to endure harsh vibrations.



## UV stable

Exposure to polyethylene to UV radiation leads to degradation of the material, which over time results in surface defects and ultimately cracking or failure of the product. To prevent this, most grades contain UV stabilisers. The efficiency of this of this stabilisation depends on the type of stabiliser used as well as the stabiliser content in the material.

A measure for how well a material is stabilised is the UV rating which is based on the results of accelerated weathering tests and directly relates to how many hours samples have been exposed to artificial sunlight before a defined loss in mechanical properties occurs. The higher the UV rating, the better the stabilisation of the material and the longer its life expectancy outdoors.

Although the Australian Standard for base resins accepts a rating of UV8, this level of quality simply does not meet our expectations. As a result, TJM Airtec snorkels are processed using materials with a much higher rating of UV20 – UV24.



## Colour fast

When it comes to incorporating colour into the snorkel, TJM undertakes a process called 'colour compounding'. Basically the pigment is mixed into the molten base resin before the product is even moulded. This procedure ensures that the colour pigment is evenly saturated throughout the polymer, preventing it from rubbing off or bleeding. In addition, this process does not inhibit the particles of the polymer from fusing together, enabling the formation of a strong and dense product.

Some competitors snorkels are subjected to a cheaper and easier pigment solution called 'dry blending'. This process not only results in a blotchy appearance, it also reduces the strength of the product. In dry moulding, the pigment coats the polymer particles - effectively forming a barrier that prevents the particles from properly fusing together.



## Customised design

Every vehicle has a different shape, so why should a snorkel be any different? We tailor each TJM Airtec snorkel to compliment the natural style and curves of the nominated vehicle.

Whether it's modifying the mould to allow for an aerial, or designing the air ram to follow the curve of the windscreen you can be confident that every TJM Airtec snorkel not only performs, it looks the part too.

### **We started it**

Founded on mateship in 1973, TJM is the Aussie pioneer of 4WD equipment.

### **We're tried and proven**

Australia's rugged, yet diverse landscape has provided the ideal testing ground. Whether your journey takes you on or off road, for work or play, TJM has the gear you can depend on.

### **We're tough, yet sophisticated**

Using the latest engineering and manufacturing technology, our products are exposed to stringent testing and thorough quality assurance procedures to guarantee our customers receive nothing but the best.

### **Everybody wants a piece of us**

Our research and development team brings leading-edge and performance-driven products. We're the experts not just on our home turf but also offshore, so it's not surprising TJM's Aussie innovations are exported around the globe.



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