TJM PRO LOCKER
AIR LOCKING DIFFERENTIALS

Technical Information

PART NO: TJMPROLOCKER REVMS

YEAR 2 WARRANTY 40,000Km

... a member of the cmi group
Getting out into nature and experiencing the world away from the urban sprawl is something that can really only be done using a 4WD. Vehicle manufacturers know this, that is why so many models are available today.

Why is it though that your standard 4WD is challenged when tackling the smallest of obstacles? Most of the time it all comes down to traction. Or lack there of, so to speak.

Loss of traction is the enemy of any four wheel driver and lack of it can turn your well planned adventure into a frustrating holiday hell.

Your factory 4x4 has a differential designed for road use and allows easy cornering by delivering torque to the wheels experiencing the least resistance to prevent the tyres from wearing out prematurely. This process works well on the “black stuff” but when you get off road, your engine sends all its power to the wheels that will often come off the ground, leaving you motionless.

TJMs Pro Locker locking differential is the solution to this problem!

The TJM Pro Locker Locking Differential is an innovative air operated diff locker that allows you, at the flick of a switch, to send equal drive to both wheels, giving you the best possible chance or tackling the toughest obstacles.
The TJM Pro Locker is an air-operated differential lock that, when fitted and engaged using compressed air, allows you to have equal drive to both wheels.

Pro Locker works by engaging a locking ring over one axle gear which locks the gear to the carrier and immobilizes the differential pinion gears, giving you equal drive to both wheels & allowing you to tackle the toughest terrain.

How A Standard Differential Works

When a vehicle with four wheel drive engaged is driven in a straight line, the standard differentials in most vehicles allow equal transfer of engine torque to all four wheels. When the vehicle turns a corner, torque is delivered to the wheels that experience the least resistance. This principle ensures that the inside wheels will rotate freely and power is delivered to the outside wheels to prevent tyres from scuffing and wearing out prematurely.

Because the standard differentials transfer the torque to the wheels that encounter the least resistance, you will lose drive when on loose/slippery ground or if one wheel is suspended in mid air. This becomes a problem as the wheel will spin and will not allow the wheel on firmer ground to drive the vehicle out of the situation.

How a TJM Pro Locker Works

Once engaged, the TJM Pro Locker operates by locking in both axles & delivers equal drive to both wheels. This means that an equal amount of engine torque is transferred to both wheels, giving you the best possible chance of driving out of situations you may not have previously been able to get through.

Unlocking the differential involves the pressurized air being redirected through an exhaust port on the solenoid valve. A spring in the actuator pushes the selector ring back, which in turn pulls the locking ring back out of engagement with the side gear. The differential is now unlocked and the gears are free to differentiate as before.

Reinforced rubber external hose extension is supplied as standard to minimize the risk of the airline being damaged by debris while driving.

No rubber ‘O’ rings that can wear out.

Robust design equals less maintenance.

Recessed coloured L.E.D. cabin switches show clearly when TJM Pro Locker is on or off.

Patented design that has been used and proven in the field for over 20 years.

TEN ADVANTAGES of owning a TJM Pro Locker

1. Unique air operated piston style actuator aims to eliminate the risk of oil being pumped up the airline.
2. Hardened thrust washers and the size of the locking ring make Pro Locker extremely strong in operation.
3. Stronger materials and a thicker carrier compared to most standard differentials.
4. Larger pinion gears compared to most standard differentials.
5. No carrier modification needed other than the drilling and tapping of a bulkhead fitting port.
6. Large pre tensioned 10mm bolts hold the hemisphere together.
7. Reinforced rubber external hose extension is supplied as standard to minimize the risk of the airline being damaged by debris while driving.
8. Recessed coloured L.E.D. cabin switches show clearly when TJM Pro Locker is on or off.
9. Patented design that has been used and proven in the field for over 20 years.
10. TJM’s Two Year, 40,000km warranty on Pro Lockers is limited to the mechanical components.

FEATURES

PRO LOCKER

- INDEPENDENT LOCK ON/OFF
- L.E.D. LIGHT SWITCHES
- COMPRESSOR USED FOR MULTIPLE APPLICATIONS
- OPTIONAL REMOTE MOUNTED AIR RESERVOIR
- ONE PIECE SOLID CROSS SHAFT
- REINFORCED RUBBER HOSE EXTENSION (STANDARD)

* High-Visibility L.E.D. Light Switches Engage & Disengage TJM Pro Lockers

Climbing Steep Hillsides Has Never Been So Easy
In 2005, TJM combined a renowned patented design, extensive testing and finally TJM’s established production capabilities, and the TJM Pro Locker was born. This new generation of diff lockers took the military proven Pro Locker design and added to it nine months of intensive R&D testing before TJM was prepared to release the TJM Pro Locker to the marketplace.

Now, based on the comparative advantages, the experienced development staff at TJM believe that the TJM Pro Locker is superior to any other locker available today.

You can be assured that the combination of a simplistic design with components of exceptional strength and quality will leave you satisfied with your choice for years to come.

TJMs Pro Locker is available for an ever increasing range of vehicles. Please check with your local TJM 4WD store for all current pricing and availability information.
Our 4WD accessory range is distributed and serviced throughout an Australia-wide network of over 50 retail outlets and exported to more than 45 countries. We pride ourselves on only making and selling products that meet and exceed the expectations of every one of our loyal customers. Should you ever require it, TJM's warranty, back-up and after-sales service is second to none.

With a testing ground like Outback Australia at our disposal, you can be assured that every new piece of TJM equipment has been put through its paces in one of the harshest environments in the world before we make it available to you. We know that having equipment fail you in the wrong situation can be the difference between life and death, so we do our very best to provide you with products that keep on performing throughout the life of the vehicle and beyond.

More information on TJM's extensive range of products and store locations is available at www.tjm.com.au.