

TAC-6



6 wheel drive
Interchangeable Capable
Multi-function Versatile Robust Tested
Lightweight Armoured Modular Reliable
Functional Serviceable Durable Capacity
Efficient Heavy duty



ABOUT THE TAC-6



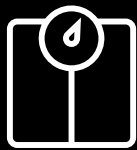
Introducing the TAC-6 multi-role tactical and utility solution. This is a culmination of a 7-year long development project that has been comprehensively engineered, tested exhaustively and carefully designed to meet several requirements using one incredibly capable platform.

With an impressive off and on road Gross Vehicle Mass of 7 tons, a state-of-the-art suspension system, advanced drivetrain, and an exceptional operational range, the TAC6 is the culmination of our relentless pursuit over the past seven years to create a versatile military vehicle that exceeds the expectations of everyone that encounters it.



Development on the project started with a request from a Special Forces regiment for a vehicle that could handle several disciplines, be able to get in and out of non-permissible environments quickly, that did not require any special training to operate and could be easily serviced in the field by its operators. Sounds like a tall order, which it is, however we believe we have the perfect solution.

From the very inception of the project, our focus was on designing a military platform that would excel in deployment, maintenance, reliability, and capability. Every aspect of the TAC6 has been meticulously engineered, leaving no room for compromise when it comes to strength, functionality, or practicality. In an environment where product failure simply is not an option, the TAC6 has been comprehensively over-engineered to ensure it can not only go anywhere, but come back again, every time.



4 400kg
PAYLOAD



2 200 KM
CRUISING
RANGE



50%
TRACTION
INCREASE

[Watch the video here](#)



ABOUT THE TAC-6

The beauty of the platform is its modular configuration abilities. It is specifically designed to meet any requirement in its field of operation without hampering its capability or reliability. Similarly, the platform lends itself to bespoke design of any possible requirement that may exist in the future. Its inherent capabilities are unmatched by anything in a similar vehicle class and are even greater than larger, heavier tactical vehicles that require special training to operate. Anybody with a basic drivers licence can operate the TAC-6 with ease.

The TAC-6 was engineered for more than just one purpose, but with one baseline trait: the ability to go anywhere and come back again, over and over, with anyone. It has been over-engineered and rigorously tested in the harshest environments without a single mechanical failure.

After more than seven years of extensive research and development, backed by over 250,000 kilometres of rigorous testing in Europe and Africa, the platform is now ready for launch.



250 000 kms
TEST COMPLETED



6X2/6X6
DRIVE MODES



SERVICE IN
THE FIELD



MODULAR OPTIONS FOR THE TAC-6



The base chassis and platform can fulfil any one of these roles and more:

- Personnel carrier
- Tactical vehicles, with variety a of weapons platforms such as:
 - ❑ Turret mounted 12,7mm
 - ❑ Turret mounted 14,5mm
 - ❑ Turret mounted 20mm
 - ❑ Turret mounted 30mmx113
 - ❑ 60mm Mortar system
 - ❑ 81mm Mortar system
- Ammunition Carriers
- Mechanical Field Workshop
- 3500 L Fuel or Water Tanker
- Water purification plant
- Firefighting Unit
- Food/Cold Haulage
- Generator Units
- Small vehicle transport
- Logistical support
- Radar Platform
- Drone Platform
- Anti-tank Guided Missile Launch Platform
- Humanitarian Aid delivery



TRANSFER CASE

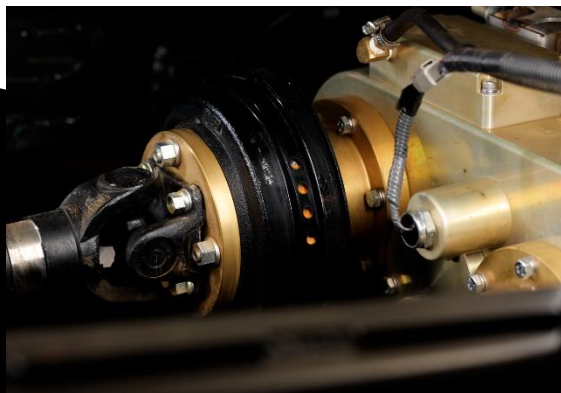


Designed to seamlessly transition between 6x2 and 6x6 configurations, this transfer case employs internal synchros for smooth engagement, allowing the platform to effortlessly adapt to any environment with ease and reliability.

Unlike traditional chain-driven systems known for their inherent drawbacks, the TAC6 transfer case utilizes a gear-driven mechanism. This deliberate choice ensures that the entire drivetrain maintains the exacting OEM standards and eliminates slap back often associated with chain-driven systems.



The transfer case housing is CNC machined from a solid block of aircraft-grade aluminium. This process guarantees unmatched strength and reliability. Keeping the driver informed and in control, the integrated instrument cluster features indicators for the 6x6 system and axle lockers in real-time.



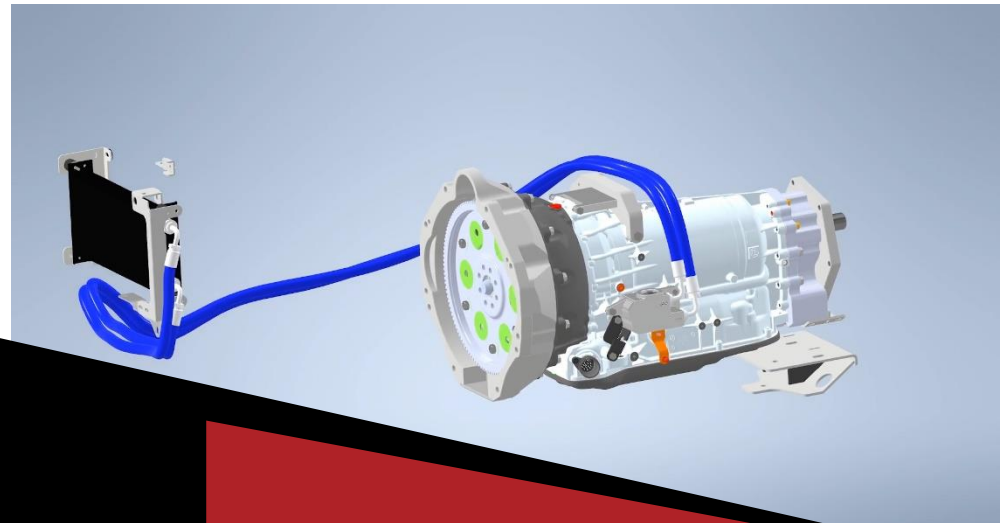
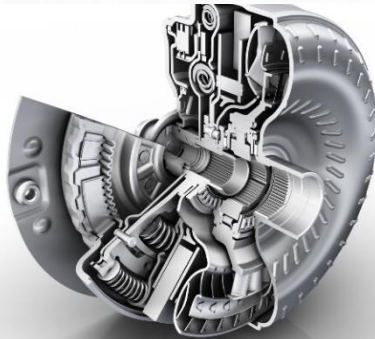
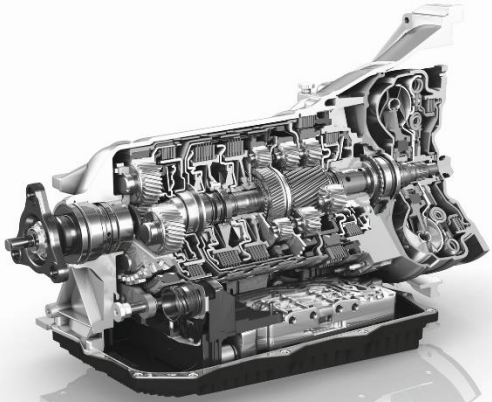


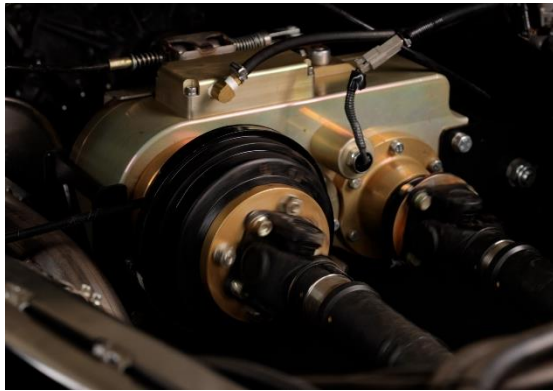
OUR TRANSMISSION SOLUTION

The ZF 8HP90 automatic gearbox rises above all others when unyielding performance and reliability are required. It is purpose-built by ZF for the TAC6 and exclusively available to exceed the demands of modern warfare.

With a torque capacity of up to 1000 Nm, it harnesses formidable power, while its eight gears and wide gear ratio spread ensure optimal power delivery across diverse terrains. Distinguishing itself from the competition, the ZF unit boasts the option of an integrated automatically deployable hydraulic stabilizer system at low speed. This revolutionary feature neutralizes lateral pivoting movement inherent to heavy-caliber weapons, ensuring unparalleled accuracy in critical military operations.

Built with high-strength gears, bearings, and advanced cooling systems, the 8HP90 exhibits resilience and consistency even in extreme temperatures and off-road environments. Its advanced cooling system dissipates heat, optimising performance during heavy loads and in hostile surroundings.





DRIVE TRAIN

At the core of the TAC6 drive train are the drive shafts, constructed using off-the-shelf, heavy-duty DANA components. These components are renowned for their exceptional strength and durability, ensuring that the drive shafts can withstand the most rigorous demands encountered during military operations.



One critical component that epitomizes the drive train's resilience is the drop forged drive coupler. Specifically designed and manufactured for the TAC6, this drive coupler is an astonishing 115% stronger than standard units. Its role in maintaining the platform's mobility cannot be overstated, as it ensures seamless power transmission between the factory transfer case and the 6x6 transfer case. We have ensured that the drive coupler universals can be easily serviced in the field using readily available heavy-duty DANA components. This empowers operators to maintain and repair the platform without relying on third-party unique components, thereby enhancing operational readiness and minimizing downtime.

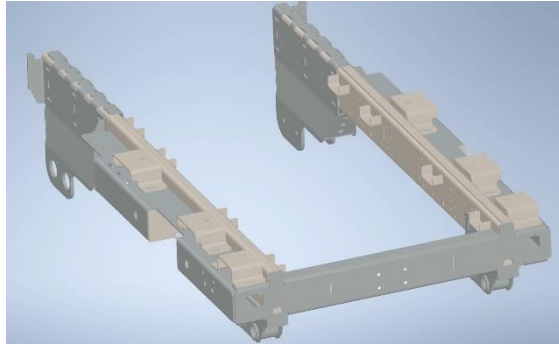




6X6 CHASSIS DESIGN

Through exceptional engineering and careful consideration, the TAC6 6x6 chassis design achieves the perfect balance between strength, load-carrying capacity, and flexibility. By utilizing 5mm high-strength steel and strategically placed stiffeners, we have created a robust and reliable platform that can confidently handle the rigors of heavy-duty applications.

The decision to preserve the factory chassis length further reinforces the TAC6's ability to evenly distribute forces, enhancing its stability and overall performance under varying operational conditions.





TAC-6 SUSPENSION

We understand the importance of adaptability and reliability in demanding operational environments. By utilizing standard length leaf springs, original equipment standard components, and allowing for customization and compatibility with various lift systems and tyre sizes, the TAC6 suspension ensures that your vehicle is equipped to handle any mission with confidence and ease.

This unique approach not only provides operational flexibility but also simplifies repairs and maintenance as readily available off-the-shelf components can be used, eliminating the need for reliance on unique third-party parts such as bushings, shock absorbers, springs and shackles.

Clients have the flexibility to incorporate suspension lift systems ranging from 2 inches to 4 inches without the need for extensive suspension modifications. This allows for easy adaptation to various terrains and operational scenarios, ensuring optimal performance and maneuverability in diverse environments.

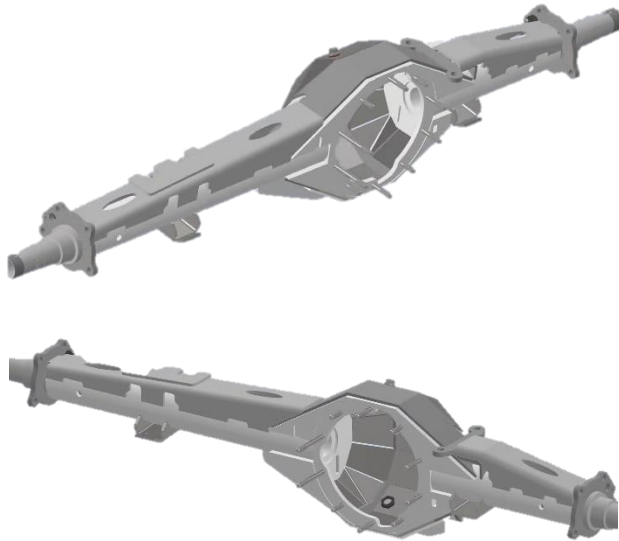
To further enhance flexibility, the TAC6 suspension design allows for the use of various tyre sizes. Whether it's the standard 31" tyres or the impressive 35" tyres, the platform can accommodate different setups without the need for extensive modifications.





TAC-6 AXLE HOUSINGS

The TAC6 axle housing features a proven full-floating side shaft setup. This design allows for the easy removal of side shafts in the event of damage, enabling swift repairs and minimizing downtime. Using a unique three-piece side shaft design and interchangeable components between the two rear axle housings, the TAC6's 6x6 system remains mobile even if two rear side shafts are damaged and removed.



The TAC6 platform's axle housings have been meticulously designed and engineered to meet the demanding requirements of high GVM off-road applications. Recognizing the inherent limitations of factory housings, we developed replacement axle housings specifically tailored for the TAC6 platform.

The TAC6 axle housings are compatible with the OEM components, including the differential centre unit and wheel hubs. This compatibility allows for seamless repairs and maintenance, as well as the use of proven OEM components, ensuring peace of mind and streamlined operations.

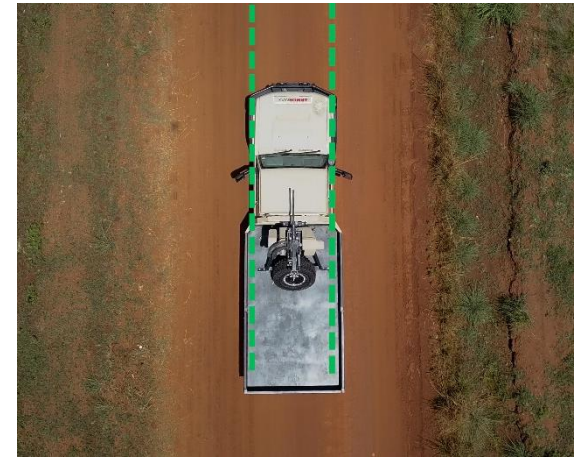
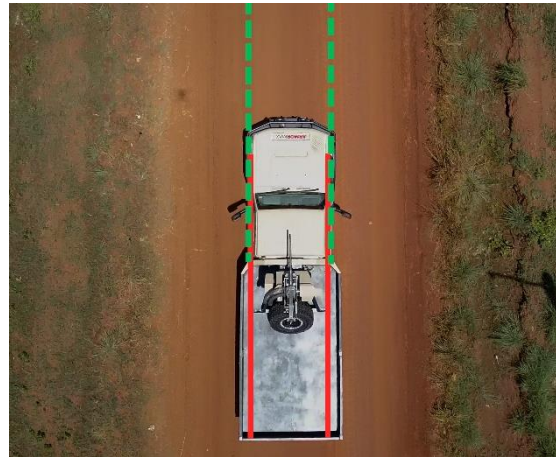
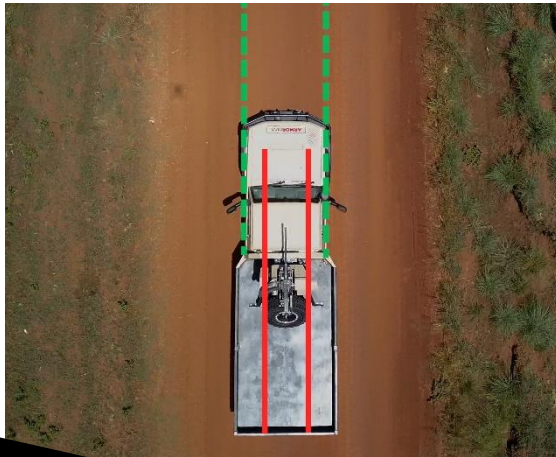
To further enhance performance, the TAC6 axle housing incorporates increased oil capacity, resulting in cooler operating temperatures and improved gear oil longevity. This safeguards against viscosity breakdown, ensuring optimal lubrication and protection for critical components.



TAC-6 AXLE HOUSINGS

The new and improved axle housing design aligns the rear track width with the front axle, eliminating the need for bolt-on applications or wheel spacers. This not only enhances stability and handling but also eliminates potential failure points during operation.

The spindle shafts supporting the wheel hubs have been reinforced with stronger materials, providing increased strength and resilience to withstand the rigors of traversing uneven terrain at full GVM.





BRAKING SYSTEM

The TAC6's braking power surpasses all expectations within its vehicle class. Whether hauling heavy loads or maneuvering through challenging terrains, the TAC6's braking system delivers unrivalled stopping power.

The upgraded disc braking system features on all 6 wheels gives 50% more braking power over a 4x4 vehicle. To withstand the intense heat generated during high-stress braking events with a full payload and tow load, the TAC6 braking system exhibits a remarkable thermal capacity of up to 500° Celsius. Moreover, the TAC6 platform incorporates a revamped drivetrain-operated hand brake. This redesign substantially enhances the system's holding power at full GVM, promoting safety and stability.



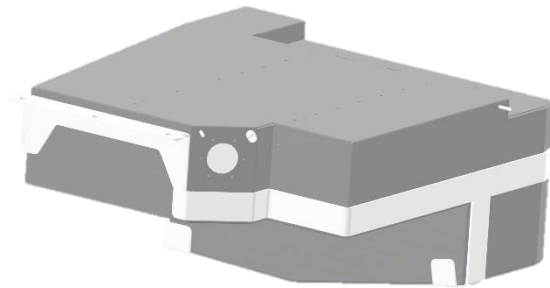
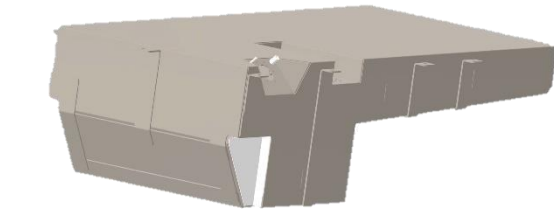


FUEL SYSTEM

The TAC6 platform features a purpose-built fuel system designed to meet the demands of extended operations and remote missions. With a focus on increased fuel capacity and enhanced reliability, the TAC6 sets a new standard in operational range.

The TAC6 replaces the factory fuel tanks with two specially designed tanks. The main fuel tank boasts an impressive capacity of 210 liters, while an auxiliary tank adds an additional 90 liters. With a total usable fuel capacity of 300 liters as standard, the TAC6 offers an impressive operational range of over 2,000 kilometers. Furthermore, if your requirements call for even greater fuel capacity, the TAC6 can be upgraded to hold up to 560 liters of fuel on the double cab and a massive 610 liters on the single cab. This exceptional fuel capacity ensures extended mission durations and minimizes the need for frequent refueling without impacting usable space.

The TAC6 maintains the use of the factory control systems to ensure accurate fuel management and readings. The fuel tanks are securely mounted on anti-vibration mounts. This strategic placement prevents the tanks from experiencing excessive stress during high-flex off-road conditions, ensuring their structural integrity and reliability.





BEAD LOCK WHEELS

With an impressive rim rating of 1,655 kg per wheel, the bead lock wheels are built to handle the demands of heavy loads while staying well within the total GVM. The key benefits of bead lock rims are their ability to significantly reduce the chances of tyre de-beading. Even at low tyre pressures in challenging off-road and sandy conditions, these rims provide enhanced security, keeping the tyre securely in place.



Tyre changes become a breeze with just a single 13mm socket spanner. There's no need to carry specialized tyre changing equipment, as the simplicity of the process ensures quick and hassle-free replacements. Military style split rims are also available for fitment.





TOWAGE, SAND FLOTATION & STABILITY



Recognizing the limitations of the factory cross member, prone to breaking in harsh off-road towing conditions, the new chassis features a boxed high-strength steel rear cross member rendering tow failures a thing of the past. This enhancement allows the platform to accept a military-grade tow hitch.



The TAC6 platform delivers a remarkable increase of over 50% in traction. This significant boost empowers the platform to effortlessly navigate uneven landscapes at maximum GVM. When it comes to sand flotation, the TAC6 platform stands tall above its 4x4 counterparts. With superior engineering the result is unparalleled sand flotation. By precisely positioning the axles to align with the tyre size, weight is evenly distributed across all axles, minimizing drag and maintaining forward momentum. The TAC6 effortlessly glides through sandy terrains, surpassing any 4x4 in its load category.



Stability is a crucial factor for both on and off-road operations, and the TAC6 platform has harnessed the power of a third axle to deliver unrivalled stability under heavy loads. This ingenious design eliminates the need for heavy-duty anti-sway bars, allowing the axles to articulate freely and maintain optimal traction on challenging terrains. Off-road, the platform's chassis remains flatter, reducing roll and ensuring maximum stability, even in the most demanding situations. On-road, corners and crosswinds are handled with ease, as the third axle minimizes chassis roll, providing an unwavering and secure driving experience.



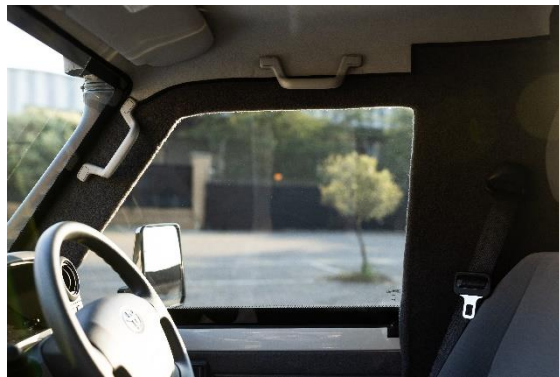
ABOUT OUR ARMOURING

As a customer option, the TAC-6 can be fitted with STANAG level 1 or B6 discreet vehicle armour. The armouring package makes use of the lightest, high-grade ballistic materials available globally to not only maximize safety but also retain as much dynamic ability as possible.

This is a 360-degree solution that ensures occupants of the cab are unequivocally protected from all angles while under attack from assault rifles. 40mm ballistic glass is employed throughout to replace the OEM windows and provide maximum clarity while providing a safety barrier with outside threats.

We achieve this both through ISO 9001 certified production processes, and the selection of the highest quality of lightweight material available. These materials include:

- Ballistic Glass from the world's top suppliers.
- Opaque lightweight armour which is constructed with an ultralight strike face with a hardness rating of 9 on the MOH hardness scale (Diamond has a 10 rating) in conjunction with our UHMWPE armour.
- Ballistic steel sections and overlaps using Armox ADV.
- Armorcote protection for fuel tank and other areas.
- Run flat bands and in-house PTT intercom system.





TAC-6 ADVANTAGES



When it comes to mobility, the TAC6 platform outperforms any full-sized 4-ton truck available today. Extensive testing across diverse landscapes in Africa and Europe has solidified its reputation as the epitome of mobility. The TAC6 platform's exceptional performance is not limited to a single terrain. Whether navigating through bustling urban environments or conquering rugged rural landscapes, this platform effortlessly excels in both scenarios. Its higher mobility sets it apart from other trucks with similar load capacities.

The TAC6 platform, available in both single cab and double cab configurations, presents a formidable universal load frame, tailored to meet specific client requirements. This exceptional platform serves as a versatile and adaptable foundation for a wide range of modular units, delivering unparalleled flexibility and functionality.

What sets the TAC6 platform apart is its exceptional suitability for armoured vehicles. With a robust GVM of 7000 kg, this platform provides unmatched stability and traction, ensuring optimum performance even in the most challenging terrains. Armoured vehicles mounted on the TAC6 platform experience unrivalled capabilities and superior maneuverability, guaranteeing mission success and operator safety.



TAC-6 ADVANTAGES OVER THE COMPETITION

- Water tanks can be fitted with ease to required specification.
- Personnel capacity can range from 2 to 14 people, lightly armoured and unarmoured.
- APC variants as a 4x4, 6x6, double cab or full extended wheelbase APC.
- The only 8 speed automatic available for this drivetrain and chassis developed by ZF exclusively for the TAC-6
- The TAC6 is built with components that are available off the shelf, and can be serviced by any Toyota dealer or in the field.
- Weapon Mounts can be configured with multiple mount options and remote operation ability.
- Fire suppression system can be installed to specific requirements.
- Two spare wheels can be fitted at the rear.
- Towing capability of 3500 kg braked trailer.
- Use of standard chassis length improves strength over other LC based solutions.
- Vehicle is easily transported by land, air or sea. Wheels or chassis mounts can be used to affix vehicle.
- Vehicle is far lighter and agile than any other solution that can carry the same payload.
- Operational range is unsurpassed.
- Deployment costs are saved as few vehicles are needed for operations that would normally use much larger vehicles to carry less load.
- Service intervals are 1 year/10 000 kms.



OTHER APPLICATIONS



Whilst the TAC6 was designed and engineered for military purposes, the modular platform does lend itself to other applications where reliability, flexibility, strength and carrying capacity are required. Currently in production and development is a bespoke, luxury game viewing vehicle that makes use of the high GVM advantages to create a comprehensively outfitted vehicle like no other. A fully electric drivetrain is also available through a strategic partner that builds electric Land Cruisers for the mining sector.

Customization and accessory options that have become popular with Land Cruiser 79 owners worldwide are fully compatible with the TAC6 platform. Being a modular platform that can be customized to any customer requirement, the TAC6 would equally make for the ultimate hunting, overlanding or farming vehicle.





DIMENSIONS	S/CAB	D/CAB	TRANSMISSION	
Length (mm)	5995	5995	Make	Toyota
Length LWB (mm)	6495	6495	Type	5 Speed Manual & Low Range 8 Speed Auto Optional
Width (mm)	1870	1870		
Height (mm)	2015	2015	TRANSFER CASE	
Wheelbase (mm)	3180/4150	3180/4150	Quantity	2
Ground Clearance (mm)	265	265 (under diff)	Make	Toyota TC
	350	350 (to chassis)	Type	1 Speed Gear Drive
Approach Angle (deg)	40	40	Make	Commander TC
Departure (deg)	38	38	Type	1 Speed Gear Drive
Breakover (deg)	15	15		
Turning circle/LWB (mm)	15 610 / 16 260	15 610 / 16 260	STEERING SYSTEM	
Fuel tank (litres)	300	300	Hydraulic	
Cruising range estimated (kms)	2000	2000		
MASS			AXLES	
GVM (kg)	7 000	7 000	Front	Toyota Axle
Tare (kg)	2 600	2 800	Centre	CDS HD TC41A200
Payload (kg)	4 400	4 200	Rear	CDS HD TC41A300
Payload LWB (kg)	4 270	4 070		
SEATING			SUSPENSION	
Quantity (in cab)	2	5	Front	Coil Spring, Longitudinal Arms, Panhard Rod with Castor Correction
			Rear	Leaf Springs, semi elliptic. Bottom mount
PERFORMANCE			BRAKES	
Max speed (km/h)	160	160	Service Brake	Dual Circuit Hydraulic, 4 Circuit ABS, 6 Pot all round
Low Range Gradeability	70%/35%	70%/35%	Park Brake	Transfer Case mounted, Driveshaft Disc Park Brake
PROTECTION LEVEL	STANAG level 1	STANAG level 1		
ENGINE			WHEELS AND TYRES	
Toyota			Rim Type	17" X 8.5J Bead Lock Rim, 1 655 kg rated
4.5D V8 (1VD FTV) Turbo Diesel			Tyre Size	285/70/R17 (32") to 35"
Max Power (kW @ RPM)	151 @ 3400			
Max Torque (Nm @ RPM)	430 @ 1200 3200			
Engine is unmodified and left as standard				

SPECIFICATIONS TAC-6



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