

ULTRA LIGHT
TACTICAL VEHICLE
(ULTV)

Armormax Defence is proud to present a brand new project that adds a new dimension to multirole tactical mobility in non-permissive environments. Configurable in both armoured and softskin variants, this versatile vehicle is geared for special forces operations or commercial applications in the toughest of terrains.

We are thrilled to present our 6x6 concept—a modular, versatile and capable vehicle that has application in any environment. The vehicle and it's many configuration possibilities is suitable for the military, agriculture, mining, forestry and leisure applications.

The cab can be configured as standard soft-skin, Lightweight Armoured to B6, or open roll-bar caged. In the roll-bar configuration, a modular easy-on/easy-off armour kit can be included along with fold-down, segmented frontal ballistic screens allowing the use of pintle-mounted LMG's.

This vehicle has been over-engineered and rigorously tested to ensure it offers unrivalled capabilities while remaining as easy to use as the standard Land Cruiser.

The 6x6 runs in either 6x2 or 6x6 format, thanks to a second transfer case that drives the third axle alone. Safety measures have been built in as standard. Importantly, a forged drive coupler between the standard transfer case and 6x6 transfer case has been employed.

To ensure longevity and easy field servicing, the custom 3-piece drive shafts are built using heavy duty, off the shelf DANA components. The side shafts are interchangeable on each rear axle and can be easily removed from the wheel hub.

Note that no cutting or shortening of the original chassis has been done. New form bent 5mm high strength steel is used to extend the chassis that overlaps the standard chassis. This spreads the load stress throughout the entire chassis.

The suspension is designed to use standard length leaf springs, as well as military grade original equipment. The setup can be adapted to a specific operational requirement, and can use lift







systems to gain up to 4 inches of lift. The design also allows for 6 snow tracks to be fitted if required. With the added weight, the brakes have received attention too. Discs are upgraded to 350 mm rotors with 6 pot callipers all round. The handbrake is mounted to the transfer case and locks the driveshafts

The components that receive the most attention though are the axles. The standard rear axle is replaced with a unit that runs true with the front axle which gives a track correction the standard Land Cruiser doesn't have. No wheel spacers or other bolt on devices are thus needed to correct the track. The same custom axle is used for the third axle so that all 6 wheels run in the same track. They use the factory differential centre unit to lower maintenance costs.

The spindle shafts that support the wheel hubs have been designed from a stronger material. The side shafts can easily be removed from the hub and interchanged. The two rear axles remain completely independent of each other so in the unlikely event of two side shafts failing, the vehicle remains operational. The axle changes

20 000 KMS

OFF-ROAD TESTING 4 400 KG

PAYLOAD CAPACITY 2" TO 4"

LIFTING ABILITY 32" TO 35"

TYRES USED











have given the 6x6 unmatched sand floatability and result in a 50% increase in traction. Factory fuel tanks are replaced by two purpose built tanks with a combined capacity of 310 litres, which allows for a 2100 km operational range.

Not only is payload capacity increased, but towing capacity is greatly increased over any other light vehicle. To aid in this, bead lock wheels are used that are rated to 1 655 kg per rim.

The cab is B6 armoured with a combination of lightweight synthetic armour and ballistic steel in the overlap areas. The best ballistic glass that is available is fitted to all windows, with the drivers window able to open to about 5 cm. The fuel tank is protected with self-sealing Armorcote, the battery and ECU are protected with lightweight armour, as is the floor and firewall of the vehicle. The armour is designed to wishstand rounds from assault rifles including a 7.62x39, 5.56 (223),

SS109 and 7.62x51.

The modular setup of the vehicle has numerous applications, including but not limited to:

- Personnel Carriers.
- Ammunition Carriers.
- Mobile Mortars, up to 120 mm.
- Mechanical Field Workshop.
- 3500 L Fuel or Water Tanker.
- Food/Cold Haulage.
- General Cargo.
- Off-Road Adventure setups.
- Generator Units.
- Small vehicle transport.

The 6x6 has already undergone rigorous testing in Africa and France in both military and civilian applications. Over 20 000 kms was covered in each test vehicle without any mechanical failures.

2100 KMS

OPERATIONAL RANGE +50%

TRACTION INCREASE

350 MM

BRAKE DISC

6X6/6X2

DRIVE MODES

DIMENSIONS S/CAB D/CAB Length (mm) 1870 1870 Width (mm) Height (mm) Wheelbase (mm) Ground Clearance (mm) 2015 2015 3180/4150 3180/4150 265 265 (under diff)
Approach Angle (deg) 40 38 40 Departure (deg) Breakover (deg) 38 15 15 Turning circle (mm) 15 610 15 610

MASS
GVM (kg) 7 000 7 000
Tare (kg) 2 600 2 800
Payload (kg) 4 400 4 200

SEATING
Quantity (in cab) 2 5

PERFORMANCE
Max speed (km/h)
160
160
Low Range Gradeability
70%/35%
70%/35%

PROTECTION LEVEL B6 Armormax

ENGINE
Toyota 4.5D V8 (IVD-FTV)
Toyota 4.2D Straight Six (IHZ)
Toyota 4.0 Petrol V6 (IGR-FE)

TRANSMISSION

Make Toyota

Type 5 Speed Manual & Low Range

TRANSFER CASE

Quantity 2
Make Toyota TC

Type 1 Speed Gear Drive
Make Commander TC
Type 1 Speed Gear Drive

STEERING SYSTEM Hydraulic

 AXLES

 Front
 Toyota Axle

 Centre
 CDS HD TC41A200

 Rear
 CDS HD TC41A300

SUSPENSION

Front Coil Spring

Longitudinal Arms
Panhard Road with
Castor Correction
Leaf Springs, semi-

Rear Leaf Springs, semielliptic. Bottom mount BRAKES

Service Brake Dual Circuit Hydraulic 4 Circuit ABS, 6 Pot all round

Park Brake Transfer Case mounted

Driveshaft Disc Park Brake

WHEELS AND TYRES

Rim Type 17" X 8.5J Bead Lock Rim

1655 kg rated

Tyre Size 285/70/R17 (32") to 35"





Armormax Defence (Pty) Ltd

011 462 6079

www.armormax.co.za

