

2004 Toyota Land Cruiser LC 105 Level B-6 Armoured SUV

The armour process has been integrated after the base vehicle production, without changing the exterior appearance. The armour is engineered in such a way that all gaps between the main body of the vehicles and the doors are overlapped and fitted with to prevent foreign projectiles or splinters from entering the passenger compartment.

Materials:

All armouring materials utilised have been ballistically tested by independent European authorities. Test reports can be presented upon request. However complete protection is not possible for reasons of design and modern weapon technology.

Opaque areas:

All opaque areas including the roof are protected against soft core projectiles fired with the following and all lesser weapons at 90° and 45° (roof) impact angle in accordance with the CEN

- Calibre 7.62 x 39 mm, FJ/PB/SC, AK 47, (Kalashnikov) OBR-43 PS
- Calibre 5.45 x 39.5 mm, APFJ/PB/SCP, AKS 74, (Kalashnikov) OBR-74
- Calibre 5.56 x 45 mm, FJ/PB/SCP, US rifle M16 A2,SS-109/M-855
- Calibre 7.62 x 51 mm, FJ/PB/SC, "FAL"/"LAR" Nato rifle.

Transparent areas:

All transparent areas are protected against soft core projectiles fired with the following and all lesser weapons at 90° impact in accordance with the CEN.

- Calibre 7.62 x 39 mm, FJ/PB/SC, AK 47, (Kalashnikov) OBR-43 PS
- Calibre 5.45 x 39.5 mm, APFJ/PB/SCP, AKS 74, (Kalashnikov) OBR-74
- Calibre 5.56 x 45 mm, FJ/PB/SCP, US rifle M16 A2,SS-109/M-855
- Calibre 7.62 x 51 mm, FJ/PB/SC, "FAL"/"LAR" Nato rifle

Floor:

The floor of the vehicle is designed in such a way that it will defeat the following hand grenades and all lesser explosives.- Two DM 51 (German Norm) per sqm detonated simultaneously.

Vehicle Specifications

Base vehicle	Toyota Land Cruiser STD, station wagon, off-road-vehicle, new, LHD LWB, 5 doors
Model code	HZI105-GCMRS; For use under extreme climatic and physical conditions
Engine model	1 HZ-4164cc, Diesel 6 cylinders
Output	129 hp / 96 kw
Cubic capacity	4.164 cc
Transmission	manual five gear transmission
Colour	White
Interior	grey seats / cloth interior surrounding
Seats	2 + 3 + x 2 seat rear parallel bench

Dimensions and Weights

Length	4.890mm
Height	1.920mm
Width	1.940mm
Wheelbase	2.850mm
Axle ground clearance	200mm

Suspension and braking system

The entire suspension system such as shock absorbers and coil springs have been changed to upgraded components to ensure reliability and road safety. The vehicle braking system has been adapted to adhere additional weight constraints that have been applied to the vehicle main body components. Tires and rims have been approved for the higher weight ratio according to APAVE recommendations and legal requirements.

Included base vehicle equipment

- Engine & Chassis
- 50 liters extra fuel tank
- 60 amp-hour battery 12V
- 70 amp alternator 12V
- Brake control valve (Load Sensing Pressure Valve)
- Cyclone and pre-cleaner type air cleaner
- Double fuel filter
- Engine oil cooler
- Fuel tank and transfer box protection
- Full floating rear axle
- High altitude compensator
- Power assisted steering

Exterior

- Exterior rear view mirrors
- Front and rear mudguards
- Front and rear towing eyes
- High/low 2-windshields wipers



- Lockable, full size spare wheel mounted under body
- Manual free-wheel hubs
- Rear step bumper
- Rear window wiper
- Semi-sealed halogen lamps
- Swing-out type back doors
- Tubeless tyres

Interior

- Adjustable front seats
- Air cleaner warning
- Air conditioning (no CFC)
- Assist grips x 7
- Battery volt meter gauge
- Cigarette lighter
- Digital clock
- Door ajar warning
- Front and rear door armrest
- Front and rear heater vents
- Front ashtray
- Front center armrest with 3 cup holders
- Front head rest x 2
- Front seat belts x, three-point on out board seats
- Fuel filter warning with buzzer
- Fuel gauge
- Fuel level warning light
- Fuel lid opener switch (keyless)
- Heater control, panel (dial type)
- Interior light
- Interior rear view mirror (day & night)
- Lockable glove box
- Odometer (digital)
- Oil pressure gauge
- Parking brake warning light
- Part time transfer lever
- Pre-wiring for radio cassette including 2 speakers and manual antenna
- Rear door child protection locks
- Rear Headrest x 2
- Rear two-seater parallel bench seats in luggage area
- Rear seatbelts x 3, three point on outboard seats, two point on the center seat
- Seat belt warning
- Side defroster vents
- Speedometer Km/h
- Steering column - tilt & collapsible
- Steering wheel lock
- Sub fuel gauge for second tank
- Sun visor x 2
- Tachometer - Rev. Counter (rpm)
- Timing belt replacement warning light



- Trip meter (digital)
- Vinyl floor covering
- Water temperature gauge

Including accessories

- Operator's manual
- Keys: one + two reserve
- Touch up paint

Including safety options

- Vehicle jack
- First Aid kit
- Road side warning triangle
- Essential tool box consisting of assorted tools according to CEN

Included security equipment:

Alarm siren x 3 tone

In combination with the vehicle intercom and PA system, the alarm siren can be used in the event of an emergency situation. Three individual loud acoustic tones can be utilised for each separate incident. As a security feature the alarm siren can also be used to draw attention if vehicle occupants are subjected to a potential violent/threatening situation.

Anti-explosion exhaust insert

The exhaust insert will prevent the appliance of improvised explosive devices (IED's) from being inserted into the vehicle exhaust system either making the vehicle non-mobile or preventing the vehicle from accelerating with the full power. This is an essential security precaution.

Central door locking system

All five doors are centrally lockable by remote control for easy access.

Battery additional support (Back up)

An additional support battery is installed in the event of the vehicle main battery not operating on full load ; or when auxiliary electrical equipment is being used. The battery is charged by a diode controlled system and its capacity is constantly controlled. If the main battery is flat or develops a defect the second battery relay switch can be operated by the driver without having to leave the confines of the cab.

Battery armour protection x 2

Both batteries, main and support, are protected within a specially armoured box within the engine compartment to protect them against projectiles and splinters. Both armoured boxes can be easily removed in quick time for routine maintenance and battery removal.



Engine fire suppressant system

Fire suppressant cartridge is mounted in the vehicle front engine compartment. In the event of a fire the suppressant system can be activated via easy accessible and recognisable switch from the center console by the driver.

Hinges reinforced

All original OEM door hinges have been replaced with specially designed reinforced strengthened heavy duty door hinges. These hinges will hold the additional opaque and transparent armour features that are incorporated into the vehicle's doors.

Intercom system

Intercom system enables vehicle passengers to conduct a two-way communication to persons outside the vehicle. An important security feature eliminating the necessity to wind down window or open up doors at vehicle check points etc.

Protected fuel tank

Fuel tank is completely armoured according to the specification with level CEN B6. Armoured steel will protect fuel tank against the effects of explosives device projectiles being detonated under the vehicle.

Protected vehicle management system (Black box)

As an added precaution, the vehicle management system black box, is also protected with armoured steel plating to protect it against splinters and projectiles. Many important vehicle functions are electrically controlled by this piece of equipment.

Run-Flat tire system (inserts)

In the event of vehicle receiving a puncture, blow-out or having deflated tyres the Run-flat system will allow the vehicle to continue driving under controlled conditions for 15 km at 50 km/h.

Rotating flashing beacon / spot light connector

Built into the roof of the vehicle is a dual purpose electrical connector. This provision can be used for the appliance of an emergency rotating flashing beacon, or if it required, a roof mounted remote/manual spot light. The connector can also used as a power source for emergency flashing light bars.

Tails lights and Kill switch

As a security precaution aid, an additional interactive "Kill switch" will enable the vehicle driver to kill all the vehicle's light is one easy action. This function enables the vehicle passengers to exit and enter the vehicle without interior / Exterior lights from going on, thus drawing unwanted attention at night time. In the event of the vehicle being followed or chased a night time, the rear license plate lights and brake lights can be extinguished.



Telephone / Communication preparation cable

Pre-wiring has been laid throughout the vehicle to assist further instalment of communication equipment for on board telephone, radio, GSM communication.

Vehicle suspension stabilising bars

The regular standard OEM Toyota Land Cruiser suspension has been replaced with a more robust heavy duty hard wearing coil system to withstand the additional substantial body armour weight. The additional weight shift and pressure upon this suspension system when a vehicle negotiates a particularly deep pot hole can lead to the situation where the suspension coils do not recover the correct positioning leaving the vehicle in a sunk down leaning position. The adapted suspension stabilising bars will prevent this occurrence from happening. OEM comfort standards are maintained with this feature.

Window Lifter

Fitted to the drivers door window. The window can be lowered and raised approx 10cm, to allow documents to be passed at checkpoints without exiting the vehicle.

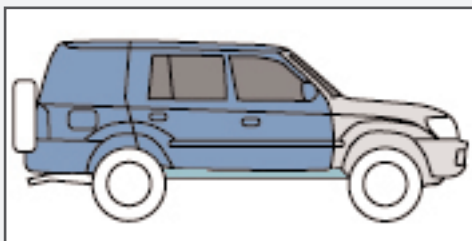
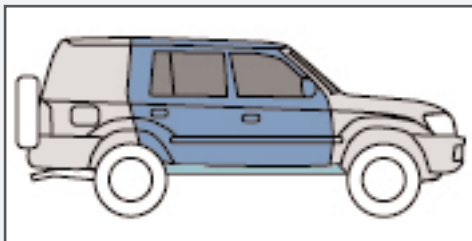
Cloth seating

Seat covering from vinyl to cloth on Toyota 105 model for all x 4 seats. Cloth covering not only enhances the appearance of the vehicle interior, it also adds to the passenger comfort in hot and humid climates, as well as cold.

Nature Of Installation

The standard installation offered involves armouring the passenger area and leaving the rear cargo area as standard, with the installation of an armoured bulkhead (with glazing) behind the rear seats.

This specification saves considerable weight (approx 350Kgs), time for manufacture and cost.



- Opaque armour, high hardness ballistic steel.
B5 protection at 90° to vertical.
- Transparent armour, polycarbonate lined ballistic glass.
B6 protection at 90° to vertical.
- Roof armour, high hardness ballistic steel.
B6 protection at 45° to vertical.
- Fragmentation protection 2 X DM51