

NEW PROJECT DESCRIPTION

ARMORED TOYOTA LAND CRUISER 300 in CEN BR6+ /B7 level protection



Vehicle Overview

The redesigned 2024 Armored Toyota Land Cruiser (TLC 300 series) offers a touch of luxury and top-of-the-line technology – providing the ultimate combination of comfort, security, style, and performance. The armored SUV stands up to the demands of the toughest situations and the most challenging terrains. This vehicle replaces its predecessor, the Toyota Land Cruiser 200 series (LC200) in Toyota’s lineup.

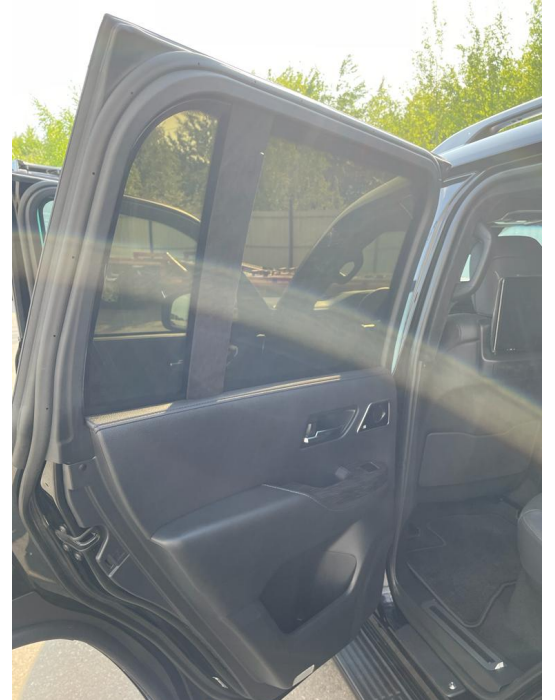
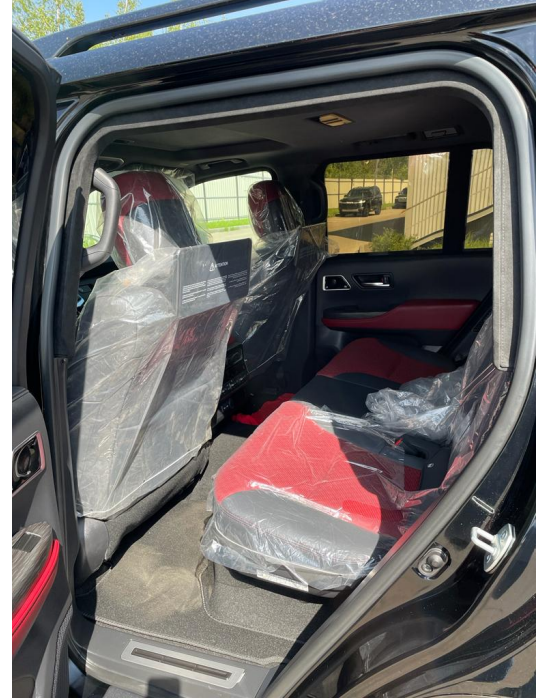
The Armored Toyota Land Cruiser (LC300) boasts three powerful engine options: a 3.5L V6 petrol engine with 400horsepower, a 4.0L V8 petrol engine with 271 horsepower, and a 3.3L V6 diesel engine with 302 horsepower.

Featuring a re-engineered powertrain, the TLC300 delivers powerful performance and exceptional off-road maneuverability. It is also available in market-specific trim levels such as VXR, GXR, GR-Sport

as well as GX / GX-R, VX+ / VX.R and ZX for right-hand-drive markets.

True to the advanced engineering capabilities the armored Toyota Land Cruiser provides unmatched mobility in the field – delivering an exceptional driving experience with cutting-edge security features. Armored to the BR6 level, the Toyota Land Cruiser ensures 360-degree protection from high-power assault rifles and explosions from up to two DM51 hand grenades.





Armoring highlights:

Standard Armoring Features (included)

- Engine bay armoring including firewall and front fenders
- Entire perimeter protection of the passenger compartment by opaque and transparent armor (certified hard ballistic steel and bullet resistant glass – BRG)
- Roof protection against 1 German hand grenade DM51
- Floor protection against 2 German hand grenades DM51 exploded simultaneously
- Radiator protection
- Protection for battery, fuse box and electronic control unit (ECU)
- Rear bulkhead with integrated emergency escape hatch fitted by BRG behind the second row
- HD machine milled door hinges
- Overlapping of door frames

- HD certified suspension adapted to the increased weight after armoring
- HD certified Run-Flat devices on all 5 wheels
- OEM 18 inch wheels: rims and tires
- HD certified brake components
- Engine side protection - front fenders
- Tail pipe protection – steel mesh
- Tinted bullet resistant glass according to the traffic regulations in the end-user country
- Rear side windows and rear windows are non-armoured, 60% tinted

Optional Equipment & Accessories (extra price)

- Front electrically operable glass window with HD actuators
- Front LED strobe lights integrated into front grill and tailgate
- Light-weight armoring package
- Multi-tone siren/PA/Intercom system
- Emergency lights system
- Fire suppression system in engine bay
- Auxiliary battery with kill switch
- Heavy duty wheels: alloy rims and tyres with increased load capacity per each
- Any options – on request

PROTECTION LEVELS COMPLIANCE WITH DIFFERENT STANDARDS AND DIRECTIVES:

All materials used in the production of the cabin were successfully tested against projectiles and explosives by independent laboratories. Test reports can be presented upon request or during a factory visit. The armoring of the vehicle provides protection against a wide range of projectiles and explosives. However, complete protection is not possible for reasons of design and modern military weapon technology.

	Test Level VPAM APR 2006	Application for		For comparison		Type of Weapon	Cartridges	Information about Test Ammunition			Extracts taken from test Conditions				
		VPAM_PM2007 VPAM BRV 2009 VPAM BSW 2006 VPAM HVN 2009	BSW 1 HVN 1	DIN EN 1063 (BR) DIN EN 1522/23 (FB) VPAM BRV 1999 (VR) STANAG 4569 AEP55 (Level)	BR 1 FB 1 VR 1 (BRV 1999)			Calibre	Type of bullet	Mass (g) Hardness (HRC)	Manufacturer /Type	Shot Distance* *) (m)	Bullet Velocity (m/s)	Bullet Energy (Joule)	
Hand Gun Protection	1	PM1 VR1	BSW 1 HVN 1					22 Long Rifle	L/RN	2,40 ± 0,1	Winchester	10 + 0,5	360 ±10	168	
	2	PM2 VR2	FSW 2 HVN 2					9mm Luger ⁵⁾	FMJ/RN/S C Tinned	8,00 ± 0,1	DAG DM 41	5 + 0,5	360 ±10	518	
	3	PM3 VR3	FSW 3 HVN 3					9mm Luger ⁵⁾	FMJ/RN/S C Tinned	8,00 ± 0,1	DAG DM 41	5 + 0,5	415 ±10	689	
	4 ¹⁾	PM4 VR4	BSW 4 HVN 4						.357 Magnum	FMJ/CB/S C	10,20 ± 0,1	Geco	5 + 0,5	430 ±10	943
									.44 Rem. Mag.	FMJ*/FN/S C	15,60 ± 0,1	Speer	5 + 0,5	440 ±10	151
5	PM5 VR5	BSW 5 HVN 5						.357 Magnum	FMJ/CB	7,10 ± 0,1	DAG Special	5 + 0,5	580 ±10	1194	
Assault Rifle Protection	6	PM6 VR6	BSW 6 HVN 6	B4+				7,62 x 39	FMJ/PB/F eC	8,0 ± 0,1 core 3,60	M 43 PS	5 + 0,5	720 ±10	2074	
	7	PM7 VR7	BSW 7 HVN 7		Stanag Level 1 when in addition 5,56 x 45 mm (Typ: M193)			.223 Rem ²⁾ (5,56 x 45)	FMJ/PB/S CP	4,0 ± 0,1	MEN SS 109	10 + 0,5	950 ±10	1805	
								.308 Win ³⁾ (7,62 x 51)	FMJ/PB/S C	9,55 ± 0,1	MEN DM 111	10 + 0,5	830 ±10	3289	
Armor Piercing	8	PM8 VR8	BSW 8 HVN 8		Stanag Level 2			7,62 x 39	FMJ/PB/H CI	7,70 ± 0,1 core 4,10 hardness 65	API BZ	10 + 0,5	740 ±10	2108	
	9	PM9 VR9	BSW 9 HVN 9					.308 Win ³⁾ (7,62 x 51)	FMJ/PB/H C	9,70 ± 0,2 core 4,0 ± 0,1 hardness 62 ± 2	MEN/CBC FNB, P 80	10 + 0,5	820 ±10	3261	
	10	PM10 VR10	BSW 10 HVN 10		Stanag Level 3			7,52 x 54 R	FMJ/PB/H CI	10,40 ± 0,1 core 5,30 hardness 63	B 32	10 + 0,5	860 ±10	3846	
<p>*)The standards DIN EN 1063 (special glazing in civil engineering) and DIN AN1522/23 Windows and doors as well as STANAG 4569 AEP 55 and VPAM BRV 1999 are listed for comparison. Requirements and test conditions partly differ from VPAM.</p> <p>**) When necessary regarding velocity of the bullet, oscillation and impact point, the shot distance can be adjusted in the test 1-12.</p>						FMJ	full metal jacket (steel)	HC	hard core	FNB	FN Herstal, Belgium				
						FMJ*	full metal jacket (copper)	WC	wallram-carbide (tungsten)	Speer USA	Federal Cartridge Company, USA				
						CB	coned bullet	FMs	full brass	1)	In these steps both calibres are to use				
						RN	round nose	I	incendiary	2)	Twist rates 178 mm ± 5%				
						PB	pointed bullet	C.I.P.	Permanent international commission for the testing of small arms	3)	Twist rates 254 mm ± 5%				
						FN	flat nose	TDCC	Dimension sheets of the C.I.P.	4)	Twist rates arbitrary				
						L	full lead	DAG	RUAG Ammotec, Germany	5)	Test barrel with a transition of 7,5mm				
						SC	lead-soft core	Geco	RUAG Ammotec, Germany	6)	Arbitrary shot distance, Appropriate hits have to be ensured in terms of velocity, oscillation and impact point				
						FEC	mild-steel core	MEN	Metallwerk Eisenhuetten Nassau, Germany						

BALLISTIC LEVELS:

B6,B6+

Opaque areas:

All opaque areas including the roof are protected against the following and all lesser weapons/ammunitions at 90° impact angle in accordance with the above specifications.

- Calibre 7.62 x 39 mm, FJ/PB/FeC, AK 47 Kalashnikov
- Calibre 5.56 x 45 mm, FJ/PB/SCP, M16 Colt
- Calibre 7.62 x 51 mm, FJ/PB/SC, (FN) "FAL" / "LAR" NATO rifle

Transparent areas:

All transparent areas are multi-layer and polycarbonate coated **55mm** thick to protect against the following and all lesser weapons/ammunitions at 90° impact angle in accordance with the above specifications.

- Calibre 7.62 x 39 mm, FJ/PB/FeC, AK 47 Kalashnikov
- Calibre 5.56 x 45 mm, FJ/PB/SCP, M16 Colt
- Calibre 7.62 x 51 mm, FJ/PB/SC, (FN) "FAL" / "LAR" NATO rifle

B7

Opaque areas:

Both sides of the passenger compartment and the rear bulkhead of the vehicle are protected using 9.8 mm high-quality armour steel defeating the following ammunitions up to the 7.62x51mm P80 Nato Ball (U.S. NIJ level IV, CEN level FB7) at 0° incidence (90° to the surface) and 10m range according to CEN1522.

- Calibre 7.62 x 39 mm, FMJ/PB/HCI, AK 47 Kalashnikov
- Calibre 5.56 x 45 mm, FJ/PB/SCP, M16 Colt (FB5-FB6)
- Calibre 7.62 x 51 mm, FJ/PB/SC, FN "FAL/LAR" NATO rifle (FB6-NIJ III)
- Calibre 7.62 x 51mm, FJ/PB/HC (AP), FN "FAL/LAR" NATO rifle (FB7-NIJ IV)

Transparent areas:

The rear bulkhead glass is multi-layer and polycarbonate coated, **70mm thick**, to protect against the following and lesser weapons/ammunitions up to the 7.62x51mm P80 NatoBall (U.S. NIJ level IV, CEN level FB7) at 0° incidence (90° to the surface) and 10m range according to CEN1063.

TECHNICAL DESCRIPTION:

Transparent areas:

- Driver's and co-driver's windows are electrically operable (extra option)
- Heated windscreen with separate switch on/of for heating (extra option)
- Windschild B6+ (thickness 55 mm)
- Front doors's windows operated 100-120 mm B6+ (thickness 55 mm)
- Rear door's windows non-operated B6+ (thickness 55 mm)
- Bulkhead glass (230mm x 510 mm) B7 (thickness 70 mm)

Opaque areas:

Ballistic steels and compositions:

- Front bulkhead B6+ - 90⁰ (6,5 mm)
- Doors B7 - 90⁰ (9,8 mm)
- A,B & C-pillars B6+ - 90⁰ (6,5 mm)
- Full door overlaps B6+ - 90⁰ (6,5 mm)
- Side and rear walls B7 - 90⁰ (9,8 mm)
- Front and partial rear wheel arches B6+ - 90⁰ (6,5 mm)
- Bulkhead Π-shape behind second seats line B7 - 90⁰ (9,8 mm)
- Roof of the vehicle is designed to defeat the following:
 - 2x DM51 Hand Grenade Placed directly on the roof
 - 1x HG85 Hand Grenade (Equiv. to M67 Grenade) Placed directly on the roof
 - 2x HG85 Hand Grenades (Equiv. to 2xM67 grenades) placed directly on the roof
- Floor of the vehicle is designed to defeat the following:
 - Two DM 51 hand grenade (German Norm) detonated simultaneously
 - 1x HG85 (equivalent to M67 Grenade) under vehicle

Rear bulkhead with emergency escape hatch fitted with ballistic glass



Luggage compartment area is armored partially and rear tailgate isn't armored

CERTIFIED MATERIALS USED FOR ARMORING:



- Bullet Resistant Glass: certified Kratos

- Ballistic Steel: certified SSAB Ramor 500/600 / SSAB ArmoX 500T/600T / Swebor Armor 500
- Heavy Duty suspension: Outback Armour / Dobinsons / Ironman/ JRZ / Eibach suspension components
- Run-flats: Hutchinson / APC / Europlast / Safe Sure are inserted in all tires including spares
- Heavy Duty brake systems: StopTech / Alcon /
- Heavy Duty tires and rims with higher load capacity per each wheel: depending of customer's request

*****Material use depends upon Availability**

EXAMPLE:

BASIC CAR TECHNICAL SPECIFICATION:

LHD Land Cruiser 300 3.5L Twin-Turbo V6 Petrol, VX , Model: VJA300L-GNUVZV SFX: B2 Middle East Specification

Transmission 10 speed, Automatic. Brakes: Front: Disc, Rear: Disc

Drive Type: 4x4

Tyres Radial Front: 265/65R18 Rear: 265/65R18. Aluminium

Suspensions Front: Independent front suspension, Rear: 4Link rigid

Wheelbase LWB 2850 mm, Ground Clearance: 235 mm

Weight Kerb Weight: 2440kg, Gross Vehicle Weight: 3230kg, Payload: 790kg

Seats 7 Seater. Front: 1+1 separate, Rear: 3+2 Bench. Material: see interior specs

Dimensions Length: 4950mm, Width: 1980mm, Height: 1920mm, Volume: 18.8m³ all excluding accessories

Colour Black

Country of Origin Japan

Engine Model V35A-FTS - 3445cc, Petrol(Tank 80+30l), 6 cylinders, BHP: 409, KW: 305, Cooling (Water), electrics 12 Volts

No of doors 5

Standard Features:

<p>Exterior Antenna - glass (AM/FM + FM Sub) Body rust protection Bumper: front - painted Bumper: rear - painted Fog lamps - front (LED) Fog lamps - rear Fuel cap w/tether Headlamp cleaner Headlamp: LO:BI-LED HI:LED Intermittent wipers (front only with rain sensor) Luggage and Back Door (hatch door) Mud guards Outside rear view mirror - RM + AUTO RE + ECM + REV + CMR + LIGHT Radiator grille - painted & plating Rear spoiler Rear window wiper - intermittent + washer Side glass: front, green w/heat shield Side steps Towing eye hook: FR & RR closed Windshield - green w/top shade + heat Shield</p> <p>Interior A/T shift lock system: electric Accessory power outlet: FR:(DC12)+RR(DC12)+DK(AC220) Accessory power outlet: USB : FR (1) + RR1 (2) + RR2 (1) Air conditioning: auto (4 seats independent control) Armrest - rear (RR1) Assist grips - front & rear Audio Jack: USB</p>	<p>Economy meter: ECO indicator & zone indicator Electronic park brake (MOC w/brake hold) EMV & Navigation system (w/o navigation & map Data) Engine monitor warning Engine oil level warning Floor mats: carpet (FR+RR1) Floor silencer (all floor) Footrest - Driver Fuel lid opener Glove box: w/lamp Headlamp levelling - auto Headrests: front (D+P) Headrests: RR1 (3) RR2 (2) Heater control panel (auto 4 seats independent control) + EMV Heater control panel REAR w/4ZONE Heater: 4 seats, independent control Heater: rear duct for RR1 + RR2 + DEF High mount stop lamp Illuminated entry system Interior rear view mirror (automatic-day & night) Key reminder warning Light reminder warning with buzzer & auto cut Luggage room light Meter illumination control Microphone & amplifier Multi Info Display Occupant classification sensor - P seat sensor Oil pressure gauge</p>	<p>Seat material: leather Seat: 5DR: 7-RR1: 40:20:40(slide, walk in, rec)+ RR2: 50:50 (2P. Manual fold down) Seat: front, lumbar support (D power slide) Seat: front, separate D-Power + Memory Seat: front, slide D: 260mm P: 240mm Seat: front, vertical adjuster D&P (power) Seatback pockets (D&P) Shift lever & knob - sequential shift (M mode) Speed warning w/lamp & buzzer Speedometer Optitron km/h, TFT Multiinfo disp Steering column-Tilt & Telescopic, Electrical Steering switch (Audio+Display+Tel+Voice+CC) Steering wheel: leather with imitation wood Sun visors D&P Tyre pressure warning Washer fluid warning Water temperature gauge</p> <p>Miscellaneous Dest. Package : Jordan Grade Package: VX Owner's manual - English Tool Kit & Jack Wireless device support - Bluetooth + WIFI</p> <p>Security & Safety Air Bag System: D(single), P(dual)</p>	<p>Central door locking - D side one motion, w/speed auto lock</p> <p>Child lock (rear doors) Clearance lamp w/Daytime running light system - LED & welcome light Daytime running light system - LED Horn Light control system Parking support brake - CSR(FR4 + RR4) + RCD Vehicle Stability Control - ABS+BA+VSC+ATRAC+TSC+DAC+CRAWL+TA Wireless door lock - Smart entry, push start, panic Tyres Spare wheel mounted under body Tyre brand: DUNLOP</p>
---	---	---	---

<p>Audio: EMV + deckless JBL 14Sp (12.3 inch) Carpet floor covering Clock: digital Coat hooks x 2 (fixed) Console box: centre Console box: front Cooler rear duct (centre console & roof RR1 & RR2) Cruise control Cup holders: front & rear Dash silencer Door ajar warning Door courtesy lamp Door pocket: front & rear Door scuff plate</p>	<p>Overhead console Personal lamp: front LED Personal lamp: rear LED Power Windows all doors: auto up/down, w/jam protection & remote control Push button ignition - SMART START Rear window defogger Room Lamp: LED Seat belt warning lamp & buzzer (D&P) Seat belts: 7 (FR 3P x2, RR1 3P x3, RR2 3P x2)</p>	<p>Side FR, Curtain Shield (CSA) FR-RR1-RR2 Air Bag System: D+P Knee panel Anti-theft system: alarm & immobiliser (scr-horn) Back monitor: BGM + Multi-terrain monitor (4 camera) w/ Panoramic View Monitor</p>	
---	--	--	--

The total vehicle protection is not possible, for reasons of permanent evolution of firearms, ammunition to them, IED and explosive technology as well as the base vehicle construction, applied wide range of materials and different technical parameters including different permissible weight loads!!!

