

MINE PROTECTED VEHICLES | APV 200 AND 76 SERIES

Armoured Project Vehicles | Gibraltar

GENERAL DESCRIPTION

The APV *Toyota Landcruiser 200 series and 76 series*, produced by Armoured Project Vehicles are discreetly protected vehicles constructed to BRV1999-VR6/Stanag level 1 incorporating a mine-resistant floor extending across the whole passenger compartment. The modified vehicles are based on the proven Toyota platforms and offer all-wheel drive and differential locks if required. A run flat insert is used inside upgraded tyres along with weight-bearing upgraded suspensions to provide high mobility and continued driveability with deflated or damaged tyres. Upgraded brakes are offered as an optional upgrade. This configuration ensures excellent mobility in any terrain with low-cost procurement as well as low lifecycle costs. It can operate under any climatic conditions.

The vehicle is constructed as a shielded box to derive maximum passenger protection. The inner vehicle can be configured for multiple uses and therefore offers a variety of applications. Performance can be further enhanced with a range of off-road and 4 x 4 accessories along with the option to include HF/VHF/UHF and satellite communications equipment.

The hull is designed and proven to withstand the detonation of AV mines to up to Stanag 4569 level 1. Fragment protection is ensured through the double hull, and a belly pan inside the vehicle reduces pressure waves and deformations in the event of AP or AV mine detonation.



Putting in armour and finished exterior

SPECIFICATIONS

The APV protected vehicles can be used in many roles, eg, personnel carrier, reconnaissance vehicle for EOD or demining staff, or ambulance.

The crew is protected against mine explosion up to Stanag 4569 level 1 ie, detonation under belly with DM51 grenades or similar. Increased blast protection to Stanag level 2a (mine detonation caused by any wheel up to 6 kg TNT) is an option. Effective ballistic protection up to AP small arms fire, which fulfils the standard requirement of the benchmark BRV 1999 at B6 level, is part of the APV design shield.

VEHICLES IN USE TO DATE

APV has more than 300 units currently in service worldwide. NATO forces operate a fleet of long-range patrol units in Afghanistan. The UN uses units in many African locations and across Pakistan and Afghanistan. Units are also in service with ordnance disposal and mine clearance projects in Afghanistan.

ENGINE, FUEL AND OIL

No information provided.

FACTORY SUPPORT

APV has a dedicated after-sales manager who joined APV after 22 years of British Army service specialising in mechanical and electrical vehicle engineering. APV maintains full factory production records and component tracking to ensure complete lifetime support for each vehicle. APV also offers full Toyota platform parts support along with sea freight options and can arrange to freight urgent items by air if necessary. APV offers full warranty on its products and armouring components.

MAINTENANCE SUPPORT

APV Gibraltar operates a service/maintenance/warranty programme similar to that offered by the original (un-armoured) vehicle manufacturer ie 20,000 kms or one year on the vehicle platform. APV also offers a two-year defect/delamination warranty on the glass and a three-year anti-corrosion and anti-perforation warranty on the hardened steel.

APV works closely with reputable service partners or agents in locations where the units are in use. APV also maintains a “flying service” team.

TESTS AND EVALUATIONS

APV units are constructed with certified glass and steel and then the complete unit is independently tested for ballistic and blast integrity. The standards applied are the 1999 BRV at VR6 level along with roof and underbody tests against 2 x DM51 hand grenades. Increased blast protection is available. More details of test data can be requested via the APV website: www.apv-gib.com.

REPORTED LIMITATIONS AND STRENGTHS

Limitations

No information provided.

Strengths

- > APV re-engineers all vehicle doors to integrate 8 mm armoured steel using a unique close-to-skin design.
- > All vehicle doors are supported by upgraded hinges, upgraded door straps and include a Teflon roller or block on each door to support the additional weight while the door is closed.
- > Door-locking mechanisms are rebalanced and adjusted to changes in the design.
- > All door handles, which are known as critical or weak areas due to the presence of holes in the door panels, are completely sealed from the inside using 8 mm steel to protect occupants from blast and ballistics from any angle.
- > APV intends to offer protection for occupants against blast from DM 31 grenades and a wheel strike detonation from an AV mine of approximately 4 kg TNT.
- > Both model series have been designed for use in harsh climates.



Invisible armour and finished exterior

