

The Casspir Mk II Mine Protected Vehicle



The Swiss Army Knife of Combat Vehicles

**Armoured Personnel Carrier — Ambulance
Recovery Vehicle — Command Post — Mine Clearer
Utility Freight Carrier — Tanker**



The Casspir Mk II Mine Protected Vehicle

The Casspir mine-protected vehicle (MPV) is one of the first to use the V-shaped monocoque hull and is undoubtedly one of the world leaders in its field with over 2,000 in service in several countries and an enviable record as a life preserver in mine incidents and as the ideal choice for force protection.

Originally developed for the rigorous conditions of Southern Africa where a very high mine threat was prevalent, Casspir is certified to protect its occupants against the effects of a triple TM-57 anti-tank mine blast (equivalent to 21 kg of TNT) under any wheel, or a double mine (14 kg of TNT) anywhere under the hull. Casspir offers a high degree of field repairability after mine detonations that has been incorporated by some designers.

With its many configurations ranging from APC, to recovery vehicle, workshop, command vehicle, mine clearing and ambulance, to name but a few, and its unparalleled effectiveness in high mobility anti-guerrilla operations in its past, it truly is **“The Swiss Army Knife of combat vehicles”**

Casspir MPV's are currently in service in Iraq, Afghanistan, Sudan, India, and a variety of African countries on mine-clearing and security missions.

Proven in Service Reliability

Proven, highly effective landmine protection— protecting occupant and main components against the effects of landmine blasts of up to 12Kg under any wheel and 14Kg under the hull.

Exceeds All Applicable Standards

Add-on Protection— available against the effects of self-forming fragment mines (TMRP-6)

Mine detecting and mine-clearing ability— through its high compatibility with a number of detection and clearing systems

Ballistic Protection— against a variety of small arms fire and shrapnel up to B6+ level

Ease and economy of maintenance— though the use of proven, easy-to-maintain and commercially available components, compatible with Mamba, Unimog and Mercedes Benz systems

Long in-service life— through protection of main aggregates, recyclability of the hull and use of readily available spare parts.

Long-Range independence— the Casspir was designed to operate at the far end of extended supply lines. It “drives itself to work and back again”

Casspir Mk II Armoured Personnel Carrier

Engine

Type	ADE 366T Turbo-charged
Cylinders	6 cylinders in-line
Displacement	5,675 cc
Power	125kW @ 2800rpm
Torque	560 @ 1400rpm
Coolant	Water
Fuel	Diesel

Gearbox

Type	Mercedes Benz DB G3/60-5/7.5
Gears	5 forward, 1 reverse

Clutch

Clutch type	F & S GFX310K
Operation	Mechanical

Transfer Case

Type	Mercedes Benz VG 500-3W
High Range Ratio	1.05 : 1
Low Range Ratio	1.64 : 1

Axles

Front	Mercedes Benz AL 3/2.5
Ratio	6.83 : 1
Rear	Mercedes Benz HL 5/1S-10
Rear	6.86 : 1

Suspension

Type	Semi-elliptical leaf spring with hydraulic double- acting shock absorbers
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Tyres

Size	14.00 x 20-18 ply multipurpose
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Crew

Capacity	2 + 12
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Performance

Maximum speed	100km/h
Gradient ability	60%
Turning Circle	17 m

Dimensions and mass

Wheel base	4,200 mm
Length	6,900 mm
Height (roof)	2,850 mm
Width	2,450 mm
Mass (tare)	9,480 kg
Mass (gross)	10,800 kg
Fuel tank	150 litres
Water tank	100 litres

Protection Level

Landmine blasts up to 21kg under any wheel or 14kg under the hull.

Add-on protection available against the effects of self-forming fragment mines (TMRP-6)

Ballistic protection B6: against a variety of small arms fire and shrapnel.



In-Theatre



In Somalia



On Active Duty



Operational Capabilities and Considerations

The Casspir Mk II

1. Mobility

Basic performance:

Engine Type	ADE 366T Turbo-charged
Cylinders	6 cylinders in-line
Power	125kW @ 2800rpm
Torque	560 @ 1400rpm
Maximum speed	100km/h
Gradient ability	60%
Turning Circle	17 m
Range on Single Fuel Tank	1000km

2. Fire Power

The basic model Casspir MkII is fitted as standard with:

Firing Ports	12
Roof Hatches	1 - 3
Machine Guns	0

According to Customer Requirements the following can be added:

- Windscreen Fitted Machine-Gun port (forward facing)
- Roof Mounted swivelling and protected Machine Gun Mounts. Up to 2 in total. These mounts can be for 20mm or 30mm canon
- Grenade Launchers for smoke or 40mm grenade ammunition
- Roof Hatches for free firing

3. Protection

The Standard vehicle has the following ballistic and mine protection built in:

Landmine blasts up to 21kg under any wheel or 14kg under the hull.

B6 Ballistic protection against a variety of small arms fire and shrapnel.

Upgrades

Casspir are standard at B6 protection. Can be upgraded to B7+ with the addition of either 20 m² of plates adding 628kg or 14m², adding 440kgs, of weight.

Cannot have added EFP protection as it would weigh beyond the operational limits of the vehicles.

Add-on protection available against the effects of self-forming fragment mines (TMRP-6)

Ceramic Plates can also be added further to protect the axles against landmine blasts.

We have also developed a range of effective appliqué armour material which can be hung on the sides of vehicles to protect against different types of projectiles.

4. Capacity

The basic Casspir's personnel compartment is configured as follows:

Driver's cabin: Driver plus 1 passenger (or commander). Depending on the weapon configuration of the vehicle the passenger could operate either the windscreen mounted machine-gun or the roof mounted swivelling canon (from within his seat)

Rear Personnel Bin: six mine protected seats on either side of the vehicle, each fitted with four point safety belts. Each seat has its own "flap up" firing port and there is one 40mm ballistic window per pair of seats (three windows on each side).

Total Capacity: 14

5. Alternative Vehicle Configurations:

Vehicles are also available as:

- Ambulance
- Workshop
- Command Vehicle/Communication Centre
- Recovery Vehicle

6. Communications

The Casspir can be fitted with a range of radio and communication equipment depending on the need and use of the client.

We are currently recommending the following HF radio systems

High End:	Grintek Tactical Military Radios
Lower Level	Barrett Military Spec Commercial radios Q-Mac Military or Professional radios

7. Training

As part of any purchase programme we would also offer to provide training for 1 mechanic from the end user to oversee the entire build process in order that they be adequately equipped and trained to manage the maintenance of the vehicles.

We would also offer to train a group of drivers for the best management and optimal use of the vehicles.

All the above non-standard options and add-ons will be quoted as per requirements of the client in consultation with OSPREA Logistics

For Further Information

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