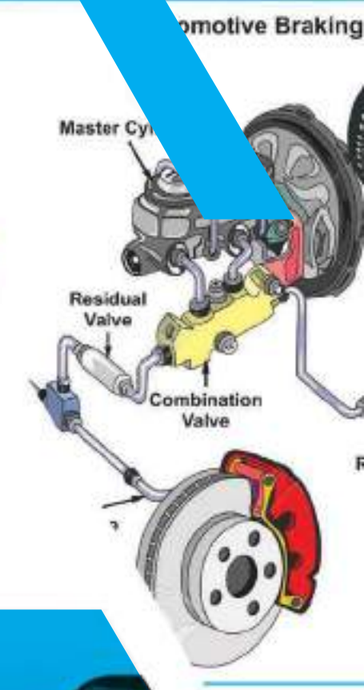
CONTENT

WHO WE ARE ?

At Infinity Chassis Units, we are pioneers in the design and manufacturing of specialized vehicles that prioritize safety, innovation, and reliability. With a strong focus on ambulances and armored vehicles, we are committed to delivering solutions that meet the highest standards of quality and performance.

Founded by experts with decades of experience in the automotive and defense industries, Infinity Chassis Units has established itself as a trusted name in the sector. Our state-of-the-art manufacturing facilities and cutting-edge technology enable us to craft vehicles that are not only robust and secure but also tailored to the specific needs of our clients.

We understand the critical nature of the work our vehicles are involved in, whether it's saving lives with our fully-equipped ambulances or providing unmatched protection with our advanced armored vehicles. That's why every unit we produce undergoes rigorous testing and quality control to



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At Infinity Chassis Units, we are driven by a passion for excellence and a commitment to innovation. Our team of skilled engineers, designers, and technicians work tirelessly to push the boundaries of what's possible, ensuring that our vehicles remain at the forefront of the industry.

BR4 LEVEL PROTECTON

1 HIGH-LEVEL BALLISTIC RESISTANCE

2 MULTI-LAYERED COMPOSITE ARMOR

3 OPTICAL CLARITY WITH ARMORED GLASS

BR4 Level Armored Cash-in-Transit Vehicles: Superior Security and Durability

BR4 level armored cash-in-transit vehicles provide top-tier protection for transporting cash and valuable assets in high-risk environments. These vehicles are specifically designed to withstand ballistic threats from high-caliber firearms, such as .44 Magnum rounds, ensuring the safety of the cargo and occupants.

Key features include:

Ballistic Protection: The vehicle's body is reinforced with BR4-rated armor, offering comprehensive resistance against various ballistic threats, ensuring that the vehicle remains secure during an attack.

Armored Glass: Equipped with 22mm thick BR4-rated transparent armored glass, the vehicle maintains excellent visibility while providing the same level of protection as the rest of the armored structure.

Enhanced Durability: The combination of high-strength steel and advanced composite materials used in the vehicle's construction ensures both the durability and mobility required for secure transportation.

VEHICLE DETAILS

TOYOTA HIACE 2025 MY PETROL AUTOMATIC

TECH. SPECS

Engine: 3.5L V6 Petrol

Torque: 351 Nm @ 4600 RPM

Horsepower: 277 HP @ 6000 RPM

Length: 5380 mm

Width: 1880 mm

Height: 2285 mm

Wheelbase: 3210 mm

Gross Vehicle Weight: 3500 kg

Weight Before Armoring: 2000 kg

Weight After Armoring: 2900 kg

Net Payload After Armoring: 600 kg

Armor Material: EN 1522-23 FB4/NS Bulletproof Steel

HIACE PETROL AUTOMATIC

Here are the advantages of the 2025 Toyota Hiace with a petrol engine and automatic transmission:

Reliable Performance: The petrol engine offers smooth and consistent performance, making it ideal for both city driving and long-distance travel.

Ease of Use: The automatic transmission provides a more comfortable driving experience, especially in heavy traffic, reducing driver fatigue.

Lower Maintenance Costs: Petrol engines typically require less maintenance than diesel engines, leading to potentially lower long-term ownership costs.

PROTECTION DETAILS

BR4 Level Protection for Toyota Hiace CIT Vehicles

Enhanced Suspension and Braking Systems:

To accommodate the additional weight of the armored components, the Hiace is equipped with reinforced suspension and upgraded braking systems. These modifications maintain the vehicle's handling and safety even under the added load.
Engine and Fuel Tank Protection:

Critical components such as the engine and fuel tank are also armored to BR4 standards, preventing potential threats from immobilizing the vehicle during an attack.
Discreet Design:

Despite its advanced protection features, the Toyota Hiace with BR4 protection maintains a low profile, making it less conspicuous and reducing the risk of being targeted.

WELCOME TO OUR CONSULTING

Ballistic Resistance:

The BR4 protection level is designed to resist ballistic threats from high-caliber handguns, including .44 Magnum rounds. This ensures that the vehicle can withstand armed attacks, providing a secure environment for both the cargo and occupants.
Armored Body Panels:

The vehicle's body is reinforced with multi-layered composite armor materials. These panels are strategically placed to protect critical areas of the vehicle, including doors, sides, and the rear cargo compartment, offering comprehensive protection without significantly compromising the vehicle's performance.
Transparent Armored Glass:

The windows of the Hiace are equipped with BR4-rated transparent armored glass, which is 22mm thick. This specialized glass provides the same level of ballistic resistance as the body armor while maintaining clarity and visibility for the driver.
Secure Cargo Compartment:

The rear cargo area, where cash and valuables are stored, is fully armored to BR4 standards. This area includes reinforced locking mechanisms and secure access points to ensure the safety of the transported assets.

ARMORED MATERIAL DETAILS

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Adhesion Properties:

The armor material is often bonded with adhesives or welded directly to the vehicle's structure. The adhesion properties of 3mm BR4 armor ensure a strong bond that enhances the overall rigidity of the armored surface, preventing delamination or separation during impacts.

Corrosion Resistance
This is essential for maintaining the integrity of the armor over time.

Impact Energy Absorption:
This reduces the likelihood of spalling and increases the overall safety of the occupants.

Temperature Resistance:
The BR4 armor is designed to perform effectively across a wide range of temperatures.

Ballistic Resistance:

The 3mm BR4 armor material is specifically designed to provide protection against ballistic threats from high-caliber handguns, including .44 Magnum rounds. It meets the BR4 standard, which means it can absorb and withstand the impact of such projectiles without penetration.

Material Composition:

Typically made from high-strength steel or advanced composite materials, the 3mm BR4 armor is engineered for maximum durability while keeping the weight manageable. The materials used are carefully selected to balance protec tion and vehicle performance.

Weight

A 3mm BR4 armor panel is relatively lightweight compared to thicker armor materials, which helps in maintaining the vehicle's mobility and fuel efficiency. The exact weight depends on the specific material composition but is designed to be as light as possible while still providing BR4-level protection.

This 3mm BR4 armor provides a crucial balance between protection and practicality, ensuring that vehicles can remain operational and effective while offering a high level of ballistic resistance.

Multi-Hit Capability

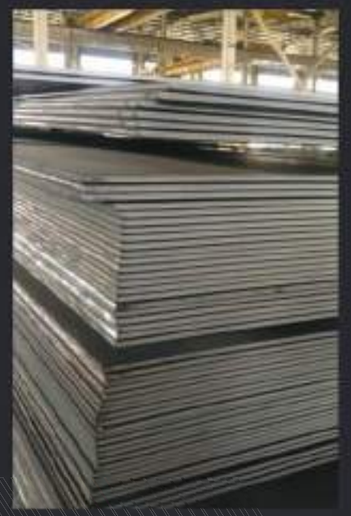
Adhesion Properties

Surface Hardness

Armor Your Future
with BR4 Protection

Acoustic Dampening:

3mm BR4 armor can also contribute to noise reduction within the vehicle. The material's density helps dampen sound, which can reduce the noise from the engine, road, and even external gunfire, enhancing the comfort and focus of the vehicle's occupants.



Unyielding Defense
Unmatched Reliability!

Repairability:

In the event of damage, 3mm BR4 armor can often be repaired or replaced in sections, rather than requiring a complete overhaul. This repairability is essential for maintaining the vehicle's operational readiness and reducing downtime.

These additional features provide a comprehensive understanding of the capabilities and advantages of 3mm BR4 armor material, making it an essential component for vehicles requiring reliable ballistic protection in various operational environments.

BR4 ARMORED GLASS

Specifications

These features make the EN 1063 BR4 NS Class armored vehicle glass an essential component for vehicles requiring high levels of protection without sacrificing visibility and operational effectiveness.

EN 1063 BR4 NS CLASS TRANSPARENT CURVED ARMORED VEHICLE GLASS

Impact Resistance
In addition to ballistic resistance, the polycarbonate reinforcement enhances the glass's ability to absorb and disperse energy from impacts, making it resistant to shattering or cracking.

Anti-Spall Coating:
An anti-spall coating is often applied to the interior side of the glass to prevent shards from breaking off and injuring the occupants in the event of an impact.

01

BALLISTIC RESISTANCE

Rated to EN 1063 BR4 NS Class, the glass is designed to withstand ballistic impacts from .44 Rem Magnum handgun ammunition. This rating ensures that the glass can effectively stop high-velocity projectiles without penetration.

02

THICKNESS:

The glass has a thickness of 22.00mm (±1mm), providing a strong barrier against ballistic threats while

03

MATERIAL COMPOSITION

The glass is a multi-layered composite, including a reinforced polycarbonate sheet. This construction not only enhances its ballistic resistance but also improves impact durability, preventing spall and ensuring occupant safety.

04

CURVED DESIGN

The glass is curved, which allows it to fit seamlessly into the contours of armored vehicles. This design not only maintains the aerodynamic profile of the vehicle but also contributes to better structural integrity.

05

SCRATCH RESISTANCE

The outer layer of the glass is treated to be scratch-resistant. This feature helps maintain visibility and clarity over time, even in harsh conditions or with frequent cleaning.

06

UV PROTECTION

The glass typically includes a UV protective layer, shielding the vehicle's occupants from harmful ultraviolet rays while also preventing the interior from fading due to prolonged sun exposure.

SUSPENSION - BRAKE REINFORCEMENT

Installation of Heavy-Duty Suspension Components:

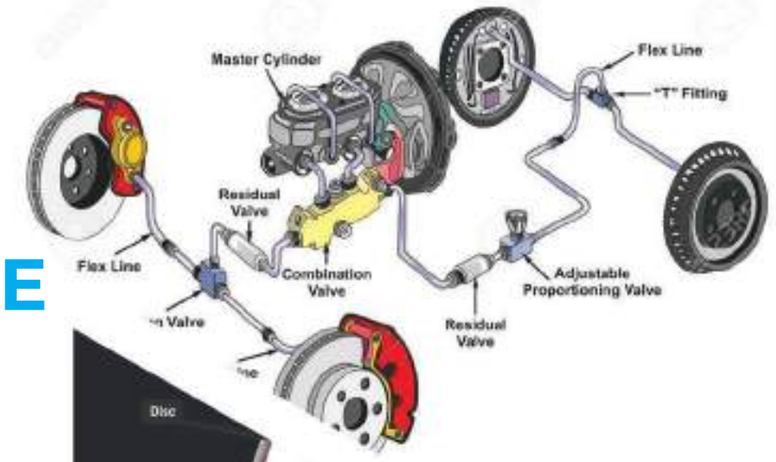
Upgrade the suspension system with reinforced springs, heavy-duty shock absorbers, and stronger suspension arms to support the additional weight of the armor.

Enhancement of Braking System:

Install larger and thicker brake discs, high-performance brake pads, and upgraded multi-piston brake calipers to ensure effective and reliable stopping power under increased vehicle mass.

Recalibration of ABS and Stability Control Systems:

Recalibrate the Anti-lock Braking System (ABS) and stability control systems to accommodate the altered vehicle dynamics and increased weight, ensuring optimal safety and control during braking and emergency maneuvers.



Braking System:

Brake Discs: The original brake discs are replaced with larger and thicker discs to increase surface area for improved heat dissipation and stopping power.
Brake Pads: Standard brake pads are upgraded to high-performance, heat-resistant pads to ensure consistent braking efficiency under heavy loads.
Brake Calipers: The existing calipers are upgraded to multi-piston calipers, providing greater clamping force and more effective braking.

Suspension System:

Springs: Standard springs are replaced with reinforced, heavy-duty springs to handle the increased weight.
Shock Absorbers: Regular shock absorbers are upgraded to heavy-duty versions for better damping and stability under load.
Suspension Arms: Stock suspension arms are replaced or reinforced to manage the additional stress and maintain vehicle balance.

SEVERAL SIGNIFICANT BENEFITS!

1. Improved Stopping Power:
Benefit: The added weight of armor increases the momentum of the vehicle, requiring more powerful brakes to achieve the same stopping distance as a non-armored vehicle.
Result: Enhanced brake components, such as larger discs and multi-piston calipers, provide the necessary force to safely and quickly bring the vehicle to a stop, reducing the risk of accidents.
2. Heat Resistance and Consistent Performance:
Benefit: Under normal and emergency braking conditions, the brake system generates a lot of heat. The additional weight of an armored vehicle exacerbates this, potentially leading to brake fade if the system isn't upgraded.
Result: High-performance brake pads and high-viscosity brake fluids are designed to operate efficiently at higher temperatures, ensuring the brakes remain effective even under continuous use, such as during a prolonged descent or repeated stopping.
3. Enhanced Vehicle Control:
Benefit: Upgraded brake systems, including recalibrated ABS (Anti-lock Braking System) and stability controls, ensure that the vehicle maintains traction and control even under heavy braking.
Result: This is particularly important for armored vehicles, which may need to perform sudden stops or evasive maneuvers. The improved brake system helps prevent skidding or loss of control, enhancing the safety of the occupants and the vehicle's cargo.
4. Increased Durability and Longevity:
Benefit: Standard brake systems wear out more quickly under the increased load of an armored vehicle, leading to more frequent maintenance and potentially unsafe conditions if not addressed promptly.
Result: Upgraded brake components are more durable and can withstand the additional stress, reducing the frequency of maintenance and ensuring that the vehicle remains in a safe operating condition for longer periods.
5. Enhanced Safety in High-Risk Situations:
Benefit: Armored vehicles often operate in high-risk environments where quick and reliable braking can be the difference between safety and danger.
Result: A reinforced brake system provides the confidence that the vehicle can perform necessary stops under all conditions, protecting both the occupants and the valuable cargo they are transporting.

- Improved stopping power under increased weight.
- Enhanced heat resistance during heavy braking.
- Better control during emergency maneuvers.
- Reduced brake fade over time.
- Increased durability and longer component life.
- Greater safety in high-risk situations.

RUN FLAT TIRES

In the realm of armored vehicles, safety and reliability are paramount. One crucial aspect contributing to these factors is the choice of tires. Armored vehicles often face challenging terrains and potential threats, making tire selection a critical decision. Two popular options for armored vehicle tires are runflat inserts/devices and runflat tires. In this article, we'll delve into the key differences between these options, shedding light on their applications, advantages, and much more.

Armored Vehicles Tires – The Basics
Armored vehicles tires – what are they, and why are they so essential?

Armored vehicles, such as military trucks, security vehicles, and cash-in-transit vans, operate in high-risk environments. They need tires that can withstand punctures and continue functioning even after sustaining damage. This is where specialized armored vehicle tires come into play.
Runflat inserts/devices explained – enhancing tire durability

Runflat inserts/devices are ingenious additions to wheels that provide extra support and resilience. These inserts are designed to maintain wheel integrity even when punctured. Here's how they work:

Construction
Runflat inserts/devices are typically made of strong, flexible materials like reinforced rubber or composite compounds.
Installation
These inserts are installed onto the vehicle's rim during the manufacturing process or added later as an aftermarket modification.

Applications of Runflat Tires
Runflat tires are commonly used in:

Premium OEM Vehicles
Certain OEM manufacturers have opted to include runflat tires along with their vehicles in order to relinquish their need to include a spare wheel (or tire patch kit) with the car.
Off-Road Vehicles
Enhancing off-road capabilities by reducing the risk of tire failure in rugged terrains.

FUNCTION

When the tire encounters a puncture, the runflat insert/device supports the weight, preventing it from collapsing. This allows the vehicle to continue moving even with a damaged tire. In most cases at speeds up to 60mph for a 1 hour duration.
Applications of Runflat Inserts/Devices
Runflat inserts/devices find applications in various armored vehicles, including:

Military (Wheeled) Tanks
Ensuring tanks can maneuver in hostile environments even if their tires are damaged.
Security Vehicles
Protecting valuable cargo during transit, such as in cash-in-transit vehicles.
Military and Security Vehicles
Ensuring military and security personnel reach their destinations safely, even in hostile conditions.
Executive and VIP Vehicles
Maintaining the security and mobility of high-profile individuals in armored cars.
Emergency Response Vehicles
Allowing police and emergency services to reach critical situations without delay.

ELECTRONIC SYSTEM SPECS

CAMERA SYSTEM

Camera System:

Number of Cameras: 7
External Cameras: 4 (Front, Rear, Right, Left)
Internal Cameras: 3 (Inside Cabin and Vault)
Brand: Dahua

GPS SYSTEM

Brand: Arvento
Real-Time Tracking: Provides live location updates
Geo-Fencing: Alerts when vehicle leaves predefined areas
Mobile App Integration: Accessible through smartphone for remote monitoring

DVR

Type: 8 Channel
Brand: Dahua
Storage Capacity: 2TB HDD
Resolution Support: Up to 4K UHD

MONITORS

:Number of Monitors: 2
Size: 10.1 inches
Locations: 1 in Driver's Cabin, 1 in Vault
Brand: Vestel
Touchscreen Capability: Supports intuitive touch controls

P/A SIREN SYSTEM

PA & SIREN SYSTEM

Brand: Aselsan
Output Power: 100W
Speaker Type: Weatherproof horn speakers
Control Panel: Dashboard-mounted with push-to-talk function
Siren Tones: Multiple selectable siren tones (wail, yelp, horn)
Microphone: Handheld microphone for clear voice commands