

Armored Enhanced Capacity Vehicle (ECV)

The 15,000 GVWR (Gross Vehicle Weight Rating) Enhanced Capacity Vehicle (ECV) is the answer to the increasing threat level around the globe where demand is for an enhanced chassis package that can accommodate increased levels of armor. The need is for a discreet vehicle which can maneuver out of harm's way while offering enhanced performance and handling. The ECV offers an unprecedented level of security combined with new industry standards in improved handling, reliability, durability, comfort, and life-span for commercial armored vehicles.

The chassis package is able to nearly double the weight-bearing capacity of the base vehicle by upgrading the entire vehicle system. Based on the OEM Chevrolet Suburban model, the 15,000 pound chassis upgrade package includes a reinforced and improved front and rear suspension, customized brakes and shocks, an increased GVWR rear axle, a reinforced frame structure, and wheels and tires with an increased weight capacity.

KEY FEATURES

Enhanced chassis and suspension package which can handle increased levels of armor

Enhanced performance and handling



The Enhanced Capacity Vehicle (ECV)



	CURRENT OEM CHASSIS	PROPRIETARY ECV CHASSIS
GVWR	8,600 lb (3,901 kg)	15,000 lb (6,804 kg)
FGAWR	4,180 lb (1,896 kg)	5,920 lb (2,685 kg)
F. Suspension	Torsion bar	Torsion bar & composite helper spring
RGAWR	5,500 lb (2,495 kg)	9,080 lb (4,119 kg)
R. Suspension	Multi leaf	Parabolic taperleaf
Rear axle	3.73 FDGR	Proprietary HD 11.5 in (292 mm) 4.88 FDGR
Wheels	16 in (406 mm)	17.5 in (445 mm)
Tires	3,000 lb (1361 kg) rated	4,940 lb (2,241 kg) rated
Brakes - rotors	Front 12.75 in (324 mm) Rear 13 in (330 mm)	13.5 in (343 mm) slotted rotors front 13.5 in (343 mm) slotted rotors rear
Brakes lines	OEM	High performance braided brakes lines
Brake calipers	OEM	High performance brake calipers
Brake friction material	OEM	High performance friction material
Shocks - std Delphi	OEM	Custom-tuned shocks
Chassis frame	OEM	Integral steel liner reinforcements
Body mounts	OEM	Stiffer mounts for increased body mass Additional body mounts for increased capacity

VEHICLE FEATURES

CUSTOMER BENEFITS

Front Suspension – Increased GAWR capacity – Glove frame – Composite helper spring	Increased front capacity for higher armor levels Handling stability
Rear Suspension – Parabolic taper leaf	Increased capacity, softer ride with taper leaf Increased capacity, durability & reliability
Rear axle – Increased GAWR capacity – Glove frame – Lower axle ratio	Increased loading capacity Increased tractive effort
Wheels & Tires – Increased weight capacity	Increased tire/wheel loading/safety margins Custom 2 piece wheel
Brakes – Custom oversized calipers – Custom oversized rotors – Brake pads – Braided lines – High temperature brake fluid	Increased braking capacity Reduce brake fade Improved brake responsiveness Meets FMVSS braking standards
Custom tuned shocks	Improved ride comfort & handling performance
Frame structure – Stiffeners – Body mounts	Chassis strength, durability Reduced body mount sag/compression
Electronics – Engine management	Customized for application – eliminate fault codes/ IP indication lights

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