



X-TRUCKS is a brand of GRUPO 201 OFICIAL, a company founded in 1945 in Mexico City, specializing in the manufacture of rubber products, specially fronton balls and later on other balls for other racket and hand sports, being the official ball of fronton in OLYMPIC, PANAMERICAN and CENTRALAMERICAN games, as well as NATIONAL AND WORLD championships.

Achiving this was only possible thanks to the constant research and development in the rubber manufacturing, which allows us to set physical characteristics, resistance, hardness, bounce and many other essential factors in order to be the official ball in these kind of events, for the proper performance of sports.

In 1998, GRUPO 201 OFICIAL ventures in the design and manufacture of rubber products for pets, which have a lot of technical requirements such as high resistance, non-toxicity and long lasting colors.

All of the above has allowed that the group acquire the right expirience in the formulation of rubber products focused in high resistance jobs and complying with high standards in their physicial and mecanical properties, favoring us in the design and manufacture of high impact products for cargo vehicles under the X-TRUCKS.







TYPES AND SIZES



Squared Bumper A: Weight: 2.6 lb Resistance: 4,400 lb



Squared Bumper B: Weight: 2.8 lb Resistance: 5,500 lb



Squared Bumper C: Weight: 4.6 lb Resistance: 8,800 lb

- Special formula for more resistance durability.
- Energy absorption, giving you greater safety and less damage your vehicle to.
- Unlimited range of colors.

Recommendations:

- 1. If you wash your car, clean your stops.
- 2. Each time you use a protector for your tires (ArmorAll) also apply it to your stops. Ensuring strength, durability and giving brightness.





TYPES AND SIZES





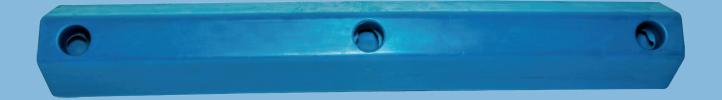
Long Bumper A: Weight: 3.3 lb Resistance: 7,700 lb

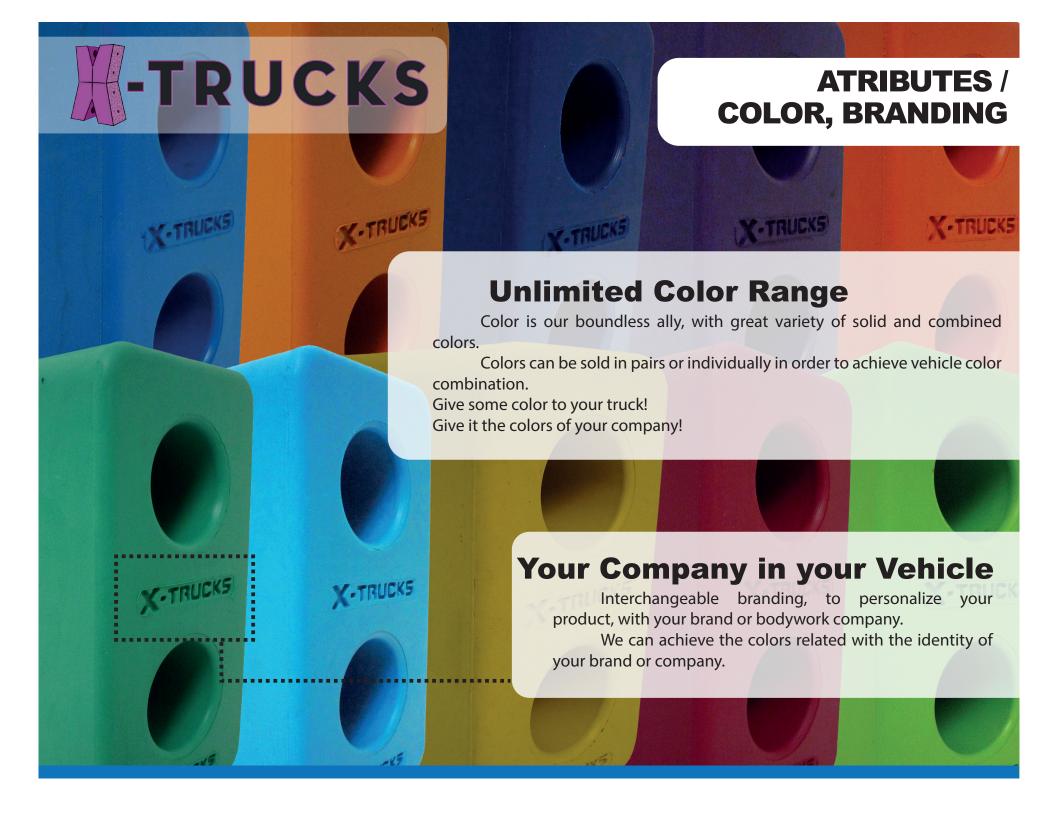


Long Bumper B: Weight: 4.6 lb Resistance: 11,000 lb



Parking Bumper A: Weight: 9.7 lb Resistance: 22,000 lb







MECHANICAL PROPERTIES



Great Resistance & Durability

Our great formulation and premium raw material were tested against the best recycled rubber bumpers, showing X-TRUCKS as a better quality product in the tests done by the INSTITUTO POLITÉCNICO NACIONAL.

These tests were made taking into acount the operation of the products being exposed to efforts and deterioration.

In all of the tests X-TRUCKS was better, because of its elasticity, plasticity and tenacity. Also all of the bumpers recover their shape 100% after the compressive tests, so they last longer, as the recycled rubber bumpers lost their shape therefore being useless.

X-TRUCKS besides being more resistant, it also counts with a greater energy absortion (between a 10 y 12%) which makes our bumpers even more safe for both, the protection of your vehicle and the people inside. Each and any of our bumpers resist 83.53 J or 8.52KgF wich means that for every meter of material the energy absobed is more than eight and a half kilos.

Mechanical Properties of the Material	
Shore A Hardness	42
Tensile strength	σ Average = 23.13 Kg/cm ² $ε$ = 3.52 %
Compressive strength	PAverage =1500 Kg δAverage = 3.0 cm σAverage = 54.23 Kg/cm ² εAverage = 0.705 %εAverage= 70.5 %
Brittleness temperature	It was brought up to -23°C without fragility problems in the material.
Freezing and thawing	It was brought up to -23°C without fragility problems in the material.
Thermal expansion	1.18%
Thermal contraction	1.38%
Density	1.056g/cm3
Chemical resistance	Na ₂ CO ₃ to 0.1 N H ₂ SO ₄ to 0.1 N H ₂ SO ₄ to 0.1 N H ₂ SO ₄ to 0.1 N
	1.1 1.3 2.1 1.5 2.7 4.6 1.6 % of mass loss

Brar







