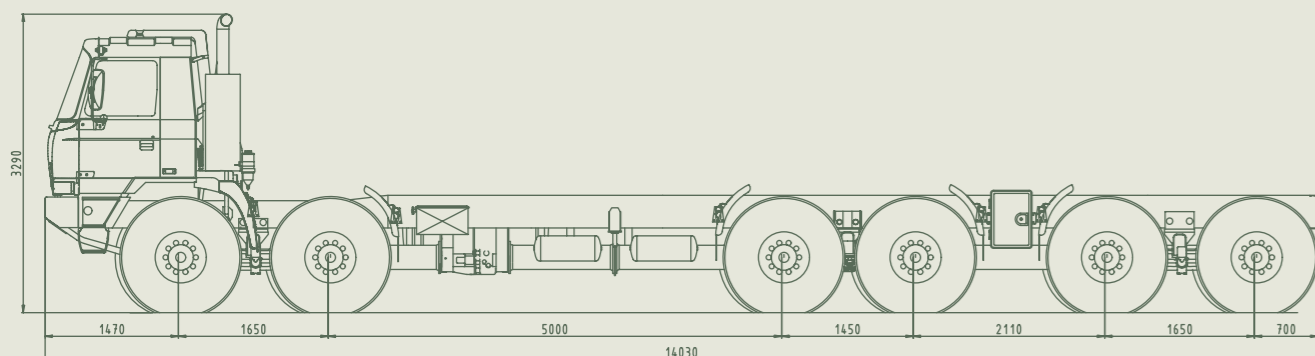
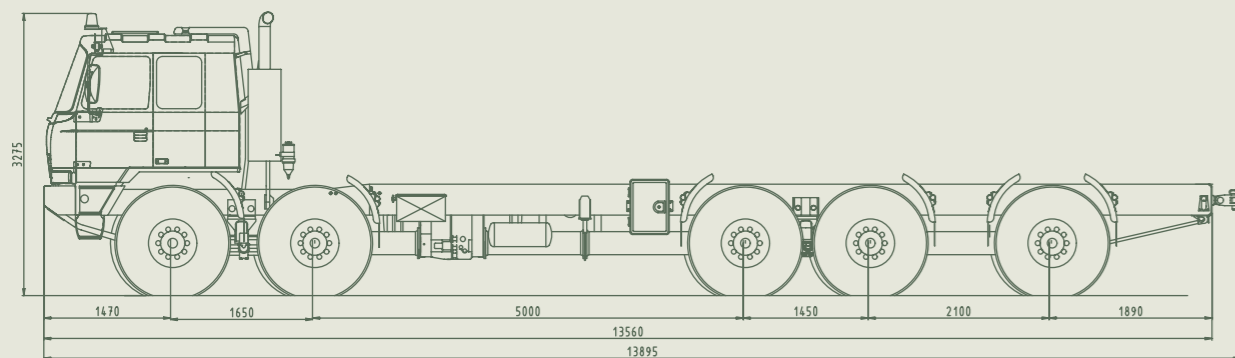
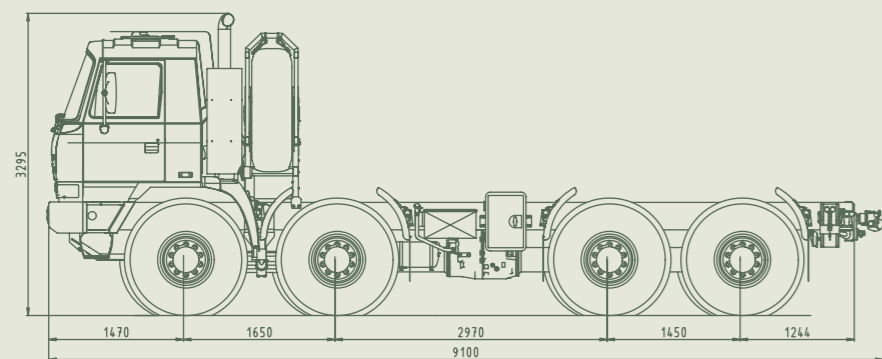
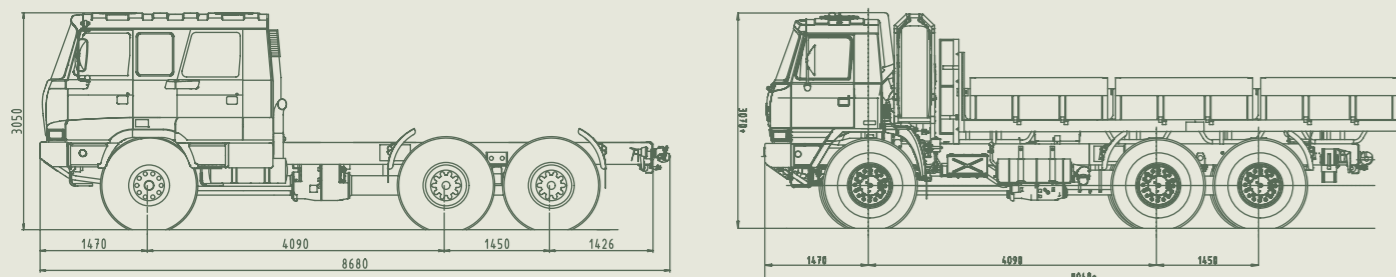


# FORCE - product range



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February 2008, the manufacturer reserves the right to make changes.



**TATRA EXPORT s.r.o.**  
A TATRA COMPANY

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**FORCE**



# TATRA FORCE



The FORCE special vehicles highlight the great flexibility and outstanding technical development of TATRA. These trucks are designed for use on the hardest terrain and in severe climatic conditions where other vehicles can not operate. In addition to the traditional TATRA concept using a central tube and half-axes with independent suspension, these highly specialized vehicles include:

- the almost exclusive use of liquid-cooled engines producing over 300kW
- the almost exclusive use of automatic transmission
- axles with wheel hub reductions
- the use of 16.00 R20 tactical tires

The technical concept of FORCE vehicles is based on light versions of TATRA military vehicles but their design definitely puts them in the category of the most heavy-duty military vehicles with outstanding mobility on the severest terrain

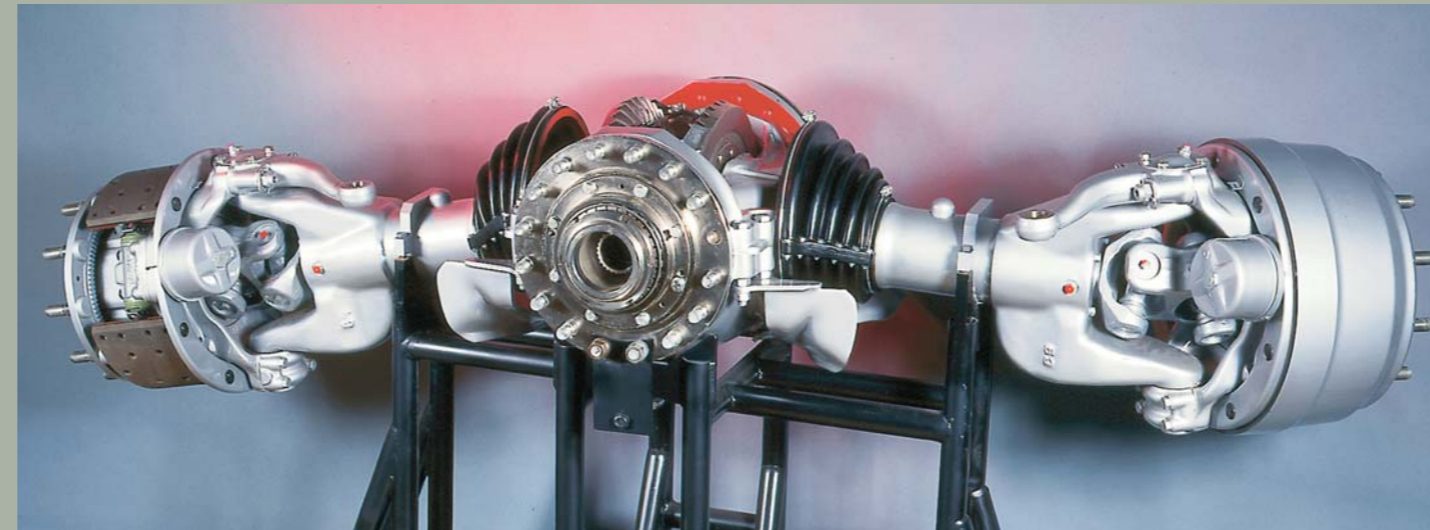
- for operation on mud and sandy soil
- for use on demanding military missions.

Their modular chassis configuration can be used for 6x6, 8x8, 10x10 and 12x12 versions.

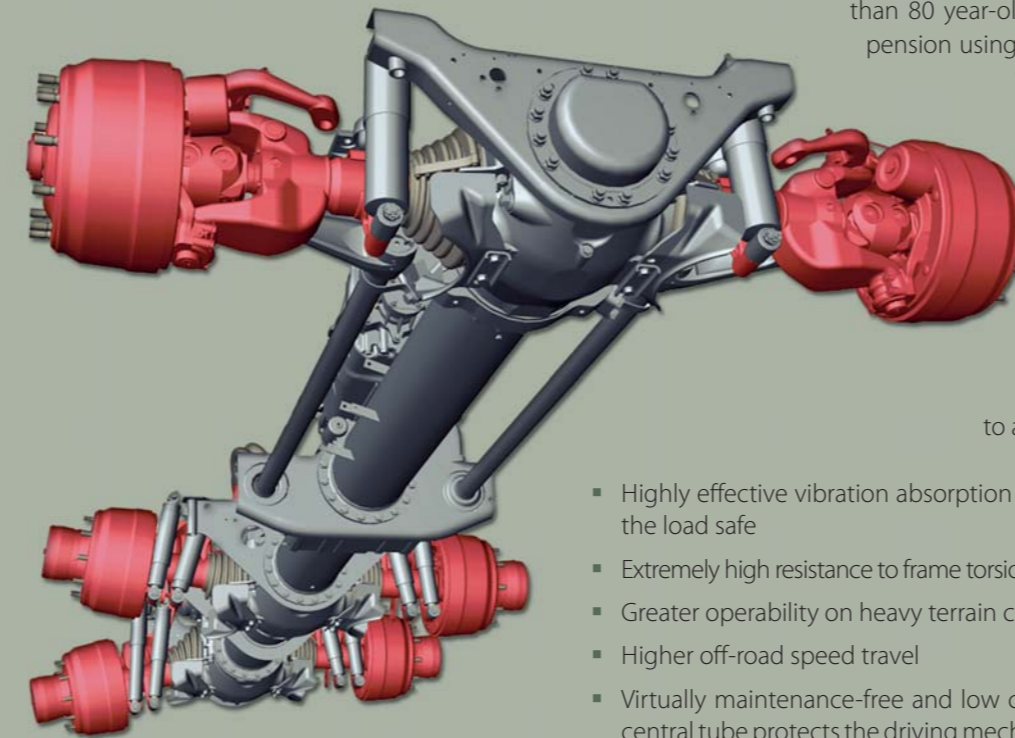
FORCE trucks are particularly suitable as a chassis for various special-purpose truck bodies such as a platform truck, hook container loaders, tanks, crush trucks and weapon system carriers.

Moreover FORCE trucks have proved to be perfect fire fighting vehicles because their engines and transmissions provide great acceleration. Another benefit is their great maneuverability on heavy terrain which other vehicles cannot get to.

## TATRA chassis concept

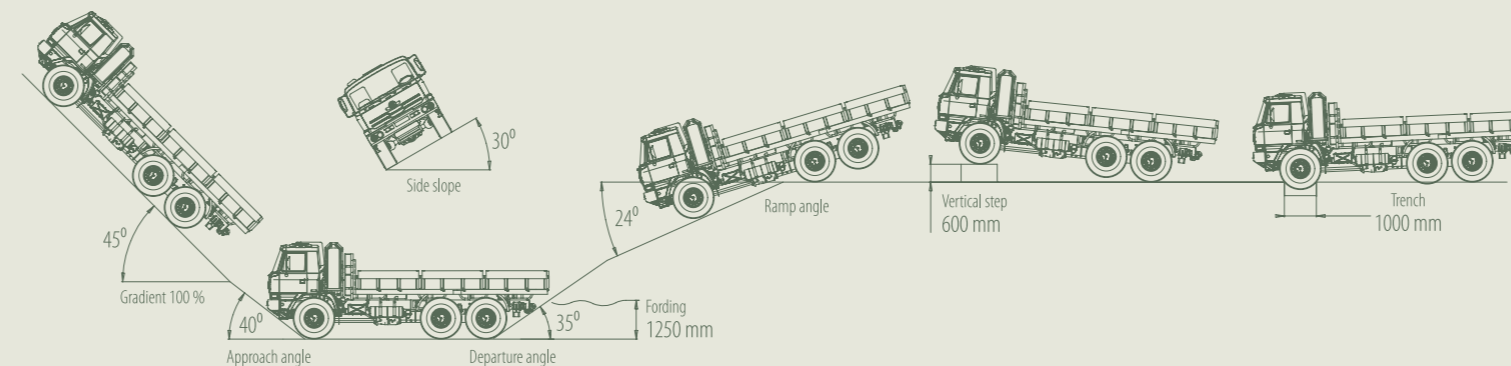


The chassis is a state-of-the-art version of the proven, more than 80 year-old concept with independent suspension using swing half-axes and a rigid space frame with a central tube.



The unique chassis concept gives the vehicle excellent driving characteristics particularly on heavy terrain. The design is based on swing half-axes with independent suspension and a space frame comprising a central tube connected to a ladder-type frame.

- Highly effective vibration absorption to keep the crew comfortable and the load safe
- Extremely high resistance to frame torsion and flexion when on rough terrain
- Greater operability on heavy terrain compared to conventional vehicles
- Higher off-road speed travel
- Virtually maintenance-free and low cost chassis operation because the central tube protects the driving mechanism against mechanical damage and weather effects



## Engine:

The trucks usually have Cummins and Caterpillar engines with a liquid cooling system, direct injection and electronic control.

Engine	Max. output	Max. torque	Emission limit
ISM 400 *	298kW/2100min <sup>-1</sup>	1966Nm/1200min <sup>-1</sup>	EPA/CARB1999
ISM 440E20 *	324kW/1900min <sup>-1</sup>	2100Nm/1200min <sup>-1</sup>	Euro 2
ISM e 420 30 *	306kW/1900min <sup>-1</sup>	2010Nm/1200min <sup>-1</sup>	Euro 3
C 13 410 **	306kW/2100min <sup>-1</sup>	2100Nm/1200min <sup>-1</sup>	EPA/CARB2004

\* ISM - Cummins, \*\* C - Caterpillar

## Transmission:

TWIN DISC, fully automatic, electronically controlled transmission with 6 forward and 1 reverse gear. A step-down transmission integrated directly into the central tube. Diagnostics on the instrument panel and a display showing the engaged gear. The truck comes with a speed limiting governor and protection against starting the engine when it is in gear.

## Steering:

Left-hand or right-hand compact servo steering. The 10x10 and 12x12 versions are supplied with rear axle steering.

## Axles:

Independent suspension swing axles with lockable axial or inter-axial differential. Wheel hub reduction. All wheel drive, integrated front/rear torque divider.

## Suspension:

### Front axle

- Leaf springs and telescopic dampers
- Torsion rods and telescopic dampers

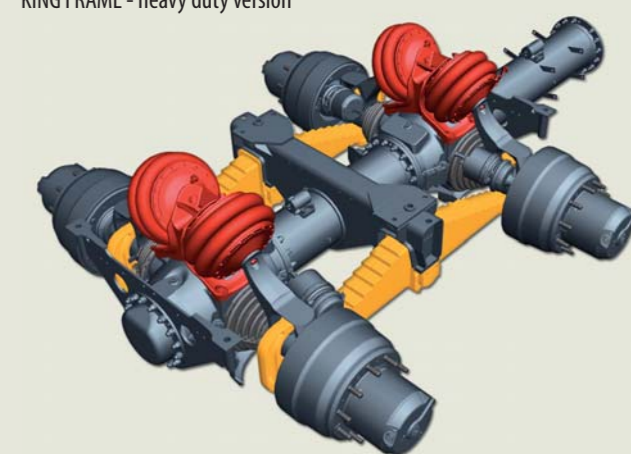
### Rear axles

- combined
  - light version up to 11.5 tons per axle (KING FRAME - light version)
  - heavy duty up to 15 tons per axle (KING FRAME - heavy duty version)
- Leaf springs – up to 11.5 tons per axle

KING FRAME - light version



KING FRAME - heavy duty version



## Cabin:

Over-engine, all-metal, two-seat cabin with curved windshield, hydraulic folding system. The cabin can be fitted with an integrated oil heater and an independent diesel heater and air conditioning.

The cabin can be short or long depending on the type of vehicle. It has a universal skeleton for both left-hand and right-hand steering. Special equipment for the cabin includes filtered ventilation, weapon holders, convoy vehicle lighting system, emergency seat and a provisional bed.

## Brakes:

Drum brakes with a PERROT brake expander, automatic brake shoe adjustment and ABS anti-lock braking system. The braking system is fitted with noise dampeners.

**Service brake** – dual circuit, overpressure braking system on all wheels.

**Emergency brake** – spring braking system on both rear axle wheels with a link to the trailer brake.

**Parking brake** – spring braking system on both rear axle wheels.

**Continuous service retarder** – engine braking.