Heavy Unarmored Vehicles

Australian Heavy Unarmored Vehicles
Austrian Heavy Unarmored Vehicles
Belarussian Heavy Unarmored Vehicles
Brazilian Heavy Unarmored Vehicles
British Heavy Unarmored Vehicles
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International AACO Mk 1 5000 kg Truck

Notes: The AACO (Australian Army Cab Over) heavy truck was in production until 1974 for military models, but they continued in production as civilian trucks in various styles until 2002 (the ACCO, or Australian Constructed Cab Over). The cab is identical to that used on the International 2500 kg truck, but the body is much larger and heavier. The cargo has drop sides and a drop tailgate, with removable bench seats, removable bows, and a removable canvas cover. Some have a cargo loading crane, usually with a capacity of 3.6 tons. The truck has a selectable all-wheel drive, or 6x4 may be selected for road use, in which case the four rear wheels are the drive wheels. The International 5000 kg has a winch in the in the body at the rear of the cab that has a capacity of 5 tons; the winch cable may be directed out to the front or rear of the truck. They saw combat service in Vietnam, where many of them "lost" their cab doors to facilitate fast bail outs. Likewise, the tarpaulin was not normally mounted over the cargo body.

The engine is an International AOD-283 I-6 gasoline-fired engine developing 150 horsepower at 3400 rpm. This is coupled with a manual T-54 transmission with 5 forward and one reverse gear. The cargo body has a wood floor over a steel truss and has a load area of 4.27 x 2.13 meters. The front suspension uses semi-elliptical springs with hydraulic shock absorbers; the rear wheels have 6-rod leaf springs. The AACO has a spare tire mounted under the rear of the cargo body. Over the commander's position is a ring mount for a weapon up to NHT, normally an M2HB in Australian service; this is not included in the stats below. Variants include a dump truck, a road paving vehicle, a fire engine, a tanker, a garbage truck, and a recovery vehicle.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$11,294	G, A	4.54 tons	11.32 tons	2+20	8	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
129/65	36/18	191	74	Stnd	W(3)	HF1 HS1 HR1

Mack Australia MC3

Notes: This is a Mack RM6866RS 6x6 heavy truck produced for the Australian military by Mack of Australia. They began to be delivered to the Australian military in 1981 and all 906 units were delivered by 1986. The engine is a Mack EM6-285 Maxidyne turbocharged diesel with a 283-horsepower rating at 2100 rpm. The transmission is an automatic Maxitorque with five forward gears and one reverse gear. The steering and brakes are power assisted and include a parking brake. The standard load area is 5.71 x 2.39 meters. The cab has a space behind the seat for the crew's gear.

The MC3s were upgraded for continued use in the mid-1990s, and the fleet completed upgrades in 1996. These upgrades included the replacement of the mechanical suspension with an air suspension and standard installation of a winch with a capacity of 10.58 tons, and having 60 meters of cable. A variant was devised, with a load-handling crane with a capacity of 3.4 tons as standard. The crane uses a power take-off from the engine, and cannot be operated while the truck is in motion. The crane installation means that the cargo area is smaller; it is 5.02 x 2.39 meters, and has appropriately shorter troop seats. This variant has lockdown points for containers. The cab itself is placed on an air suspension to ease riding aches and pains for the crew.

There is a fuel tanker version of the MC3; this version has four fuel pumps and hoses on reels. The water tanker version features an aluminum tank with internal coatings to prevent corrosion and contamination. The water tanker has three compartments in its tank, and comes with two hose reels, a spray bar, and three water dispensing faucets. Both have winches.

Other variants include a wrecker, an artillery tractor with ammunition racks, a cement mixer, a dump truck, a vehicle to lay asphalt and spray tar, and a bridging vehicle.

Twilight 2000 Notes: Upgrades were not completed by the commencement of hostilities; an individual MC3 may not have the air suspension and upgraded winch installed; some have only the air suspension installed, without the winch, or only the winch, without the air suspension. These trucks were also put to convoy escort use, carrying a stripped M113 or M113A1 in the cargo bed.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
MC3 (Original)	$9,811	D, A	8 tons	11.46 tons	3+26	8	Headlights	Open
MC3 (Upgraded)	$12,456	D, A	8 tons	11.57 tons	3+26	8	Headlights	Open
MC3 (Upgraded w/Crane)	$15,856	D, A	8 tons	12.81 tons	3+22	9	Headlights	Open
MC3 Fuel Tanker	$18,656	D, A	11,380 Liters + 780 kg	12.16 tons	3	9	Headlights	Open
MC3 Water Tanker	$17,372	D, A	9,240 Liters + 640 kg	11.8 tons	3	9	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
MC3	180/32	50/9	265	105	Stnd	W(3)	HF1 HS1 HR1

(Original) MC3	178/31	50/9	265	105	Stnd	W(3)	HF1	HS1	HR1
(Upgraded) MC3	159/28	44/8	265	105	Stnd	W(3)	HF1	HS1	HR1
(Upgraded w/Crane) MC3 Fuel Tanker	166/29	46/8	265	105	Stnd	W(3)	HF1	HS1	HR1
MC3 Water Tanker	169/30	37/8	265	105	Stnd	W(3)	HF1	HS1	HR1

OAF Type 20.320

Notes: This is a heavy 6x6 truck used by Austria. It is of all-steel construction, with drop sides and rear, and a loading crane. The engine is to the rear of the crew compartment, between the cab and cargo bed. The cab has room for the driver and two passengers, and the center cab position has a machinegun mount on the roof. The cab has a space behind the bench seat for personal gear. The heater is more than adequate, and many an Austrian soldier has slept in comfort in the winter in the cab. Folding seats for 18 passengers are fitted in either the front or rear of the cargo bed. The Type 20.320 is fitted with a heater; the cargo bed is fitted with a canvas cover. The Type 20.320 is powered by a MAN D2538 MTX Diesel with 320 horsepower, and coupled to a manual transmission with six forward and one reverse gears. The floor and troop seats are of pine, while the drop sides and rear tailgate are of hollow aluminum,

The Type 20.320 has a winch in the body behind the cab with a cable which could be led out to the front or rear and has a capacity of 8 tons. The Type 20.320/G1 variant has a crane between the engine compartment and the cargo bed with a capacity of 7.5 tons. The G2 is a basic cargo hauler without a crane. The G3 was used primarily by the Austrian engineer corps and has a 17-ton capacity crane. The G4 is a wrecker variant (not detailed here). The G5 is a decontamination vehicle (not detailed here).

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Type 20.320/G1	$18,124	D, A	10 tons	12.5 tons	3+18	10	Headlights	Open
Type 20.320/G2	$10,624	D, A	10 tons	11.95 tons	3+18	8	Headlights	Open
Type 20.320/G3	$27,624	D, A	10 tons	13.19 tons	3+18	10	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Type 20.320/G1	205/104	57/29	500	91	Stnd	W(3)	HF1 HS1 HR1
Type 20.320/G2	213/107	59/30	500	91	Stnd	W(3)	HF1 HS1 HR1
Type 20.320/G3	198/99	54/28	500	91	Stnd	W(3)	HF1 HS1 HR1

Graf and Stift LAVT-9F/2H & ZAVT-9F/1

Notes: These two trucks differ only in that the LAVT-9F/2H has a two-door cab, while the ZAVT-9F/1 has an extended four-door cab. The LAVT-9F/2H is generally used as a normal cargo truck, while the ZAVT-9F/1 is normally used as an artillery tractor. Both vehicles have a front-mounted 4.5-ton capacity winch. The engines tend to roar when the trucks are in 4x4 mode, but are much quieter in 4x2 road mode. They have a cabover design with the cab above the engine and transmission, and have a drop tailgate. The rear cargo area may be covered with removable bows and a tarpaulin cover. Some models are fitted with a HIAB cargo handling crane with a capacity of 4 tons; this is particularly common on artillery tractors. Power is provided by a Graf & Stift 6 VT-145 diesel engine developing 145 horsepower; the transmission is manual.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
LAVT-9F/2H	$7,893	D, A	6 tons	13.2 tons	3+24	10	Headlights	Open
w/Crane	$11,893	D, A	6 tons	13.5 tons	3+24	10	Headlights	Open
ZAVT-9F/1	$8,230	D, A	6 tons	14.3 tons	6+24	12	Headlights	Open
w/Crane	$12,230	D, A	6 tons	14.6 tons	6+24	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
LAVT-9F/2H	114/58	32/16	300	43	Stnd	W(2)	HF1 HS1 HR1
w/Crane	113/57	31/16	300	43	Stnd	W(2)	HF1 HS1 HR1
ZAVT-9F/1	110/55	30/15	300	43	Stnd	W(2)	HF1 HS1 HR1
w/Crane	108/54	30/15	300	43	Stnd	W(2)	HF1 HS1 HR1

Steyr 10M22

Notes: This is a standard design truck for Steyr, being a cabover vehicle similar in appearance to their other heavy trucks. It uses some components from German MAN trucks, and is to form the basis of an entire line of trucks of various sizes (the NMK line). Variants of this particular truck include a fire engine, light recovery vehicle, van body, and tanker. The truck has a cabover design which may have right-hand or left-hand controls. An enlarged cab version is also made, and the truck is built with three different wheelbases. Options include air conditioning and a winch; heating is standard. The engine is a MAN Type D 0826 LFL diesel with 220 horsepower. This is coupled with an Eaton 5206 automatic transmission with six forward and one reverse gear. The 4x4 suspension consists of parabolic leaf springs with shock absorbers and stabilizer bars, and results in a surprisingly soft ride. The 10M22 can tow 18.7 tons on road.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Steyr 10M22 LWB	$6,319	D, A	5.6 tons	10 tons	3+22	8	Headlights	Open
Steyr 10M22 MWB	$5,981	D, A	5.6 tons	9.74 tons	3+20	8	Headlights	Open
Steyr 10M22 SWB	$5,832	D, A	5.6 tons	9.47 tons	3+20	8	Headlights	Open
Steyr 10M22 LWB/Extended Cab	$6,956	D, A	5.6 tons	10.63 tons	6+22	8	Headlights	Open
Steyr 10M22 MWB/Extended Cab	$6,618	D, A	5.6 tons	10.35 tons	6+20	8	Headlights	Open
Steyr 10M22 SWB/Extended Cab	$6,469	D, A	5.6 tons	10.07 tons	6+20	8	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Steyr 10M22 LWB	183/93	51/26	150	65	Stnd	W(2)	HF1 HS1 HR1
Steyr 10M22 MWB	188/94	52/26	150	65	Stnd	W(2)	HF1 HS1 HR1
Steyr 10M22 SWB	191/97	53/27	150	65	Stnd	W(2)	HF1 HS1 HR1
Steyr 10M22 LWB/Extended Cab	175/89	49/25	150	65	Stnd	W(2)	HF1 HS1 HR1
Steyr 10M22 MWB/Extended Cab	180/90	50/25	150	65	Stnd	W(2)	HF1 HS1 HR1
Steyr 10M22 SWB/Extended Cab	183/93	51/26	150	65	Stnd	W(2)	HF1 HS1 HR1

Steyr 12M18

Notes: The 12M18 is a 4x4 medium truck used by Austria, Kuwait, Pakistan, Thailand, Canada, and the UN. The truck is of a cabover design, and the cab has room for the driver and three passengers; it has an observation hatch in the roof, but no weapons mount. The cab has an adequate heater; it has no air conditioner as standard but does have a fresh air blower. The 12M18 has a 5000-kilogram winch with 50 meters of cable, and an optional machinegun mount over the cab, optional air conditioning, and an optional 3.7-ton loading crane. The 12M18 is powered by a Steyr WD 612.24 turbocharged diesel engine developing 184 horsepower; the 12M21 uses a Steyr WD 612.26 turbocharged diesel engine developing 217 horsepower. The 12M18 uses a Steyr S5/51 manual transmission with 10 forward and two reverse gears, while the 12M21 uses a Steyr S6/65 manual transmission with 12 forward and two reverse gears. Both may be optionally fitted with a ZF automatic transmission with nine forward and one reverse gear. The 4x4 suspension consists of parabolic leaf springs with shock absorbers and stabilizer bars, and results in a surprisingly soft ride. Both may tow 10 tons on roads and 8.5 tons cross-country. The load area is 4.1x2.43 meters, and is constructed of aluminum.

Variants include ambulances, recovery vehicles, tankers, fire trucks, communications, workshops, and weapon carriers.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
12M18	$8,012	D, A	5.35 tons	11.5 tons	4+18	8	Headlights	Open
w/Crane	$11,712	D, A	5.35 tons	11.77 tons	4+18	8	Headlights	Open
12M21	$8,137	D, A	5.35 tons	11.7 tons	4+18	8	Headlights	Open
w/Crane	$11,837	D, A	5.35 tons	11.97 tons	4+18	8	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
12M18	145/74	40/21	180	63	Stnd	W(2)	HF1 HS1 HR1
w/Crane	143/72	40/20	180	63	Stnd	W(2)	HF1 HS1 HR1
12M21	162/82	46/22	180	80	Stnd	W(2)	HF1 HS1 HR1
w/Crane	160/81	44/22	180	80	Stnd	W(2)	HF1 HS1 HR1

Steyr 14M22

Notes: The 14M22 is a 4x4 medium cargo truck used by Austria, Greece, Indonesia, Nigeria, and Switzerland, and was introduced in 1990. The cargo body has drop sides and is covered with canvas over a frame. A 5000-kg capacity winch may be mounted at the front or rear (included in the stats below). These vehicles may be configured as cargo carriers, tankers, ambulances, fire trucks, or shelter carriers. The 14M22 normally comes from the factory as a cab/platform configuration, which local manufacturers and military unit shops can build onto to produce the desired vehicle. The 14M22 uses many German MAN truck components and forms part of the Steyr NMK range of trucks with compatible components. The 14M22 comes in two wheelbase lengths and versions with different cargo carrying characteristics. The standard engine is a MAN D 0826LFL diesel developing 220 horsepower, but the LWB version uses a 245-horsepower diesel compatible with Euro 3 regulations. Note that the 14M22 has a cross-country load carrying ability of 5 tons, but on roads, it can haul 8.5 tons.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
14M22	$7,744	D, A	5 tons	13.5 tons	2+18	8	Headlights	Open
14M224 LAE	$8,194	D, A	8 tons	16.5 tons	2+18	9	Headlights	Open

14M24	$8,134	D, A	7.9 tons	17.5 tons	2+18	10	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
14M22	148/74	41/21	150	65	Stnd	W(2)	HF1 HS1 HR1
14M224 LAE	130/66	36/18	150	65	Stnd	W(2)	HF1 HS1 HR1
14M24	134/67	38/18	150	72	Stnd	W(2)	HF1 HS1 HR1

Steyr 17M29

Notes: The 17M29 is a 4x4 heavy truck used by China, Egypt, Ghana, and Indonesia, and shares many components with the Steyr 24M32. The truck is of a cabover design, and the cab has room for the driver and 3 passengers. The driver's seat is an individual bucket seat and is very adjustable to the needs of the driver; optionally, the passenger bench seat may be replaced with another single bucket seat. There are passenger seats in two rows down the center of the bed, which has drop sides and a canvas cover. The 17M29 has a 10000-kilogram winch with 60m of cable, a machinegun mount over the cab, and optional automatic transmission. The standard fuel tank is 320 liters, but an optional 400-liter tank may be installed instead. The 17M29 may tow 11.5 tons on the road or 10 tons off-road. The 17M29 is powered by a Steyr WD 615.73 turbocharged diesel developing 287 horsepower at 2200 rpm, and is coupled to a manual ZF 9 S 109 GP transmission with nine forward and 1 reverse gear. Suspension is 4x4 using semi-elliptical leaf springs with shock absorbers. The steering and brakes are power assisted. The cargo load area is 5x2.43 meters, and has room for passenger bench seats as well as bulk cargo.

This vehicle is licensed-produced in China as the Hongyan, in both 4x4 and 4x2 versions.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Steyr 17M29	$10,847	D, A	7 tons	17 tons	3+20	12	Headlights	Open
Hongyan 4x2 Version	$10,305	D, A	7 tons	17 tons	3+20	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Steyr 17M29	152/77	42/22	320 or 400	101	Stnd	W(2)	HF1 HS1 HR1
Hongyan 4x2 Version	152/58	42/17	320 or 400	101	Stnd	W(2)	HF1 HS1 HR1

Steyr 18M28

Notes: This is another member of the NMK series of trucks, a sister vehicle to the 10M22 above. Despite the high load carrying ability, Steyr classes the 18M28 as a medium truck. The standard vehicle is a platform bed with no seats and drop sides, but seats can be installed to transport troops. The cargo area is large enough to mount weapons like antiaircraft guns or mortars. An extended cab version is available, as is air conditioning and an 8-ton winch with 60 meters of cable (included below). The 4x4 suspension consists of parabolic leaf springs with shock absorbers and stabilizer bars, and results in a surprisingly soft ride. The 18M28 is powered by a MAN Type D 0836LFL 6.871 Euro 2 turbocharged diesel capable of 280 horsepower. A variant of this truck, the 18M26, is powered by a variant of this engine developing 260 horsepower – more milage, but less power. The engine is coupled with a ZF 16 S 109 manual transmission with 16 forward and 2 reverse gears. Steering and brakes are power assisted. The 18M28 and 18M26 can tow 30 tons on roads.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Steyr 18M28	$10,273	D, A	8 tons	13.68 tons	3+32	10	Headlights	Open
w/Extended Cab	$10,910	D, A	8 tons	14.32 tons	6+32	12	Headlights	Open
Steyr 18M26	$10,198	D, A	8 tons	13.67 tons	3+32	10	Headlights	Open
w/Extended Cab	$10,835	D, A	8 tons	14.3 tons	6+32	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Steyr 18M28	174/88	48/24	200	98	Stnd	W(2)	HF1 HS1 HR1
w/Extended Cab	169/85	47/24	200	98	Stnd	W(2)	HF1 HS1 HR1

Steyr 18M26	165/83	46/23	200	91	Stnd	W(2)	HF1 HS1 HR1
w/Extended Cab	160/81	45/23	200	91	Stnd	W(2)	HF1 HS1 HR1

Steyr 24M32

Notes: This is a predecessor of the 26M39 listed below. It is a lighter but larger truck than the 26M39, with a less powerful engine, but with the same cargo load. The 24M32 also shares many automotive components with the 17M29. The frame is a bit stiff and the ride in one of these trucks can be quite rough. Suspension is 6x6 using semi-elliptical leaf springs with shock absorbers. The 24M32 has locking differentials, but these must be manually locked. Power is provided by a Steyr WD 815.74 turbocharged diesel with 342 horsepower, coupled with a ZF 5 S 111 GP manual transmission with nine forward and one reverse gear. An Allison automatic transmission is an option. Steering and brakes are power assisted. The rear cargo area has a tarpaulin cover over bows, and there are troops seats down the center facing out. A winch is provided with a 10-ton capacity and 60 meters of cable. The cargo load area is 6.2x2.43 meters. Towing capability is 40 tons on the road, or 10 tons off-road. Variants include a recovery vehicle, a fire engine, an artillery tractor, and a tractor-trailer. The 24M32 is used much more widely than the 26M39, used by Austria, Cyprus, and Egypt, and being license-produced in Canada (where it is called the Percheron) and China.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$12,893	D, A	12 tons	22.5 tons	3+32	18	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
141/71	39/20	400	121	Stnd	W(3)	HF1 HS1 HR1

Steyr 26M39

Notes: The 26M39 is a heavy 6x6 truck used by Canada, China, and Cyprus, and Egypt. It is an improved version of the 24M series (above). It features a steel cab, a space between the cab and cargo bed for a 13-ton crane, and a large cargo bed with a canvas cover. Tilting the cab forward accesses the engine and transmission. The cab has room for the driver and two passengers, and the cargo bed has collapsible seats down the center facing out. The cargo bed measures 5.2x2.4 meters. Power come from a Steyr WD 815.76 turbocharged diesel with 390 horsepower. The transmission is a ZF 4 S150 GP automatic transmission with seven forward and one reverse gear. Suspension is 6x6 using semi-elliptical leaf springs with shock absorbers. Towing capacity is 60 tons on the road or 15 tons off-road. There is a machinegun mount on the roof of the cab, and a 10-ton winch in front. There are recovery vehicle, firefighting, artillery tractor, and tank transporter variants.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$25,678	D, A	12 tons	26 tons	3+32	20	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
140/70	39/20	400	139	Stnd	W(3)	HF1 HS1 HR1

Steyr 26M42 P40

Notes: The 26M42 P40 is a heavy 6x6 truck used by several European countries. It is a further development of the 24M and 26M series. It has a steel cab and body, with a long bed and 13-ton crane, as well as a 10-ton winch in front. The cab has room for the driver and two passengers, and there is a machinegun mount on the roof of the cab. Power is provided by a Steyr WD 815.73 turbocharged diesel with 416 horsepower, coupled with a ZF 4 S 150 GP automatic transmission with seven forward and one reverse gear. Suspension is 6x6 using semi-elliptical leaf springs with shock absorbers and the rear axles being independently suspended. There is a machinegun mount on the roof of the cab, and a 10-ton winch in front. In the space between the cab and cargo bed, the 13-ton crane is mounted. Towing capacity is 60 tons on roads and 15 tons off-road. There are tanker, recovery vehicle, shelter carrier, firefighting and troop carrier versions of this truck.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$26,255	D, A	14 tons	26 tons	3+40	20	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
147/74	41/21	400	154	Stnd	W(3)	HF1 HS1 HR1

Steyr 680

Notes: The 680 M is an older Steyr truck still in use by many countries, including Austria, Greece, Indonesia, Nigeria, and Switzerland. It is of standard format and semi-cabover construction; the cab does not tilt, the engine and transmission being accessed from removable panels in the cab or by sliding out the entire assembly on rails through the front of the vehicle. The all-steel cab has an observation hatch on the roof over the commander's position that may or may not be fitted with a light weapon mount. The rear cargo area has removable bows, a tarpaulin top, a drop tailgate, and folding bench seats. There is also a tanker truck variant. The standard engine for most of the production series is the WD-609 (pre-chamber injection) or WD-610 (direct injection) diesel with 120

horsepower, having been produced with these engines from 1960 to 1979. For 1979 until production stopped in 1986, the engine used was the 142-horsepower WD-612. The 5-speed transmission of the 680 M is not synchronized, so it has to be switched with intermediate gas and double coupling. In the 1990s, the 680M and M3 was modified with the dashboard the being same as used on the Steyr 12M18 truck. The upgrade also used the double exterior mirrors of the 12M18, a reinforced flatbed, a new hood and new brakes.

The 680 M3 is a development of the 680 M listed above. Though load carrying capacity is lightened, the 680 M3 performs much better off road, with an independent 6x6 suspension for all wheels. However, there is a high degree of parts commonality with the 680 M. These trucks use a turbocharger on their engines, delivering 150 horsepower with the turbocharged WD-610 or 170 horsepower with the turbocharged version of the WD-612. The fuel tank is larger on the 680 M3, to partially compensate for the higher fuel consumption. Another addition is the 4.5-ton capacity winch in the front of the vehicle, with 90 meters of cable. The troop seats in the rear have been moved to the center of the vehicle for a better firing position.

There are more variants available, including a cargo/troop carrier, dump truck, and tanker. Only Austrian and Greek armies used the M3 version. The Austrian Army retired the 680 M and M3 by 2007, replaced by the Steyr 12M18. The Greeks retired and replaced theirs by 2009. The 680 M is, however, popular in the Arab world, both among the military and civilians.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
680 M (120 hp)	$6,355	D, A	6.5 tons	12.33 tons	2+20	7	Headlights	Open
680 M (142 hp)	$6,411	D, A	6.5 tons	12.39 tons	2+20	7	Headlights	Open
680 M3 (150 hp)	$6,697	D, A	5.5 tons	12 tons	2+20	7	Headlights	Open
680 M3 (170 hp)		D, A	5.5 tons	12.04 tons	2+20	7	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
680 M (120 hp)	107/54	30/15	160	35	Stnd	W(2)	HF1 HS1 HR1
680 M (142 hp)	118/59	32/17	160	42	Stnd	W(2)	HF1 HS1 HR1
680 M3 (150 hp)	124/62	34/18	180	55	Stnd	W(3)	HF1 HS1 HR1
680 M3 (170 hp)	134/68	38/19	180	63	Stnd	W(3)	HF1 HS1 HR1

Graf & Stift ZA-200/1

Notes: This is a large truck that was replaced in Austrian service by the OAF Type 20.320. Some remain in service, however. It uses a cabover type cab, and has a very stiff frame. The rear cargo area has drop sides and a 4-ton capacity HIAB crane for loading. A 4.5-ton winch leads out through the front bumper. The engine is a Graf & Stift 6 VT-200 diesel with 200 horsepower. The transmission is manual. Permissible towed loads are 15 tons on road and 10 tons cross-country. Variants include an engineer vehicle (larger cab, shorter load area), another engineer vehicle with a heavy 17-ton crane in the bed, a semi-trailer, and an aircraft refueling truck.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
ZA-200/1	$14,616	D, A	10 tons	20.63 tons	2+40	16	Headlights	Open
ZAFD-200/1 Engineers	$14,362	D, A	8 tons	20.6 tons	5+32	16	Headlights	Open
ZAFD-210/36 Engineers	$25,962	D, A	8 tons	20.65 tons	5+18		Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
ZA-200/1	107/54	30/15	300	59	Stnd	W(3)	HF1 HS1 HR1
ZAFD-200/1 Engineers	107/54	30/15	300	59	Stnd	W(3)	HF1 HS1 HR1
ZAFD-210/36 Engineers	107/54	30/15	300	59	Stnd	W(3)	HF1 HS1 HR1

MAZ-6317

Notes: The firm of MAZ was split off from KrAZ; the trucks produced in Belarus under the Soviet Regine were KrAZ trucks, and as Belarus had a fully-functioning truck factory, they decided to produce their own trucks. One of these is the MAZ-6317, which is a heavy utility truck; many of these also service as artillery tractors, ammo carriers, MRL chassis, SSM chassis, and with a box in the bed, specialist vehicles such as command posts and FDCs. The MAZ-6317 was originally a KrAZ truck, and the prototype was completed in 1986; however, field trials were still going on when the fall of the Soviet Union happened and Belarus gained its independence, and LRIP production had not yet started. The Belarussians restarted production, and full production began in 1995. There have been some exports, most notably to North Korea; as Belarus was by then a member of NATO, NATO was not happy with this deal. Other export customers include Azerbaijan and Russia, and Ukraine manufactures these and several other MAZ trucks under license under the company name of Bogdan. MAZ also sells this truck to civilian concerns; several international aid organizations are known to use them, and several European countries have fire trucks based on the MAZ-6317. The 4x4 version is popular as a vehicle for simply having fun in mud or in rough terrain like rock climbing. A commercial, hard-bodies version of this truck is also sold, as well as refrigerated versions.

The Basic MAZ-6317 is designed to transport troops and military supplies, mostly on the road, but it also has decent off-road capacity, with a powerful engine that has a lot of torque and locking differentials, as well as central tire regulation and run-flat/puncture-resistant tires. The truck has all-wheel drive and can steer using all wheels, with the rear four wheels pivoting in opposition to the front wheel. The standard body has folding benches for troops and tie downs for equipment. The rear of the truck is covered with bows and a tarpaulin. The MAZ-6317 also has winch mounted in the front bumper, primarily used for self-recovery. This has a capacity of 10 tons and 50 meters of cable. Though capable of carrying 11 tons of cargo/troops, the MAZ-6317 can tow 29.85 tons if the truck is otherwise empty.

Normal engine is a 425-horsepower TMZ-8424 turbocharged diesel. Drive is 6x6. However, early versions used a TMZ-8421 360-horsepower turbocharged diesel, and some export versions (like the ones exported to North Korea) have a YaMZ-238DE2 turbocharged diesel developing 330 horsepower. The base transmission is manual, though automatic transmission is available upon request. The baseline cab is 2-place, but has a sleeping berth at the rear that can be equipped with luxuries like a TV, CD/DVD player, small refrigerator, etc., especially in civilian versions. The cab can be extended with an extra row of seats for three more crew; this is the MAZ 63171. The cab tilts forward to access the unitary power pack.

The MAZ-6317 is used as the chassis for the BM-21A BelGrad MRL. Other variants include the MAZ-63172 extended-bed/LWB version, MAZ-631705 shelter carrier, MAZ-6425 tractor truck. MAZ-6517 dump truck, (these last two are not depicted below) and the MAZ-5316 4x4 smaller version (found in Belorussian Medium Unarmored Vehicles).. Some more exotic variants include the Zasashnyk MRAP APC, which is built on the MAZ-5316.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
MAZ-6317 (425 hp)	$18,511	D, A	10.47 tons	14 tons	2+44	10	Headlights	Open*
MAZ-6317 (360 hp)	$18,266	D, A	10.4 tons	14 tons	2+44	10	Headlights	Open*
MAZ-6317 (330 hp)	$18,156	D, A	10.36 tons	14 tons	2+44	10	Headlights	Open*
MAZ-63171 (425 hp)	$18,612	D, A	10.56 tons	14.18 tons	5+44	10	Headlights	Open*
MAZ-63171 (360 hp)	$18,367	D, A	10.49 tons	14.18 tons	5+44	10	Headlights	Open*
MAZ-63171 (330 hp)	$18,257	D, A	10.45 tons	14.18 tons	5+44	10	Headlights	Open*
MAZ-63172 (425hp)	$19,129	D, A	11.03 tons	15.17 tons	2+50	10	Headlights	Open*
MAZ-63172 (360hp)	$18,884	D, A	10.96 tons	15.17 tons	2+50	10	Headlights	Open*
MAZ-63172 (330hp)	$18,774	D, A	10.92 tons	15.17 tons	2+50	10	Headlights	Open*
MAZ-631705 (425 hp)	$18,700	D, A	9.48 tons**	14.35 tons**	2+20	10	Headlights	Open*
MAZ-631705	$18,445	D, A	9.34 tons**	14.35 tons**	2+20	10	Headlights	Open*

(360 hp)								
MAZ-631705 (330 hp)	$18,345	D, A	9.29 tons**	14.35 tons**	2+20	10	Headlights	Open*

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
MAZ-6317 (425 hp)	200/140	55/39	350	157	Stnd	W(3)	HF1 HS1 HR1
MAZ-6317 (360 hp)	173/121	48/34	350	132	Stnd	W(3)	HF1 HS1 HR1
MAZ-6317 (330 hp)	161/113	45/31	350	121	Stnd	W(3)	HF1 HS1 HR1
MAZ-63171 (425 hp)	197/138	55/38	350	157	Stnd	W(3)	HF1 HS1 HR1
MAZ-63171 (360 hp)	171/120	48/33	350	132	Stnd	W(3)	HF1 HS1 HR1
MAZ-63171 (330 hp)	160/112	44/31	350	121	Stnd	W(3)	HF1 HS1 HR1
MAZ-63172 (425hp)	186/130	52/36	350	157	Stnd	W(3)	HF1 HS1 HR1
MAZ-63172 (360hp)	162/113	45/32	350	132	Stnd	W(3)	HF1 HS1 HR1
MAZ-63172 (330hp)	151/106	42/29	350	121	Stnd	W(3)	HF1 HS1 HR1
MAZ-631705 (425 hp)	195/137	54/38	350	157	Stnd	W(3)	HF1 HS1 HR1
MAZ-631705 (360 hp)	170/119	47/33	350	132	Stnd	W(3)	HF1 HS1 HR1
MAZ-631705 (330 hp)	158/111	44/31	350	121	Stnd	W(3)	HF1 HS1 HR1

*The shelter body of the MAZ-631705 has a Radiological rating of Enclosed. The cabs of all these trucks likewise have a Radiological rating of Enclosed.

**This does not include any equipment which may installed in the shelter body.

Engesa EE-50

Notes: This is a heavier truck built by Brazil. It is also in service with Angola. It is of cabover construction, with the cab over the engine and transmission, and a rear cargo area. The rear cargo area may be covered with a tarpaulin over bows. The wheels are all individually suspended, and the rear has a patented “Boomerang” articulated suspension, giving the rear wheels a large amount of travel for rough terrain use. The EE-50 is noted for its all-riveted steel construction, including the cargo bed that is often made of wood in vehicles of its class. The EE-50 is also noted for its deep fording capability, able to ford 1.4 meters of depth. The EE-50 is powered by a Scania D11 diesel developing 202 horsepower, and coupled with a manual transmission with five forward and one reverse gear. The EE-50 is capable of towing 5 tons on-road and off-road. The cargo load is 5 tons off-road, but if strictly road travel will be done, the EE-50 can haul 10 tons. The EE-50 has power brakes and steering. Variants include a cargo/troop carrier, ambulance, van body, tanker, recovery vehicle, fire truck, and mobile workshop. The EE-50 is used by Brazil, Angola and one other unnamed country, but Engesa’s budgetary difficulties in the 1980s and subsequent bankruptcy curtailed marketing and production of the EE-50 before more sales could be made.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$9.643	D, A	5 tons	17 tons	2+30	12	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
120/61	33/17	300	59	Stnd	W(3)	HF1 HS1 HR1

AEC Militant

Notes: These vehicles were replaced by the Bedford TM 6-6 and other trucks. They are a further development of the AEC Matador series used in World War 2. Nicknames for the Militant include the Milly or Milly Tant, and the Knocker, named for the rhythmic knocking sound of its slow-revving engine. The primary development came in the cab, which was enlarged; the Militant was designed for use as an artillery tractor. The cab also got a steel frame, unlike the wood frame of the Matador. The engine was also upgraded, and became an AEC 150-horsepower diesel. The transmission is manual, and can be balky; it has six forward and one reverse gear. The Militant is notably difficult to steer, as the truck is heavy, has a long wheelbase, and does not have power steering; steering is particularly difficult as low speeds and on challenging terrain. Most Militant Mk 1s were 6x4. Suspension is by semi-elliptical leaf springs with hydraulic shock absorbers, with the rear bogie's leaf springs being inverted. Three wheelbase variants were built, Long, Medium, and Short Wheelbase. The load area for the LWB is 5.49x2.32 meters, the length of the load area of the MWB is 5.09 meters, and for the SWB, 4.52 meters.

They have a cabover type cab, drop metal sides, and a removable drop tailgate. Most of them are equipped with a 7-ton capacity winch that has 76.2 meters of cable; this winch was designed to help emplace and tow artillery guns, but proved adept and robust at recovering other trucks. Some have a HIAB 4-ton crane to the rear of the cab.

The Mk 3 adds a cab heater and a more powerful engine, an AEC AV 760 diesel developing 226 horsepower, coupled with a manual transmission with six forward and one reverse gear. The suspension is upgraded, with double acting shock absorbers and an articulating rear bogie. Steering on the Mk 3 is power assisted, and the Mk 3 is much easier to maneuver than the Mk 1. The winch was made standard. The load area is increased to 6.25x2.34 meters. Just as the Mk 1 received the nickname of Milly, the Mk 3 was known as the Nellie.

In the 1970s, many Militants were sold off to civilian concerns, ranging from collectors to heavy recovery specialists. Some Mk 1 Militants were in service with the Army as late as 1985, and some Mk 3 Militants were in service until the mid-1990s.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Militant Mk 1 LWB	$12,468	D, A	10.16 tons	21.2 tons	2+42	16	Headlights	Open
w/Crane	$16,468	D, A	10.16 tons	21.5 tons	2+42	16	Headlights	Open
Militant Mk 1 MWB	$12,021	D, A	10.16 tons	20.24 tons	2+40	16	Headlights	Open
w/Crane	$16,021	D, A	10.16 tons	20.54 tons	2+40	16	Headlights	Open
Militant Mk 1 SWB	$11,264	D, A	10.16 tons	18.81 tons	2+36	16	Headlights	Open
w/Crane	$15,264	D, A	10.16 tons	19.11 tons	2+36	16	Headlights	Open
Mk 3	$14,489	D, A	10 tons	22 tons	2+40	16	Headlights	Open
w/Crane	$18,389	D, A	10 tons	22.3 tons	2+40	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Militant Mk 1 LWB	90/35	26/10	218	40	Stnd	W(3)	HF1 HS1 HR1
w/Crane	90/35	26/10	218	40	Stnd	W(3)	HF1 HS1 HR1
Militant Mk 1 MWB	92/35	26/10	218	40	Stnd	W(3)	HF1 HS1 HR1
w/Crane	92/35	26/10	218	40	Stnd	W(3)	HF1 HS1 HR1
Militant Mk 1 SWB	95/36	27/11	218	40	Stnd	W(3)	HF1 HS1 HR1
w/Crane	95/36	27/11	218	40	Stnd	W(3)	HF1 HS1 HR1
Mk 3	110/42	31/11	218	66	Stnd	W(3)	HF1 HS1 HR1
w/Crane	110/42	31/11	218	66	Stnd	W(3)	HF1 HS1 HR1

Alvis Aquatrack

Notes: This large amphibious tracked carrier is currently in use by the Filipino Marines. The Aquatrack is a large, rectangular tracked vehicle with a boat-type hull, powered by two propellers at the rear in Kort nozzles when in water. It can operate fully loaded in rough waters up to Sea State 5, and in plunging surf of up to 3.05 meters. The Aquatrack can also traverse marginal terrain, such as mud, soft sand, frozen ground, or swamps. The hull is very tough, being thin but made of nickel-chrome steel to withstand corrosion. It has five separate watertight compartments which can be sealed from one another, and the Aquatrack has a low center of gravity. The driver's cab is in the front of the hull and has seating for four, with access from a roof hatch or from the rear of the compartment, and large windows to the front and smaller ones to the sides. The roof hatch of the cab has a weapon mount strong enough to take weapons of up to .50/12.7mm size. The rear compartment is large and carries the cargo, with fold-down seating for up to 40 fully equipped troops. The deck of this compartment has a non-slip coating and rollers to assist in loading and unloading large cargoes; a vehicle the size of a Land Rover, plus 28 troops, may fit inside. The rear has a large ramp and a door, and there are

windows near the top of the sides of the compartment. The suspension is a modified form of that used on the M113 series, but is wider and much longer.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$11,997	D, A	5 tons	18 tons	2+40	14	Headlights	Enclosed

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
140/98/35	39/27/10	400	93	Stnd	T3	HF1 HS1 HR1

Alvis Stalwart

Notes: This is an amphibious 5-ton truck used by Austria and Sweden, and once used by Britain. Production stopped in 1971, and they have also become quite sought-after civilian and collectors' vehicles. A winch with a capacity of 4.99 tons is mounted at the front. It is propelled in the water by water jets; these water jets include nozzles which turn 180 degrees to allow the vehicle to move in reverse in the water. The base vehicle is known as the FV622; with a loading crane of 3 tons capacity, the designation becomes FV623. The FV623 was primarily used by the Royal Artillery to transport ammunition pallets. The FV 624 will not be detailed here; it is a fitters vehicle for REME. Other variants include a tanker truck (mostly for fuel), and a mine-deploying vehicle fitted with the Ranger antipersonnel mine system.

Power for the Stalwart is provided by a Rolls-Royce B-81 Mk 8B gasoline engine developing 220 horsepower. The transmission is manual, with five forward and 5 reverse gears, and a power take-off to the waterjets. Steering is power assisted. The Stalwart is 6x6 with all independently suspended wheels. The suspension and drive system are complex and need a lot of preventative maintenance. The Stalwart features a true 6x6 drive, with all wheels turning at the same speed. This is an advantage over rough or muddy terrain, but on roads, particularly on high speed turns, leads to premature wear and tear. The Stalwart is capable of towing 10 tons on roads, but off-road, 7.5 tons is the maximum.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Stalwart FV622	$8,335	G, A	5 tons	14.48 tons	3+38	12	Headlights	Open
Stalwart FV623	$11,335	G, A	5 tons	14.71 tons	3+18	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Stalwart FV622	141/71	39/20/6	365	97	Stnd	W(3)	HF1 HS1 HR1
Stalwart FV623	140/70	39/19/6	365	97	Stnd	W(3)	HF1 HS1 HR1

Bedford TM 4-4

Notes: This vehicle has been produced by Great Britain since 1980. It is a medium 4x4 truck of cabover design used by England, Bahrain, Abu Dhabi, and Oman. The cab has a hatch on the roof with a light machinegun mount, and has a heater. The hatchway is large enough for two people to stand in it, and the hatch itself is made of fiberglass. The cargo body is steel with a wooden floor, removable drop sideboards and tailgate, and may be fitted with seats down the center (facing out) or NATO containers and pallets. Powering the TM 4-4 is a Bedford 8.2/205TD 8.2-liter turbocharged diesel developing 206 horsepower, and coupled with a Turner M6-47026 manual transmission with six forward and one reverse gear. Steering and brakes are power assisted. Depending on the appointments, the TM 4-4 may tow a 6-ton one-axle trailer or a two-axle 8-ton trailer, 10 tons, or the equivalent. Options include an 8-ton capacity winch with 75 meters of cable, and a 3.65-ton capacity cargo-loading crane. Variants include a dump truck and tanker.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
TM 4-4	$8,790	D, A	8 tons	16.3 tons	2+32	12	Headlights	Open
w/Winch	$10,790	D, A	8 tons	16.38 tons	2+32	12	Headlights	Open
w/Crane	$11,040	D, A	8 tons	16.91 tons	2+18	12	Headlights	Open
w/Winch and Crane	$13,040	D, A	8 tons	16.99 tons	2+18		Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
TM 4-4	125/63	34/18	154	71	Stnd	W(2)	HF1 HS1 HR1
w/Winch	124/63	34/18	154	71	Stnd	W(2)	HF1 HS1 HR1
w/Crane	122/62	34/17	154	71	Stnd	W(2)	HF1 HS1 HR1
w/Winch and Crane	122/62	34/17	154	71	Stnd	W(2)	HF1 HS1 HR1

Bedford TM 6-6

Notes: The TM 6-6 is a larger, 6-wheeled version of the TM 4-4 described above, and uses many of the same components of that

vehicle. The cab is identical to the TM 4-4, a cabover design with a hatch on the roof with a light machinegun mount, and has a heater. The hatchway is large enough for two people to stand in it, and the hatch itself is made of fiberglass. The cargo body is of the same construction as the TM 4-4, but is 2.27 meters longer, and is steel with a wooden floor, removable drop sideboards and tailgate, and may be fitted with seats down the center (facing out) or NATO containers and pallets. A sore point is the engine; it is a Bedford 8.2/205TD turbocharged diesel, and at an output of 206 horsepower, makes the TM 6-6 underpowered. The suspension is heavier with 6x6 drive. Variants include a platform body for carrying containers and pallets, and a version with a 10-ton capacity winch in the front and rear for self-recovery and for loading pallets. Another variant has an Atlas 3.65-ton-capable crane for loading cargo. The TM 6-6 is used by Great Britain and Abu Dhabi.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
TM 6-6	$11,728	D, A	14 tons	24.39 tons	2+50	20	Headlights	Open
w/Winches	$16,728	D, A	14 tons	24.59 tons	2+50	20	Headlights	Open
w/Crane	$15,378	D, A	14 tons	25 tons	2+24	20	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
TM 6-6	99/50	28/14	227	71	Stnd	W(3)	HF1 HS1 HR1
w/Winches	99/50	28/14	227	71	Stnd	W(3)	HF1 HS1 HR1
w/Crane	98/50	27/14	227	71	Stnd	W(3)	HF1 HS1 HR1

Foden Low Mobility Vehicle

Notes: This is a heavy 8x4 truck used by the British Army. It is designed primarily for on-road use and has poor off-road mobility. The vehicle is very long at over 10 meters in length, and most of this is the cargo body. The cab is mounted over the engine, and has a heater and roof hatch with a machinegun mount. The vehicle is powered by a Rolls-Royce 220 Mk III 220-horsepower diesel, coupled with a Fuller manual transmission with nine forward and one reverse gear. The transmission tends to be balky and difficult to shift. The steering is power assisted. The suspension is 8x4; the front suspension uses semi-elliptical leaf springs with shock absorbers, while the rear suspension uses the same leaf springs with fully articulated wheels. The tanker variant uses a sealed tank body with five separated compartments; it is able to carry five types of fuel, and comes with five hose reels and pumps. Other variants include a dump truck, a DROPS truck and a tractor truck.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Cargo Truck	$12,933	D, A	20 tons	29.55 tons	3+50	24	Headlights	Open
Tanker	$22,344	D, A	22,600 liters + 400 kg	28.89 tons	3	24	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Cargo Truck	105/24	29/6	227	80	Stnd	W(4)	HF1 HS1 HR1
Tanker	105/24	29/6	227	80	Stnd	W(4)	HF1 HS1 HR1

Foden Medium Mobility Vehicle

Notes: This is a heavy 8x8 truck in British service that is related to the Foden 10-ton truck listed in the *NATO Combat Vehicle Handbook.* It is also related to the German MAN HX series. It is a cabover design, which is primarily meant to tow the FH-70 155mm howitzer, though cargo carrier versions do exist. (These are usually used to carry ammunition pallets for the FH-70 howitzer.) A recovery vehicle version is also made. The cab roof has a hatchway in the center with a weapons mount.; this cab has space behind the seat for 600 kilograms of gear. The hatchway is big enough for two soldiers to stand in it or and strong enough for two to sit on the roof. The cargo area in the cargo version has a hardwood floor, drop sides, and a 3.6-ton loading crane. The suspension is 8x8; the front suspension uses parabolic leaf springs with shock absorbers, while the rear four members of the suspension uses trapezoidal leaf springs with radius rods; the rearmost wheels have an anti-roll bar. The engine is a MAN D2066 turbocharged diesel with 440 horsepower, coupled with a ZF 12 AS2301 AS-Tronic automatic transmission with 12 forward and 2 reverse gears. Steering and brakes are power assisted. The MMV can ford 75 centimeters or 1.5 meters with preparation (largely requiring an extended exhaust and air intakes).

A variant called the Integrated Armored Cab (IAC) adds light armor for the cab and mounting points for slat/bar armor on the front and sides of the cab. The IAC cab also has an air conditioner and an NBC Overpressure system.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
MMV	$16,362	D, A	16.45 tons	32 tons	3+42	24	Headlights	Open
MMV w/IAC	$26,416	D, A	16.45 tons	40 tons	3+42	24	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor

MMV	132/66	37/18	400	162	Stnd	W(4)	HF1 HS1 HR1
MMV w/IAC	115/58	32/16	400	162	Stnd	W(4)	HF2 HS2 HR2*

*The AV listed applies only to the cab; the rest of the vehicle is AV1. The cab floor has an AV of 3Sp.

Leyland DROPS Logistics Support Vehicle

Notes: As the name suggests, this is a PLS/DROPS (Demountable Rack Offload and Pickup System)-type vehicle for the transport of large containerized or palletized loads. As such, it is not designed or equipped to carry troops, but a figure for a jury-rigged arrangement is given below. The cab has shock-absorbing seats for two people, and it can be given additional bolt-on armor protection. There is space in the cab for the crew's gear. The truck has a Multilift Mk 4 load-handling system capable of loading or unloading containers or pallets up to 15 tons to assist in loading cargo. The containers to be loaded are normally enclosed in flatrack frame pallets to facilitate grappling and loading, but this is not strictly necessary – it just makes unloading or loading easier. (NATO standard containers do not normally need the flatrack.) The Leyland DROPS truck is powered by a Perkins Eagle 350LM turbocharged diesel developing 350 horsepower. This is coupled with a ZF 8 HP 600 automatic transmission with six forward and one reverse gear. Steering and brakes are power assisted. Suspension is 8x6 with semielliptical leaf springs and shock absorbers, which are double acting on the front axles.

This truck has seen combat use in Bosnia with both British and Malaysian forces. In 1999, modifications began to equip these trucks with antilock brakes; by 2001, this ABS program was completed. 40 DROPS trucks used by the Royal Marines were also modified to be able to ford up to 1.5 meters of salt water. This truck may tow 20 tons.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
DROPS LSV	$25,223	D, A	15 tons	32 tons	2+30	24	Headlights	Open
w/Applique	$26,464	D, A	15 tons	38 tons	2+30	24	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
DROPS LSV	129/43	36/12	272	129	Stnd	W(4)	HF1 HS1 HR1
w/Applique	118/40	33/11	272	129	Stnd	W(4)	HF2 HS2 HR2*

*The AV listed applies only to the cab; the rest of the vehicle is AV1. The cab floor has an AV of 3Sp.

Western Star M4866S Heavy Engineering Support Vehicle

Notes: This truck is not designed to carry personnel, but is instead to meant to carry large pallets, containerized cargo, and special bodies such as radar units and huge tanker bodies. The vehicle is equipped with a sleeper cab, and the cab is suspended onto the truck frame to reduce shocks being transmitted to the cab, with high-backed air suspension seats further reducing crew fatigue. Power is provided by a Caterpillar C12 turbocharged diesel developing 410 horsepower, coupled with an Allison HD4860P automatic transmission. The suspension is 6x6 and features locking differentials and antilock brakes. Variants include a three-way dump truck and a tractor trailer. The passenger load shown below is if the vehicle is provided with improvised seating for troops, something that is possible but not likely; basically, this is by putting a cargo truck's rear cargo bed on the HESV.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$13,099	D, A	15.06 tons	30.42 tons	3+30	24	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
130/66	37/18	454	151	Stnd	W(3)	HF1 HS1 HR1

Western Star M4800 Medium Logistic Vehicle

Notes: This is a high-mobility medium truck used by Canada. The MLV comes in two versions, a 4.32-meter wheelbase with a capacity of 5 tons, and a 5.08-meter wheelbase with a capacity of 7 tons. The radiator and cooling system are capable of keeping the engine within operating temperatures up to 60 degrees Celsius. The truck is primarily produced with an automatic transmission, but manual transmissions are available. The M4800 is powered by a Caterpillar M3116TA diesel developing 220 horsepower. The engine is underpowered for this class of truck, especially in the LWB version. The suspension is 4x4 and the truck has a central tire inflation regulation system which is automatic and computer controlled. A winch with a capacity of 8 tons may be mounted either in the front or the center of the vehicle; when front-mounted, the cable may be led out only to the front, but if center-mounted, the cable may be led out to the front or rear of the truck. Some of these vehicles have an enlarged cab to hold 6 people; these are normally used to tow artillery pieces or carry antiaircraft guns. Variants include a fire engine, a version that is strengthened for parachuting, a tanker, and a wrecker.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
SWB	$8,812	D, A	5 tons	20.87 tons	3+20	16	Headlights	Open
Enlarged Cab	$9,241	D, A	5 tons	21.17 tons	6+20	16	Headlights	Open
LWB	$10,523	D, A	7 tons	24.53 tons	3+28	20	Headlights	Open
Enlarged Cab	$10,952	D, A	7 tons	24.83 tons	6+28	20	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
SWB	112/57	31/16	227	65	Stnd	W(2)	HF1 HS1 HR1
Enlarged Cab	111/56	31/15	227	65	Stnd	W(2)	HF1 HS1 HR1
LWB	102/51	29/14	227	65	Stnd	W(2)	HF1 HS1 HR1
Enlarged Cab	101/50	29/14	227	65	Stnd	W(2)	HF1 HS1 HR1

Bombardier TF-300-TT

Notes: This is a heavy truck used to carry very heavy cargoes. The front and rear are attached by a ball joint that enhances cross-country mobility. There is an escape hatch in the roof of the cab, and the cab is heated and air conditioned. The engine is the same as that on the M113A2 APC, a Detroit Diesel 6V53T turbocharged diesel developing 212 horsepower; it is rather underpowered for its task, but provides a great deal of torque for towing or in cross-country mobility. Optional equipment includes a 10-ton winch in the front or center of the vehicle and a load-handling crane with a capacity of 5 tons behind the cab; if equipped with a crane, the truck will also have two outrigger legs which are to be lowered when using the crane. As the TF-300-TT has an insulated cab which has a more than adequate heater, the cab can become quite snug in cold weather.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
TF-300-TT	$14,650	D, A	13.6 tons	27.1 tons	5+54	20	Headlights	Open
w/Winch	$17,150	D, A	13.6 tons	27.2 tons	5+54	20	Headlights	Open
w/Crane	$19,650	D, A	13.6 tons	27.84 tons	5+54	22	Headlights	Open
w/Winch & Crane	$22,150	D, A	13.6 tons	27.94 tons	5+54	22	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
TF-300-TT	94/48	27/14	450	71	Stnd	W(3)	HF1 HS1 HR1

w/Winch	94/48	27/14	450	71	Stnd	W(3)	HF1 HS1 HR1
w/Crane	93/47	26/13	450	71	Stnd	W(3)	HF1 HS1 HR1
w/Winch & Crane	93/47	26/13	450	71	Stnd	W(3)	HF1 HS1 HR1

FAW Jiefang CA-141

Notes: The CA-141 is an updated CA-15, and up to 100,000 per year are being produced. It shares many components and the same general layout as the CA-1091 (see below). They are 4x2 medium trucks designed primarily for road use, and have limited off-road performance. Power may be provided by a Model 6102 132-horsepower gasoline engine or a Model 6110A 157-horsepower diesel engine; the transmission is manual in both cases with five forward and one reverse gear. Towing capability is 6 tons. Large amounts of former military CA-141s have been sold off to civilians; they often show up in Chinese movies and TV shows.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
CA-141 (Gas Engine)	$6,326	G, A	5 tons	9.31 tons	3+20	6	Headlights	Open
CA-141 (Diesel Engine)	$6,520	D, A	5 tons	9.31 tons	3+20	6	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
CA-141 (Gas Engine)	145/34	41/9	180	58	Stnd	W(2)	HF1 HS1 HR1
CA-141 (Diesel Engine)	163/38	46/10	180	46	Stnd	W(2)	HF1 HS1 HR1

FAW Jiefang CA-1091

Notes: The CA-1091 trucks are the successor to the CA-15 medium trucks in China. They are medium 4x4 trucks with room in the cab for the driver and two passengers, and a heater. The cargo bed is fitted with wooden side rails and has a ladder for access and a canvas cover. The primary difference between the subtypes are the engines; the CA-1091E2 has a Model 6102 132-horsepower gasoline engine, the CA-1091K2E2 has a Model 6110A diesel engine developing 157 horsepower, and the Model CA-1091K3E2 has a Model 6102BQ-6 138-horsepower diesel engine. All have the same manual transmission with six forward and one reverse gear. Towing capability is six tons.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
CA-1091E2	$7,227	G, A	5 tons	9.7 tons	3+20	6	Headlights	Open
CA-1091K2E2	$7,281	D, A	5 tons	9.35 tons	3+20	6	Headlights	Open
CA-1091K3E2	$7,234	D, A	5 tons	9.2 tons	3+20	6	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
CA-1091E2	133/67	37/18	180	58	Stnd	W(2)	HF1 HS1 HR1
CA-1091K2E2	150/76	42/21	180	46	Stnd	W(2)	HF1 HS1 HR1
CA-1091K3E2	139/70	39/19	180	40	Stnd	W(2)	HF1 HS1 HR1

Hongyan CQ-261

Notes: The CQ-261 is a heavy 6x6 truck used by Chinese armed forces. It is based on the French Berliet GBU and GCH medium trucks. The large forward cab is mounted over the engine and transmission, has room for the driver and two passengers, and has a roof hatch with a machinegun mount. The cargo bed has a drop tailgate and wooden side rails, with a canvas cover. Seats are along either side, facing inward. The vehicle is powered by a Chongfa 6150 diesel engine developing 200 horsepower, and a manual transmission with five forward and one reverse gear. The truck has a 6x6 suspension and can tow 13.6 tons. It should be noted that if the CQ-261 sticks to roads, it can haul up to 12.26 tons. These vehicles are used to carry cargo, troops, and as an artillery tractor. There is also an 8x8 version of this vehicle, which is used to carry the Type 79 ribbon bridge (not detailed here).

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$8,073	D, A	8.27 tons	22.46 tons	3+24	16	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
102/51	28/14	400	59	Stnd	W(3)	HF1 HS1 HR1

Dong Feng EQ1112F8D

Notes: This medium 4x2 truck is not used by Chinese armed forces, but is exported to more than 10 nations in Asia, Africa, and South America (the export name is Aeolus). It is of conventional layout, with an all-steel body. The cab seats three, and is also all-steel, but has no roof hatch or firing ports. The EQ1112F8D has a 4x2 suspension and while it gives excellent performance on roads,

it is a poor performer off road. The engine is a Chao Yang 6102 diesel developing 140 horsepower. Dong Feng builds medium-weight trucks by the metric buttload, and there are likewise large amounts of the EQ1112F8D in the world. The truck is also sold to civilians, who use them in just about any configuration one can imagine. The EQ1112F8D is a rather large truck, at a length of over 8 meters.

The EQ1112F8DY is the same truck, but with a right-hand drive configuration.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$8,178	D, A	6.4 tons	11 tons	3+24	8	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
140/28	39/8	145	41	Stnd	W(2)	HF1 HS1 HR1

Dongfeng EQ-1141G

Notes: This heavy Chinese truck was primarily produced for export, though Chinese military and civilian interests use some. It is a 4x2 truck that is meant mostly for on-road use, and has limited off-road capability. Towing capacity is 8.16 tons, powered by its Cummins 6BT118-01 diesel with 160 horsepower, coupled to a manual transmission.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$7,640	D, A	8 tons	14.1 tons	3+32	12	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
126/30	35/8	190	47	Stnd	W(2)	HF1 HS1 HR1

Norinco Type 60-1

Notes: This is a tracked load carrier used by China to tow field guns and howitzers, and carry their ammunition. It is similar in concept to the US M-548 (though it looks different). The Type 60-1 may tow a load of 15 tons, or carry 5 tons. The forward cab is large to accommodate the driver and gun crew, and the roof of this cab has a mount for a DShK machinegun. Behind the cab are stowage bins for the crews' personal equipment, and at the rear is a canvas-covered cargo area. The vehicle has a rear-mounted winch with a capacity of 17 tons and 75 meters of cable. The Type 60-1 is powered by a 12150L-1 diesel engine developing 300 horsepower. The Type 60-1 is also used as the chassis of the 273mm Type 83 MRL.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$16,416	D, A	5 tons	12.5 tons	6	7	Headlights	Enclosed

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
177/124	49/34	375	84	Stnd	T2	HF1 HS1 HR1

Fire Control	Stabilization	Armament	Ammunition
None	None	DShK (C)	750x12.7mm

Norinco WCT-1

Notes: “WCT” is the English translation of the truck’s name, standing for “Water Cannon Truck.” And that’s what it is; it’s a large truck with a pair of water cannons up front and a large water tank in the rear. Its use is as an antiriot vehicle; the water cannons are sufficient to knock down four people standing in a group while doing little physical damage to them. The WCT-1 can also fire CS, marking dye, and a slippery foam. These substances are fed to the water cannons instead of water when selected. A ramming bumper, mesh over the windows, and flashing lights on the roof of the cab help complete the equipment. A spare tire is mounted atop the center of the vehicle, and the tires are run-flat tires.

The WCT-1’s water cannons are fed from a 9000-liter water tank; this allows 900 seconds of target spraying. The cannons are mounted on the roof behind the cab and rotate. They have a “gun camera” on them that allows the crew to fire the cannons from inside the vehicle. The cannons also have spotlights on top of them to further aid observation. The water cannons have a range of 50 meters. Each cannon can fire a different substance if necessary. When firing CS, it starts out as a liquid stream with a range of 25 meters; then it reaches its destination, treat it as a CS hand grenade with the burst as being the place where the stream hits. The stream is 1 meter wide and 25 meters long. The dye stream is used for marking targets for possible later apprehension or to blind them, and is a very sticky dye that is difficult to wash off. The dye stream is similar to the CS stream, but has no burst radius other than by splashing. It has no permanent effect on the target. The foam is a 2-meter-wide stream 25 meters long and in a 20-degree arc. The ground area is covered in a foam that requires those in the area (unfortunately, police and troops included) to roll each phase Impossible: Dexterity to stand up. This slippery property lasts for 1 hour. The truck has separate tanks for each substance; 150 liters of CS, dye, and foam are carried, enough for 10 shots each.

The WCT-1 has a crew of six; the driver, vehicle commander; and a crewmember who is a specialist in each type of substance carried. Behind the cab on each side is a large door, allowing the crew to get in and out. The truck is NBC sealed but not radiologically shielded, as the NBC sealing is designed to keep the crew from being affected by CS gas. The crew also has a vehicular NBC system as a backup, and the masks can be disconnected to allow for escape from the vehicle if necessary. Air conditioning and heating is provided, as well as a 20-liter tank for drinking water. The large windshield up front and on the sides of the cab and the doors are

bullet-resistant and the vehicle has a modicum of protection, mostly against pistol rounds.

The suspension of the WCT-1 is 4x6, and primarily designed for street travel and to run over low-obstacles in the way. The ramming bumper can be used to clear larger obstacles. The truck is powered by an Arrayal 331-horsepower diesel engine that also powers the water cannons and the pumps for the water and other substances, as well as the AC and heater and NBC Overpressure system.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$362,208	D, A	5 tons	12.5 tons	6	7	Headlights	Enclosed

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
97/14	20/3	300	116	Stnd	W(4)	HF2 HS2 HR2

Fire Control	Stabilization	Armament	Ammunition
Basic	+1	2xWater Cannons	Water: 900 seconds, Other: 10 Shots

Tatra 111

Notes: This truck series was for some time the most powerful truck used by the Czechs. They were replaced in service by the Tatra 138, but many are still found in civilian roles, and in front-line roles in Vietnam and the Middle East. The Tatra 111P is the standard military model. All models have a drop tailgate, but the Tatra 111N has drop sides as well. The Tatra 111NR has a winch with a capacity of 6 tons. Variants include several tractor trucks, a crane-shovel, several crane trucks, several tankers, and a dump truck. The Tatra 111 can tow a load of 8 tons cross-country or 22 tons on improved roads. The Tatra 111 is powered by a T-111A diesel engine developing 180 horsepower; the transmission is manual with four forward and one reverse gear.

The Tatra 141 is a variant of the Tatra 111 with an enlarged cab, and are used primarily as artillery tractors and prime movers for large equipment trailers with electronic gear, communications, NBC decontamination complexes, or other large equipment used by specialized units. The Tatra 141 has a reinforced frame and cargo body, as well as heavy-duty towing hooks. A figure is given below, but the Tatra 141 does not normally carry a large complement of troops. The Tatra 141 can tow a nominal 12-ton load cross-country but is capable of a 100-ton tow on improved roads.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Tatra 111P	$9,060	D, A	8 tons	16.6 tons	3+32	12	Headlights	Open
Tatra 111NR	$10,560	D, A	8 tons	16.66 tons	3+32	12	Headlights	Open
Tatra 141	$10,217	D, A	6 tons	18.14 tons	8+24	14	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Tatra 111P	113/58	31/16	135	48	Stnd	W(3)	HF1 HS1 HR1
Tatra 111NR	113/57	31/16	135	48	Stnd	W(3)	HF1 HS1 HR1
Tatra 141	108/54	30/15	420	48	Stnd	W(3)	HF1 HS1 HR1

Tatra 138

Notes: This truck replaced the Tatra 111, and was in turn replaced by the Tatra 148. It is an evolutionary development of the Tatra 111. It is a conventional-layout truck, with a cargo area that has drop sides and a removable tarpaulin cover over bows. The standard engine is the T-928-12, a 180-horsepower diesel, but some are equipped with a 928K supercharged diesel developing 220 horsepower. Both use the same manual transmission with five forward and one reverse gear. The Tatra 138 can tow a 10.8-ton load cross-country or 22 tons over roads. The truck is equipped with a 6-ton capacity winch.

Variants include several crane trucks, a tractor truck, a crane/shovel, a couple of dump trucks, and an airfield lighting truck with a large signal light. A variant is also used to launch the PMP pontoon bridge.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Tatra 138 (180 hp Engine)	$9,315	D, A	8 tons	20.59 tons	3+32	16	Headlights	Open
Tatra 138 (220 hp Engine)	$9,188	D, A	8 tons	20.55 tons	3+32	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Tatra 138 (180 hp Engine)	108/54	30/15	150	48	Stnd	W(3)	HF1 HS1 HR1
Tatra 138 (220 hp Engine)	113/57	31/16	150	75	Stnd	W(3)	HF1 HS1 HR1

Tatra 148

Notes: This is a somewhat old Czech truck, first produced in 1972. It is a basic cargo vehicle with a conventional layout. The Tatra 148 has a central backbone tube construction, which have high torsion and bend strength It also houses the important parts of the drive train and allows for modular construction. The Tatra 148 has an inter-axle differential. The Tatra 148's standard engine is a T-2-928-1 multifuel developing 212 horsepower; the truck can be fitted with the engine of the tractor truck variant of the Tatra 148, which is a T-2-928-19 multifuel developing 232 horsepower. The engines feature fuel injection, which can be adjusted depending upon the role and load to be carried. Front axle suspension is by adjustable torsion bars, while the rear axles are suspended by semi-elliptical leaf springs. The drive is 6x6. Brakes are power assisted. Most military variants have a hatch on the roof of the cab. The driver's seat is fully suspended to reduce driver fatigue.

Variants include the TZ-74 decontamination vehicle, the CAS-32 fire engine, the Tatra 148S series dump trucks, the NT series tractor-trailers, and a variety of hard bodies and tankers.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Tatra 148 (212 hp)	$8,987	D, G, AvG, A	9.08 tons	23.64 tons	3+36	20	Headlights	Open
Tatra 148 (232 hp)	$9,037	D, G, AvG, A	9.08 tons	23.69 tons	3+36	20	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Tatra 148 (212 hp)	102/52	29/14	200	58	Stnd	W(3)	HF1 HS1 HR1
Tatra 148 (232 hp)	108/54	30/15	200	64	Stnd	W(3)	HF1 HS1 HR1

Tatra 813

Notes: The first vehicles of this type were produced in The Czech Republic, Slovakia, in 1967, and produced until 1982, when they were replaced by the T815. The chassis is related to that of the OT-64 APC, and it is a truck with good off-road performance. The designers started with the Tatra 138, but the project quickly grew out of this base. The truck has a tubular backbone construction, and has high torsional and bending strength. The Tatra 813 military truck is available in 8x8 suspensions, with permanent all-wheel drive, and steering on the front four wheels. The engine is a T-930-3 diesel with 270 horsepower, though early models used a 258-horsepower version of the same engine. The manual transmission has a nominal five speeds, but an overdrive feature provides a total of 20 forward and four reverse gears. Military Tatra 813s have a central tire pressure regulation system and run-flat tires, as well as a compressor able to maintain the pressure in any tire up to 12 punctures. The truck has locking differentials on all axles as well as a central locking differential. Military versions also have a winch with a capacity of 11 tons; this is mounted in the center between the second and third axles, and the 60-meter cable may be led out to the front or rear. The suspension uses a combination of leaf springs, coil springs, and torsion bars, and produces a soft ride. On a good road, the Tatra 813 can tow a 100-ton load. Brakes and steering are power assisted,

The forward control cab is large, with four doors, allowing for the seating of 7 persons including the driver. This cab does not tilt to access the power pack; instead, there are access panels inside the cab and outside the cab to provide maintenance and repairs. The cab is pressurized and has two hatches in the roof, one of which has a weapon mount. The rear cargo area has drop sides and rear, and is made of steel. Some Tatra 813s are mounted with a snowplow; these are not armored plows and are not suited for use as a mine plow.

This vehicle is used to move pontoon bridges or scissors bridges, and some are used as the basis for the RM-70 40-round 122mm MRL. There are also versions of this truck that tow semi-tractor trailers (65 tons), dump trucks, and crane trucks. The Czech Republic, Slovakia, and India use the Tatra 813, and it was also exported to the Soviet Union, East Germany, Iran, Iraq (captured from Iran), and Romania. There is also considerable civilian use in at least 10 countries.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Tatra 813 (258 hp Engine)	$20,717	D, A	8.2 tons	22 tons	7+28	16	Headlights	Enclosed (Cab only); Open
Tatra 813 (270 hp Engine)	$20,747	D, A	8.2 tons	22.03 tons	7+28	16	Headlights	Enclosed (Cab only); Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Tatra 813 (258 hp Engine)	105/54	30/15	360	71	Stnd	W(4)	HF1 HS1 HR1
Tatra 813 (270 hp Engine)	109/55	30/15	360	75	Stnd	W(4)	HF1 HS1 HR1

Tatra T815 Series

Notes: The Tatra T815 (or simply Tatra 815) starts with Tatra's tubular backbone frame; the rest of the components are mounted to this rigid assembly. This frame has high torsional and flexural rigidity, and protects the rest of the components, particularly the load-carrying bed, from the motions and forces on the axles. The suspension, whether 4x4, 6x6, or 8x8, have a front suspension of torsion bars, leaf springs, and air bellows combined. The rear suspensions have a combination of leaf springs, air bellows, torsion bars, and the Tatra King Frame suspension, which is a combination of a pneumatic shock absorber, and a coil spring placed inside. Each wheel is independently sprung and can move a large amount to retain contract with the ground below them. Military T815s have a central tire pressure regulation system and run-flat tires along with a constant air compression system which swings into action when the tire is punctured; this can keep the tire inflated with up to 12 punctures, depending on how large the punctures are. The load-carrying area is all-steel, with drop sides and a drop tailgate. Upon demand, Tatra supplies their T815s with multifuel variants of their engines. It may

be covered with a canvas tarpaulin over removable bows. An armored cab is optional; armored cab versions are further protected by NBC Overpressure. Major assemblies of the 4x4, 6x6, and 8x8 versions are interchangeable with each other.

The Tatra 815 4x4 is the smallest member of the T815 family, with 4 wheels and a smaller bed and load capability. Variants include cargo/troop carrier, workshop carrier, launcher for reconnaissance drone, fire truck, and a civilian model. The Czech Republic, Slovakia, and India (where it is produced under license) use the T815 4x4, and there are a lot of civilian T815 4x4 trucks in the world, doing tasks limited only by imagination. Most military T815 4x4s are powered by a T3B-928-30 turbocharged diesel developing 268 horsepower, but some are powered by a German Deutz turbocharged diesel developing 285 horsepower. (This is particularly common in T815 4x4s operating in Western Europe.) These are coupled with a 10 TS-130 manual transmission with 10 forward and 2 reverse gears. Tatra will also supply their trucks with automatic transmission upon demand. Towing capability is 16 tons off or on-road. The cab is large and has a hatch on the roof with a weapon mount.

The 6x6 version of the T815 (often going by the same “Kolos” name as the 8x8 versions of the T815) is a smaller version of the T815 than the 8x8. Most major assemblies are the same as on the 8x8 version, including the rear suspension. (The front suspension has more in common with the 4x4 model.) The original engine was the T3-930-31 multifuel engine, but two other turbocharged diesels were later used on the 6x6 T815. The 6x6 model can tow a 65-ton load on road, but only 16 tons off-road. Versions of this vehicle include cargo/troop carrier, tanker, decontamination vehicle, container carrier, bridging carrier, radar or antenna carrier, command post carrier, NBC reconnaissance vehicle, recovery vehicle, and fire truck. The T815 6x6 is also the chassis for the Tatrapan APC. The Czech Republic, Slovakia, and India use the T815 6x6. Like the 4x4, the 6x6 T815 has numerous civilian users.

The T815 8x8 replaced the Tatra 813 in Czech service (though the Tatra 813 is still being used). It is an 8x8 truck with independent suspension for each wheel, and has good off-road performance. The cab is fully enclosed and has room for six people including the driver, and has a roof hatch with a weapon mount. The cab is NBC sealed and has a heater. The cargo area has drop sides and rear, and can be covered by a tarpaulin. There is a winch mounted in the front bumper that has a capacity of 12 tons, and has 85 meters of cable. The original engine was a T3-930-51 multifuel with an output of 265 horsepower; further Tatra turbocharged engines of 308 and 436 horsepower were also used to power the T815 8x8, and later Cummins and Deutz turbocharged diesels of 350 horsepower and 590 horsepower were installed, particularly in export models. (Other engines are also available, but I don’t have figures on those.) The standard transmission is a manual transmission with 20 forward and four reverse gears, but an automatic transmission of several gears can be installed. The Kolos may be equipped with an arrow-type snowplow or a dozer blade. Variants include a tractor-trailer (may tow 25 tons, or 100 tons on hard roads), pontoon or ribbon bridge carrier, RM-70 122mm MRL carrier, decontamination vehicle, command post carrier, minelayer, radar vehicle, and recovery vehicle. The Tatra T815 is also the chassis for the Dana and Zuzana SP howitzers. The Czech Republic, Slovakia, India, Saudi Arabia, and the UN use the Kolos.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
T815 4x4 (268 hp)	$8.832	D, A	5.8 tons	15 tons	4+20	12	Headlights	Enclosed (Cab only), Open
w/Armored Cab	$10,011	D, A	5.8 tons	16.1 tons	4+20	12	Headlights	Shielded (Cab only), Open
T815 4x4 (285 hp)	$8,897	D, A	5.8 tons	15.03 tons	4+20	12	Headlights	Enclosed (Cab only), Open
w/Armored Cab	$10,076	D, A	5.8 tons	16.13 tons	4+20	12	Headlights	Shielded (Cab only), Open
T815 6x6 (235 hp)	$9,828	D, G, AvG, A	8 tons	21.5 tons	4+28	16	Headlights	Enclosed (Cab only), Open
w/Armored Cab	$11,007	D, G, AvG, A	8 tons	22.6 tons	4+28	16	Headlights	Shielded (Cab only), Open
T815 6x6 (313 hp)	$10,410	D, A	8 tons	21.5 tons	4+28	16	Headlights	Enclosed (Cab only), Open
w/Armored Cab	$11,589	D, A	8 tons	22.6 tons	4+28	16	Headlights	Shielded (Cab only), Open
T815 6x6 (347 hp)	$10,540	D, A	8 tons	21.57 tons	4+28	16	Headlights	Enclosed (Cab only), Open
w/Armored Cab	$11,719	D, A	8 tons	22.67 tons	4+28	16	Headlights	Shielded (Cab only), Open
T815 8x8 (265 hp)	$15,282	D, G, AvG, A	10 tons	26.7 tons	6+44	20	Headlights	Enclosed (Cab only), Open
w/Armored Cab	$16,736	D, G, AvG, A	10 tons	28.1 tons	6+44	20	Headlights	Shielded (Cab only), Open
T815 8x8 (308 hp)	$13,972	D, A	10 tons	26.62 tons	6+44	20	Headlights	Enclosed (Cab only), Open
w/Armored Cab	$15,426	D, A	10 tons	28.02 tons	6+44	20	Headlights	Shielded (Cab only), Open
T815 8x8	$14,127	D, A	10 tons	26.7 tons	6+44	20	Headlights	Enclosed (Cab only),

(350 hp) w/Armored Cab	$15,581	D, A	10 tons	28.1 tons	6+44	20	Headlights	Open Shielded (Cab only), Open
T815 8x8 (436 hp)	$14,447	D, A	10 tons	26.86 tons	6+44	20	Headlights	Enclosed (Cab only), Open
w/Armored Cab	$15,901	D, A	10 tons	28.26 tons	6+44	20	Headlights	Shielded (Cab only), Open
T815 8x8 (590 hp)	$15,022	D, A	10 tons	27.15 tons	6+44	20	Headlights	Enclosed (Cab only), Open
w/Armored Cab	$16,476	D, A	10 tons	28.55 tons	6+44	20	Headlights	Shielded (Cab only), Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
T815 4x4 (268 hp)	144/73	40/20	230	93	Stnd	W(2)	HF1 HS1 HR1
w/Armored Cab	137/69	38/19	230	93	Stnd	W(2)	HF2 HS2 HR2*
T815 4x4 (285 hp)	151/76	42/21	230	105	Stnd	W(2)	HF1 HS1 HR1
w/Armored Cab	144/73	40/20	230	105	Stnd	W(2)	HF2 HS2 HR2*
T815 6x6 (235 hp)	97/49	27/14	460	64	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	92/47	26/13	460	64	Stnd	W(3)	HF2 HS2 HR2*
T815 6x6 (313 hp)	123/62	34/16	460	115	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	117/59	32/17	460	115	Stnd	W(3)	HF2 HS2 HR2*
T815 6x6 (347 hp)	133/67	37/18	460	128	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	126/64	35/17	460	128	Stnd	W(3)	HF2 HS2 HR2*
T815 8x8 (265 hp)	94/48	27/14	460	78	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	92/46	26/13	460	78	Stnd	W(4)	HF2 HS2 HR2*
T815 8x8 (308 hp)	105/53	29/14	460	113	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	103/52	28/14	460	113	Stnd	W(4)	HF2 HS2 HR2*
T815 8x8 (350 hp)	114/58	32/16	460	129	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	112/57	31/16	460	129	Stnd	W(4)	HF2 HS2 HR2*
T815 8x8 (436 hp)	134/68	38/19	460	161	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	131/67	37/19	460	161	Stnd	W(4)	HF2 HS2 HR2*
T815 8x8 (590 hp)	169/85	47/24	460	212	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	165/83	46/23	460	212	Stnd	W(4)	HF2 HS2 HR2*

*The AV is only for the cab; the rest of the truck is AV1. The cab floor has an AV of 4Sp.

DAF YA 616

Notes: This heavy truck was designed in the mid-1950s and remained in production for 12 years, and used primarily as an artillery tractor. It is a standard cabover truck with a 9-ton capacity winch in the rear; the cable may be led out of the rear or in front of the truck. The YA 616 can tow a load of 14.5 tons. The YA 616 is powered by a Continental Red Seal R gasoline engine with 232 horsepower, coupled with a manual transmission with five forward and one reverse gear. The YA 616 is notorious for its poor fuel efficiency. It should be noted that if the YA 616 stays on roads, it can haul a load of 10 tons. It has a 6x6 suspension.

Variants include a tanker designated the YF 616, which comes in fuel tankers and water tankers. The fuel tanker has four hoses and fuel pumps, and a small area behind the cab for crew equipment. Fueling can be conducted at a total of 93 liters per minute; and the tanker has three compartments. Other variants include a wrecker, a flatbed container carrier (with the winch moved to the front), a tractor truck, a heavy recovery vehicle, and a dump truck.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
YA 616	$10,555	G, A	6 tons	17 tons	2+24	12	Headlights	Open
YF 616	$11,039	G, A	7000 L + 340 kg	18.68 tons	2	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
YA 616	118/59	33/17	400	119	Stnd	W(2)	HF1 HS1 HR1
YF 616	111/56	31/15	400	119	Stnd	W(2)	HF1 HS1 HR1

DAF YA 5441/5442

Notes: This medium 4x4 truck was replaced in production by the YA 5444, but was still being used by the Netherlands in the 1990s. It is primarily used by the RNAF, and is a development of the YA 4440 medium truck. It is of cabover design, with the cab tilting to access the engine and transmission. Equipment includes a 7-ton capacity crane (on the YA 5442) and an 8-ton capacity winch. The YA 5441 and 5442 are powered by a DT 615 turbocharged diesel with 153 horsepower; transmission is a ZF S5-35/2 manual with five forward and one reverse gear. The suspension is 4x4, and the steering and brakes are power assisted. Towing limit cross country is 4 tons. Variants include a cargo/troop carrier, Lance missile component carrier, tanker, and radio vehicle.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
YA 5441	$9,451	D, A	5 tons	12.29 tons	3+20	8	Headlights	Open
YA 5442	$16,451	D, A	5 tons	12.6 tons	3+20	8	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
YA 5441	110/55	31/15	200	56	Stnd	W(2)	HF1 HS1 HR1
YA 5442	109/54	30/15	200	56	Stnd	W(2)	HF1 HS1 HR1

DAF YA-5444 DNT

Notes: This is a medium 4x4 truck that is a development of the YA-4442. The Netherlands uses it, and it came into service in 1990, primarily with the RNAF. It is of a cabover design. Power is provided by a DAF DNT 6.242 turbocharged diesel engine developing 180 horsepower, and coupled with a ZF S6-36 automatic transmission. The truck is late, but still underpowered. The brakes and steering are power assisted. The suspension is 4x4. The maximum towed load is 6 tons cross-country. The roof of the cab has a hatch with a machinegun mount. A variant, the YA 5444 ALK, has a 7-ton capacity materials handling crane behind the cab.

Variants include a cargo/troop carrier, generator carrier, tanker, and shelter carrier.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Open
YA 5444 DNT	$7,965	D, A	5 tons	13.6 tons	3+20	10	Headlights	Open
YA 5444 ALK	$14,965	D, A	5 tons	13.91 tons	3+20	10	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
YA 5444 DNT	115/58	32/16	200	66	Stnd	W(2)	HF1 HS1 HR1
YA 5444 ALK	113/57	31/16	200	66	Stnd	W(2)	HF1 HS1 HR1

DAF YAV 2300 DHTD

Notes: This is a heavy Dutch-built truck that is mainly used to transport NATO command posts and personnel, including the towing of the 20-ton command trailers used by the top elements of that command; they were also used to transport the Dornier antenna system. Sideboards frame the basic cargo body, but these can be removed so the truck can carry containers or shelters, fuel or water

tanks, or a low body. Over the commander's position in the cab is a hatch with a weapon mount. The engine is a DAF DHTD 825 Mil turbocharged diesel developing 213 horsepower, coupled with a ZF SS-111 automatic transmission with eight forward and one reverse gear. Steering and brakes are power assisted. The suspension is 4x4. There is a 9-ton winch in the center behind the cab; the cable may be led out to the front or rear. Note that if the YAV 2300 DHTD stays on roads, it can haul a 7-ton load. Towing on roads is 24 tons.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$10,422	D, A	5.3 tons	15.5 tons	3+22	12	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
119/60	33/17	300	72	Stnd	W(2)	HF1 HS1 HR1

DAF YAZ 2300

Notes: The YAZ 2300 is a relative of the YAV 2300 DHTD, but also very different, as it is larger and has a 6x6 suspension. The YAZ 2300 is the general cargo truck; it has an all-aluminum load area and a 7-ton load handling crane in between the cab and the load area. Stabilizers are normally lowered on either side to the rear of the cab before using the crane. The load area has drop sides and tailgate for the transportation of containers, hard bodies, and oversized loads. The cab is a cabover design and tilts forward 60 degrees to access the engine and transmission. Some examples were made with an enlarged cab; this version does not have a crane, as the space in which the crane would be is taken up by the enlarged cab. Versions with an enlarged cab were mostly assigned as artillery tractors. Some versions of the YAZ 2300 were fitted with an armored cab and reinforced floor. The YAZ 2300 of all cab types have an overhead hatch on roof of the cab which is reinforced to take a light machinegun mount; none of the variants below have this hatch. The YAZ 2300 is powered by a DAF DHS 825 turbocharged diesel developing 250 horsepower, with an automatic transmission. The truck is underpowered, but has tremendous torque, and can tow 40 tons on roads.

Some variants include the YFZ 2300 fuel tanker and the YVZ 2300 water tanker. Other variants include a flatbed cargo carrier, special cargo versions for the Royal Netherlands Navy, versions to work with Dutch Patriot SAM batteries, a reload vehicle for MLRS, a wrecker, and a tractor truck.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
YAZ 2300	$18,861	D, A	10 tons	23.5 tons	3+40	14	Headlights	Open
w/Armored Cab	$20,317	D, A	10 tons	24.6 tons	3+40	14	Headlights	Open
w/Enlarged Cab	$12,161	D, A	10 tons	25.04 tons	6+40	14	Headlights	Open
w/Armored & Enlarged Cab	$13,617	D, A	10 tons	26.34 tons	6+40	16	Headlights	Open
YFZ 2300	$19,861	D, A	12,000 L + 360 kg	25.18 tons	3	16	Headlights	Open
YVZ 2300	$17,861	D, A	10,000 L + 480 kg	24.32 tons	3	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
YAZ 2300	99/50	28/14	300	85	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	95/49	27/14	300	85	Stnd	W(3)	HF2 HS2 HR2*
w/Enlarged Cab	94/48	27/14	300	85	Stnd	W(3)	HF1 HS1 HR1
w/Armored & Enlarged Cab	92/46	26/13	300	85	Stnd	W(3)	HF2 HS2 HR2*
YFZ 2300	94/48	27/14	300	85	Stnd	W(3)	HF1 HS1 HR1
YVZ 2300	97/49	27/14	300	85	Stnd	W(3)	HF1 HS1 HR1

*The AV listed is for the cab only; the AV for the rest of the truck is AV1. The cab floor's AV is 4Sp.

Sisu E11T High Mobility Tactical Vehicle

Notes: Though the name is a mouthful, this truck is simply a large cargo truck for hauling very heavy loads. It is designed for extreme conditions, particularly rocky and soft terrain in cold climates. The HMTV has a high ground clearance and very thick and strong structural members. The Renault-made cab is heated and is of cabover design; it is a sleeper-type cab. There is an option for an armored cab with NBC Overpressure. The vehicle may be powered by a Cummins M380E diesel developing 380 horsepower, or a Cummins M405E diesel developing 405 horsepower. (Finnish Army E11Ts use the 405-horsepower engine.) Transmissions may be automatic or manual. Steering and brakes are power assisted. The suspension is 6x6 and uses parabolic leaf springs on the front and parabolic leaf springs with hydraulic shock absorbers on the rear axles. Critical components such as the fuel tank, main electrical components, and hydraulic members are located in protected areas such as behind structural members.

The E11T also comes in an 8x8 version. It is basically an enlarged 6x6 version. The primary version is a flatbed PLS-type truck that is used to transport large containerized or palletized loads, but there is also a basic cargo version, and that is what is detailed below. Removable side and rear boards can be fitted, along with bows and a canvas cover for the load area. The E11T 8x8 is equipped with a 16-ton Multilift load handling crane (along with outrigger legs that are to be lowered when using the crane), and a 10-ton winch which is in the frame behind the crane; the cable may be led out to the front or rear. The engine for the 8x8 is a Cummins 410-horsepower diesel.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
E11T 6x6 (380 hp)	$12,582	D, A	15.5 tons	26 tons	3+62	20	Headlights	Open
w/Armored Cab	$13,627	D, A	15.5 tons	27.1 tons	3+62	20	Headlights	Shielded (Cab Only)
E11T 6x6 (405 hp)	$12,677	D, A	15.5 tons	26.07 tons	3+62	20	Headlights	Open
w/Armored Cab	$13,722	D, A	15.5 tons	27.17 tons	3+62	20	Headlights	Shielded (Cab Only)
E11T 8x8	$34,058	D, A	19.7 tons	32 tons	3+80	26	Headlights	Open
w/Armored Cab	$35,103	D, A	19.7 tons	33.1 tons	3+80	26	Headlights	Shielded (Cab Only)

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
E11T 6x6 (380 hp)	124/62	34/18	250	141	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	121/61	33/17	250	141	Stnd	W(3)	HF2 HS2 HR2*
E11T 6x6 (405 hp)	130/66	37/18	250	150	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	127/64	36/18	250	150	Stnd	W(3)	HF2 HS2 HR2*
E11T 8x8	113/57	31/16	250	152	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	110/56	30/16	250	152	Stnd	W(4)	HF2 HS2 HR2*

*The AV listed applies only to the cab; the rest of the truck is AV1. The floor of the cab and the engine compartment are AV4Sp.

Sisu SA-150 VK/SA-130 VKH

Notes: This larger medium Finnish truck is primarily meant to tow artillery pieces and haul ammunition and other large cargoes. It also serves as a chassis for Finnish ZU-23-based and NSV-based antiaircraft platforms. The truck's entire frame and suspension moves with the terrain being covered; that, along with the high ground clearance and large tires results in excellent off-road performance. The wheels are also independently suspended, meaning that all four wheels are almost always in contact with the ground. The cab has a heater and a roof hatch with a light weapon mount, and the sides and tailgate of the cargo area are droppable. The vehicle has a winch that may be led out to the front or the rear and has an 8-ton capacity with 50 meters of cable. The XA-180 APC uses many of the automotive components of the SA-130 VKH and SA-150 VK.

The SA-150 uses a Valmet 611 turbocharged diesel developing 150 horsepower; SA-130s built up to 1994 have a Valmet 620 DSI turbocharged diesel developing 175 horsepower. SA-130s built after 1994 have a Valmet 620 DS turbocharged diesel engine developing 180 horsepower.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
SA-150 VK	$9,813	D, A	6.4 tons	14 tons	3+26	12	Headlights	Open
SA-130 VKH (175 hp)	$10,190	D, A	6.5 tons	14 tons	3+26	12	Headlights	Open

SA-130 VKH (180 hp)	$10,210	D, A	6.5 tons	14 tons	3+26	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
SA-150 VK	100/50	28/14	225	55	Stnd	W(2)	HF1 HS1 HR1
SA-130 VKH (175 hp)	110/56	31/15	225	64	Stnd	W(2)	HF1 HS1 HR1
SA-130 VKH (180 hp)	113/57	31/16	225	66	Stnd	W(2)	HF1 HS1 HR1

Sisu SA-240

Notes: The SA-240 is a development of the SA-150; it may be regarded as a larger, 6x6 version of the SA-150. As with the SA-150, the SA-240 is meant primarily to be an artillery tractor, though straight cargo versions of the SA-240 do exist, as well as mobile crane, light recovery vehicle, and fire fighting vehicles. The cab is basically the same as that of the SA-150, modified to suit the new frame and chassis. The frame and chassis have the same properties as those of the SA-150 and is quite adept at negotiating rough terrain. The SA-240 has the same winch as the SA-150, in the same basic position as on the SA-150, and with the cable able to be led out the front or rear. The engine is a Cummins 313-horsepower turbocharged diesel.

As the SA-240 is a larger version of the SA-150, the SA-241 CKH is a larger version of the SA-130. There are more differences between the SA-240 and SA-241 than the SA-150 and SA-130, but all these vehicles are built on the same design philosophy. The SA-241 CKH is powered by a Cummins LTA 10-330 turbocharged diesel developing 340 horsepower. The maximum towed load is 15 tons.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
SA-240	$12,360	D, A	10 tons	20 tons	3+40	16	Headlights	Open
SA-241 CKH	$13,492	D, A	12 tons	22 tons	3+48	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
SA-240	131/66	37/18	200	116	Stnd	W(3)	HF1 HS1 HR1
SA-241 CKH	130/66	36/18	250	126	Stnd	W(3)	HF1 HS1 HR1

ACMAT MTV WPK 6x6/8x8

Notes: The ACMAT MTV WPK 6x6 is a larger version of the ACMAT MTV WPK 4x4 found in French Medium Unarmored Vehicles. It has a great degree of similarity to other such trucks of its line, including the cab, most of the structural components, the engine, and many of the drive components. Perhaps the most significant difference is the 6x6 suspension. The cab, as on the 4x4, has a hatch in roof with a weapon mount able to take weapons up to .50/12.7mm in size. In addition to the standard load/troop carrier, there is a van/shelter body, and a model used to carry ISO containers or palletized loads. The 6x6 is powered by a Perkins turbocharged diesel developing 210 horsepower; the transmission is a Type S 6.65 with six forward and one reverse gear. Steering and brakes are power assisted. A 170-liter drinking water tank is located between the cab body and the chassis. The fuel supply is split between two 210-liter tanks on either side of the cab body behind the front wheels.

The 8x8 version of the MTV is different in that there are no standard load/troop carriers. Instead, the 8x8 MTV is a PLS-type vehicle, used to carry ISO containers or palletized loads, and equipped with an Ampliroll 100 NB load-handling system to help load and unload the cargo by sliding it on rollers in the tipping flatbed. Another variant is a shelter/hard body carrier. The passenger capacity is for an improvised troop seating arrangement. The 8x8 version uses the same engine as the 6x6 version, but is equipped with a Type CR 250 transmission with the same gear range. Steering and brakes are power assisted. On the 8x8 version, both front axles are steering axles.

As of 2010, these trucks are no longer being offered by ACMAT.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
ACMAT MTV WPK 6x6	$8,488	D, A	6 tons	12.5 tons	2+30	10	Headlights	Open
ACMAT MTV WPK 8x8	$9,960	D, A	8 tons	18 tons	2+30	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
ACMAT MTV WPK 6x6	138/70	38/19	420	78	Stnd	W(3)	HF1 HS1 HR1
ACMAT MTV WPK 8x8	105/54	30/15	420	78	Stnd	W(4)	HF1 HS1 HR1

ARIS Ark

Notes: Used primarily by Italian amphibious troops, the Ark is essentially an M548 tracked prime mover with the front of the vehicle replaced by a boat-like hull, and the engine compartment made completely watertight. This transforms a previously barely amphibious vehicle into one which can carry out naval landings and is amphibious without preparation. Other changes include the cab, which is somewhat higher and has watertight doors; improved bilge pumps; a snorkel-type device added to provide air for the engine during amphibious operations; and four ducted propellers have been added to the rear for propulsion in the water. The Ark is otherwise basically the same as the M548 base vehicle, including a ring mount over the commander's position for a weapon. The engine is the standard Detroit Diesel 6V53 204-horsepower engine, coupled with an automatic transmission.

Twilight 2000 Notes: This vehicle is not available in the Twilight 2000 timeline.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$9,281	D, A	5.2 tons	12.8 tons	2+22	20	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
121/85/24	34/24/7	397	55	Stnd	T2	HF1 HS1 HR1

Berliet GBC 180

Notes: This is a Berliet GBC 8 KT that has undergone a major renovation and rebuild program. The object is to save money by updating existing trucks that are still in decent structural shape. The upgrades include a more powerful engine, beefed-up suspension to increase load carrying ability, a new automatic transmission, better brakes, and a new cab made of steel and fiberglass. The new cab can take an add-on armor kit if desired, and can be equipped with air conditioning. The engine is upgraded to a MIDR 06.02.26 diesel with an output of 175 horsepower. The standard transmission is manual, but there is an option for an automatic transmission. There is an option for a mid-body winch with a capacity of 6 tons, with the 50-meter cable able to be led out to the front or rear.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
GBC 180	$7,483	D, A	5 tons	12.37 tons	3+20	8	Headlights	Open
w/Winch	$8,983	D, A	5 tons	12.43 tons	3+20	8	Headlights	Open
w/Armored	$9,937	D, A	5 tons	13.47 tons	3+20	8	Headlights	Open

Cab w/Armored Cab & Winch	$10,437	D, A	5 tons	13.53 tons	3+20	8	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
GBC 180	120/61	33/17	200	51	Stnd	W(3)	HF1 HS1 HR1
w/Winch	120/61	33/17	200	51	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	113/57	31/16	200	51	Stnd	W(3)	HF2 HS2 HR2*
w/Armored Cab & Winch	113/57	31/16	200	51	Stnd	W(3)	HF2 HS2 HR2*

*The AV listed applies only to the cab; the rest of the truck is AV1. The cab floor is AV4Sp.

Berliet GBU 15

Notes: Production of this vehicle began in 1959, but France, Belgium, China, and the United Arab Emirates were still using numbers of these vehicles by 2000. It is a cabover truck with a large cab that seats 4 and has four doors, and the cab roof is canvas; the front windshield may be folded down forward and the canvas roof stowed. The cargo area has a drop tailgate, removable sides, and a canvas cover. An 8000-kg winch is mounted at the rear. The GBU 15 uses a Berliet multifuel engine with 214 horsepower; "multifuel" is almost an understatement, as in addition to standard fuel types, the GBU 15 will also run on liquid paraffin, JP4 jet fuel, a gasoline-oil mix, LNG, light fuels and mineral or vegetable oil. The GBU-15 will not run at peak efficiency on all of these fuels; some are useful only if the truck stays within lower gear ranges. The transmission is manual with five forward and one reverse gear. The GBU 15 has good torque, if not power, it can tow 15 tons.

Variants include an artillery tractor with an enlarged cab, TBU 15 tractor-trailer (may tow 22 tons), TBU 15 CLD wrecker, dump truck, and tanker. I've had the opportunity to be near a running GBU 15 briefly; it smelled absolutely noxious.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
GBU 15	$11,947	D, G, AvG, A	10 tons	20.5 tons	4+38	8	Headlights	Open
Artillery Tractor	$12,365	D, G, AvG, A	10 tons	20.85 tons	7+38	8	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
GBU 15	98/50	28/14	400	63	Stnd	W(3)	HF1 HS1 HR1
Artillery Tractor	97/49	27/14	400	63	Stnd	W(3)	HF1 HS1 HR1

Brimont ETR

Notes: The ETR is a 4x4 all-terrain vehicle load carrier used by the French Air Force. The four wheels are independently suspended, and the vehicle is of a cabover design with large windshields. Air conditioning and heating are standard. The vehicle has a drop tailgate, canvas cover, and troop seats. The ETR is steered with both the front and rear wheels, allowing a very tight turning radius (4.37m). Rear wheel steering cannot be used above a combat move of 12 and is automatically switched off above that speed; turning radius without rear steering is 6.9 meters. Towing capability is 8.4 tons. The ETR is capable of climbing a gradient of 70-100%, depending on the surface and the tires mounted on the truck. The standard engine is a Renault diesel developing 132 horsepower, but a 155-horsepower diesel and a 170-horsepower diesel were also available. Steering and brakes are power assisted. Variants include an artillery (105mm) or heavy mortar mover, crane, dump truck, engineer vehicle, backhoe, fire truck, recovery vehicle, and shelter carrier. The Brimont ETR is also seeing considerable civilian use; it is even used in off-road rough-terrain races.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
ETR (132 hp)	$5,725	D, A	5.6 tons	11 tons	4+22	8	Headlights	Open
ETR (155 hp)	$5,785	D, A	5.6 tons	11.06 tons	4+22	8	Headlights	Open
ETR (170 hp)	$5,822	D, A	5.6 tons	11.1 tons	4+22	8	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
ETR (132 hp)	108/54	30/15	200	39	Stnd	W(2)	HF1 HS1 HR1
ETR (155 hp)	121/61	33/17	200	46	Stnd	W(2)	HF1 HS1 HR1

ETR (170 hp)	129/65	36/18	200	50	Stnd	W(2)	HF1 HS1 HR1

Renault TRM 180/200

Notes: These are trucks that all share a core chassis, but use different engines and suspension packages to yield trucks with different performance characteristics. They are derived from a commercial truck brought up to military standards, and were designed to supply the needs of less advanced nations. They are thus easy to take care of and can tolerate a lot of abuse, neglect, and oddball locally produced parts. The cab has a hatch with a mount for a light machinegun; it is a cabover design which tilts forward for access to the engine and transmission. Optionally, the cab may have a canvas cover or a removable hard top. The cab may have right-handed or left-handed controls, and automatic transmission is optional while manual transmission is standard. Also optional is a spare wheel behind the cab. TRM 180s are powered by a MIDR 06.02.26 V 182-horsepower diesel, while TRM 200s are powered by a MIDR 06.02.26 W 196-horsepower diesel. In addition to a standard troop/cargo carrier, the trucks are available in shelter/van bodies or flatbed versions.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
180.11	$7,360	D, A	6.24 tons	11.5 tons	3+26	7	Headlights	Open
180.13	$7,970	D, A	8.06 tons	13.5 tons	3+32	9	Headlights	Open
200.11	$7,403	D, A	6.13 tons	11.5 tons	3+26	7	Headlights	Open
200.13	$8,003	D, A	8.03 tons	13.5 tons	3+32	9	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
180.11	132/66	37/18	275	54	Stnd	W(2)	HF1 HS1 HR1
180.13	119/60	33/17	275	54	Stnd	W(2)	HF1 HS1 HR1
200.11	139/70	39/19	275	58	Stnd	W(2)	HF1 HS1 HR1
200.13	123/62	34/18	275	58	Stnd	W(2)	HF1 HS1 HR1

Renault TRM 340.34

Notes: This is a heavy 6x6 truck used by France. It is of a conventional design, with a cab and hood that tilts forward to access the engine and transmission. The cab has heating and air conditioning. It was developed to meet heavy engineer requirements. Power is provided by a MIDR 6.35.40 supercharged diesel developing 335 horsepower. Steering and brakes are power assisted. Towing is up to 12 tons off-road.

Variants include a dump truck, firefighting vehicle, and a tractor-trailer (may tow 75 tons or half that off road).

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$11,519	D, A	16.42 tons	26 tons	3+56	20	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
113/58	31/16	250	94	Stnd	W(3)	HF1 HS1 HR1

Renault TRM 6000

Notes: This is basically a smaller version of the TRM 9000; it uses many of the same automotive components and even the same engine (but without a turbocharger). The design was originally by Berliet, but it was bought by Renault. The TRM 6000 has been exported, but is not used by the French Army. The cargo area has drop sides and a drop tailgate. The cab may have a hard or soft top and is a cabover design. Towing capacity is 6 tons cross-country. Note that if the TRM 6000 stays on roads, it can haul 7 tons. Options include an extra 200-liter fuel tank, a winch with a capacity of 4.5 tons and 60 meters of cable, and larger tires. The engine used is the MID 06.20.30 with 185 horsepower, coupled with a manual BDSL 021 transmission with six forward and one reverse gear.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
TRM 6000	$7,175	D, A	6 tons	12.4 tons	2+24	8	Headlights	Open
w/Winch	$8,300	D, A	6 tons	12.45 tons	2+24	8	Headlights	Open
w/Extra Fuel Tank	$7,375	D, A	6 tons	12.6 tons	2+24	10	Headlights	Open
w/Winch & Fuel Tank	$8,500	D, A	6 tons	12.65 tons	2+24	10	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
TRM 6000	125/63	34/18	200	55	Stnd	W(2)	HF1 HS1 HR1
w/Winch	125/63	34/18	200	55	Stnd	W(2)	HF1 HS1 HR1
w/Extra Fuel Tank	124/62	34/18	400	55	Stnd	W(2)	HF1 HS1 HR1

w/Winch & Fuel Tank	124/62	34/18	400	55	Stnd	W(2)	HF1 HS1 HR1

Renault TRM 9000

Notes: The TRM 9000 is a cabover-design heavy truck used by France, Algeria, Egypt, Morocco, and Saudi Arabia. It is also based on a previous Berliet design which was bought by Renault, specifically the Berliet GBD. The rear cargo area has drop sides and tailgate and a canvas cover. The TRM 9000 can be fitted with a winch with a capacity of 4500 kilograms and 60 meters of cable. The TRM 9000 is powered by a MIDS 06.20.30, the same engine as on the TRM 6000 but fitted with a turbocharger; it has 228 horsepower. The suspension, however, is a 6x6 suspension beefed up over the TRM 6000. Towing capacity is 10 tons cross-country. Load hauling may be increased to 10 tons if the TRM 9000 stays on roads.

Variants include an artillery tractor, command vehicle, radio vehicle, tanker, Exocet or Otomat anti-shipping missile launcher, UAV launching vehicle, Shahine SAM launcher, recovery vehicle, and a semi-tractor trailer that can tow 27 tons.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
TRM 9000	$9.356	D, A	9 tons	20 tons	2+24	16	Headlights	Open
w/Winch	$10.481	D, A	9 tons	20.05 tons	2+24	16	Headlights	Open
w/Extra Fuel Tank	$9,556	D, A	9 tons	20.2 toons	2+24	16	Headlights	Open
w/Winch & Fuel Tank	$10,681	D, A	9 tons	20.25 toons	2+24	16	Headlights	Open
TRM 9000 w/Enlarged Cab	$9,656	D, A	9 tons	20.35 tons	5+24	16	Headlights	Open
w/Winch	$10,781	D, A	9 tons	20.4 tons	5+24	16	Headlights	Open
w/Extra Fuel Tank	$9,856	D, A	9 tons	20.55 tons	5+24	16	Headlights	Open
w/Winch & Fuel Tank	$10,981	D, A	9 tons	20.6 tons	5+24	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
TRM 9000	103/52	29/14	200	84	Stnd	W(3)	HF1 HS1 HR1
w/Winch	103/52	29/14	200	84	Stnd	W(3)	HF1 HS1 HR1
w/Extra Fuel Tank	103/52	29/14	400	84	Stnd	W(3)	HF1 HS1 HR1
w/Winch & Fuel Tank	103/52	29/14	400	84	Stnd	W(3)	HF1 HS1 HR1
TRM 9000 w/Enlarged Cab	102/52	29/14	200	84	Stnd	W(3)	HF1 HS1 HR1
w/Winch	102/52	29/14	200	84	Stnd	W(3)	HF1 HS1 HR1
w/Extra Fuel Tank	102/51	28/14	400	84	Stnd	W(3)	HF1 HS1 HR1
w/Winch & Fuel Tank	102/51	28/14	400	84	Stnd	W(3)	HF1 HS1 HR1

Renault TRM 10000

Notes: This is a development of the TRM 9000, with a longer wheelbase, more powerful engine, and different transmission. This vehicle replaced the Berliet GBU 15 in French service, and Saudi Arabia also uses it. The rear cargo area has a removable canvas top, and removable sides and tailgate. Seats for up to 24 persons may be added. There is an 8-ton winch, which may be mounted at the front or rear. The cab has space for up to four, or two seats may be replaced with a bunk. The cab also has a top hatch with a machinegun mount. The fuel is split between two 250-liter tanks. Power is provided by a MIDR 06.20.45 supercharged diesel developing 260 horsepower; the standard transmission is manual, though an automatic transmission is optional. The Uprated TRM 10000 is capable of taking more weight due to improved suspension and frame components; it has a 326-horsepower engine. Variants include an artillery tractor (with an enlarged cab), dump truck, tanker, crane, mine carrier, RPV carrier, MRL carrier, and surface-to-surface missile carrier. TRM 10000s have seen combat service in Ukraine, as deliveries of older French Army TRM 10000s were made to Ukraine starting shortly after the February 2022 invasion.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
TRM 10000	$11,459	D, A	12.71 tons	29 tons	4+24	24	Headlights	Open
w/Enlarged Cab	$11,887	D, A	12.71 tons	29.35 tons	7+24	24	Headlights	Open

Uprated TRM 10000	$12,030	D, A	15 tons	31 tons	4+24	24	Headlights	Open
w/Armored Cab	$13,343	D, A	15 tons	32.1 tons	4+24	24	Headlights	Open
w/Enlarged Cab	$12,330	D, A	15 tons	31.35 tons	7+24	26	Headlights	Open
Enlarged Cab, Armored	$13,784	D, A	15 tons	32.45 tons	7+24	26	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
TRM 10000	89/45	24/13	500	96	Stnd	W(3)	HF1 HS1 HR1
w/Enlarged Cab	89/45	24/12	500	96	Stnd	W(3)	HF1 HS1 HR1
Uprated TRM 10000	99/50	28/14	500	114	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	97/49	27/14	500	114	Stnd	W(3)	HF2 HS2 HR2*
w/Enlarged Cab	98/50	27/14	500	114	Stnd	W(3)	HF1 HS1 HR1
Enlarged Cab, Armored	96/49	26/14	500	114	Stnd	W(3)	HF2 HS2 HR2*

*The AV listed applies only to the cab; the rest of the truck is AV1. The cab floor's AV is 4Sp.

Renault TRM 12000

Notes: This is a large cargo truck of conventional design and construction. It is based on the Berliet GBH 280; Renault bought the design in the 1980s. It is normally used by France to tow heavy artillery (it can tow pieces or trailers up to 36 tons). The cargo area has drop sides, and the front has a winch of a 10 ton capacity that can be led out to the front or rear. The TRM 12000 is powered by a MIDS 06.35.40 diesel developing 280 horsepower, coupled with a manual transmission, though an automatic transmission is optional. The suspension consists of conventional leaf springs and telescoping shock absorbers, and there are locking differentials. Variants include a dump truck, tipper truck, and a tractor truck.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$10,612	D, A	12 tons	24 tons	3+36	20	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
105/54	29/15	250	83	Stnd	W(3)	HF1 HS1 HR1

Faun L908/54VA

Notes: This is the predecessor of the Faun L912/45A below, and both of them were in German service until well into the 1980s. The L-912/45A is still in service with Turkey. It is a cabover vehicle, with a winch that has a capacity of 10 tons. Some of these vehicles have a crane with a capacity of 1 ton. The L908/54V has a modular cargo bed, which enables it to carry personnel, containers, pallets, or drums. It also allows easy replacement of components, from wheels and axles to engines and cabs. The L908/54VA is powered by a Deutz F8 L714A 178-horsepower multifuel engine, and the transmission is manual with 6 forward and one reverse gear. Crew fatigue may be enhanced by the fact that steering and brakes are not power assisted. The spare wheel is carried behind the cab, lengthwise on the left side. There is only a very small space in the cab for crew belongings; the rest is carried in a box behind the cab.

There is a fuel tanker variant, the L908/ATW. This has a sealed tank carrying 15,000 liters of fuel; a water tanker was not designed. The ATW can fuel two vehicles at once with separate hoses and fuel valves. The ATW is powered by a Deutz F8 L714A multifuel engine developing 178 horsepower. The L908/ATW is both underpowered and heavier than a standard L908/54A, and this leads to poor performance.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
L908/54VA	$13,615	D, G, AvG, A	10 tons	21.5 tons	3+40	16	Headlights	Open
L908/54VA w/Crane	$14,615	D, G, AvG, A	10 tons	22.8 tons	3+40	18	Headlights	Open
L908/ATW	$9,592	D, G, AvG, A	15,000L + 300 kg	25.4 tons	3	20	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
L908/54VA	98/50	27/14	200	47	Stnd	W(3)	HF1 HS1 HR1
L908/54VA w/Crane	94/48	27/14	200	47	Stnd	W(3)	HF1 HS1 HR1
L908/ATW	90/46	26/13	200	47	Stnd	W(3)	HF1 HS1 HR1

Faun L912/45A

Notes: This is a heavy 6x6 truck more commonly used as a crane truck than anything else, though it was once the German Army's primary heavy truck. The layout is conventional, with the engine front, cab center, and cargo body to the rear. The cab normally has a canvas roof, but some have hard roofs; neither have any sort of hatch or observation flap. The cargo body has non-removable sides, but a drop tailgate, so containers or pallets carried must be smaller than 2.35 meters wide. At the front of the vehicle is an 8-ton capacity winch. The L912/45A is powered by a Deutz F12 L714A multifuel engine developing 265 horsepower. Note that if the L912/45A stays on roads, it can haul 15 tons.

The L912/5050A is a tipper truck, used to transport large vehicles (though it cannot take the weight of heavy armored vehicles); this has a flat cargo bed that tilts so that a vehicle can be pulled up onto the bed (by an 11-ton-capacity winch). Conceivably, containers, pallets, or shelter bodies could also be dragged onto this cargo bed. This variant has the same engine and transmission as the L912/45A.

Other variants include a tractor truck and an aviation fuel tanker.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
L912/45A	$12,237	D, G, AvG, A	10 tons	22 tons	3+40	16	Headlights	Open
L912/5050A	$13,196	D, G, AvG, A	10.6 tons	25.2 tons	3	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
L912/45A	122/62	33/17	300	78	Stnd	W(3)	HF1 HS1 HR1
L912/5050A	112/57	31/16	300	78	Stnd	W(3)	HF1 HS1 HR1

Faun TF 50.60 ATEC

Notes: The ATEC (All-Terrain Equipment Carrier) is similar to other PLS/DROPS-type trucks so often found in the West these days. It is a truck designed for carrying heavy palletized or containerized loads. (It is not really meant for carrying troops, and is not equipped to do so; the passenger load below is for a hypothetical jury-rigged passenger seat arrangement.) The vehicle has a 12x10 suspension (which may be taken to 12x8 for road use); steering is normally done with the front three axles, but can be done on all five drive axles if necessary. The ATEC does have antilock brakes as well as a central tire pressure regulation system. The standard German military engine is a turbocharged diesel developing 560 horsepower, but other engines developing 400, 530, or 571 horsepower are available for the ATEC. The transmission is manual and has 16 forward and two reverse gears; an automatic transmission is optional. The cab is a forward control model with excellent visibility to all sides; the truck, and especially the cab, looks like a HEMTT with too many wheels. The cab is air conditioned and heated.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
ATEC (400	$14,640	D, A	28 tons	50 tons	2+56	35	Headlights	Open

hp)								
ATEC (530 hp)	$15,125	D, A	28 tons	50.24 tons	2+56	35	Headlights	Open
ATEC (560 hp)	$15,240	D, A	28 tons	50.3 tons	2+56	35	Headlights	Open
ATEC (571 hp)	$15,280	D, A	28 tons	50.32 tons	2+56	35	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
ATEC (400 hp)	97/49	27/14	350	147	Stnd	W(6)	HF1 HS1 HR1
ATEC (530 hp)	112/57	31/16	350	190	Stnd	W(6)	HF1 HS1 HR1
ATEC (560 hp)	117/58	32/16	350	207	Stnd	W(6)	HF1 HS1 HR1
ATEC (571 hp)	118/59	32/17	350	211	Stnd	W(6)	HF1 HS1 HR1

IFA L60 APB

Notes: This truck was produced by the former East Germany, and was still in German service in the 1990s. The truck is of a cabover design with a cab called the 6400. (The cab was originally supposed to be built by Volvo, but IFA choked when they heard the price.) The L60 was supposed to be an upgrade of the W50, but cost overruns, rapidly escalating labor costs, and increasing cost of components meant that the price of an L60 was RL twice the price of a W50. The result was that the sales of the L60 were not nearly what IFA expected, and the reunification of Germany put a nail in the coffin of L60 production, as they had to then compete with outstanding designs of trucks from all over Europe. Production ended in August of 1990 after only 17,275 were built (and not necessarily sold). However, with the advent of off-road races and competitions, the L60 has seen a new life, as it has decent off-road performance.

The cargo area is covered with a canvas top over bows. The front bumper has a 4500-kilogram winch with 60 meters of cable. The design closely follows the earlier W50, but the L60 has a more powerful engine (some sources say 173 horsepower, some say 180 horsepower, so I have included both below), better (but still manual) transmission, and power steering and brakes. The L60 can also crabwalk at a Combat Move of 12, facilitating its off-road performance. Variants include a tractor-trailer, maintenance workshop, dump truck, shelter carrier, and crane. Germany, Cambodia, Hungary, and Iraq use this vehicle.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
L60 APB (173 hp)	$9,474	D, A	5 tons	12 tons	3+20	8	Headlights	Open
L60 APB (180 hp)	$9,491	D, A	5 tons	12 tons	3+20	8	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
L60 APB (173 hp)	135/68	38/19	180	51	Stnd	W(2)	HF1 HS1 HR1
L60 APB (180 hp)	138/70	39/19	180	53	Stnd	W(2)	HF1 HS1 HR1

IVECO Magirus 110.16 AWM

Notes: This medium truck is available with either one set or two sets of tires on the rear axle. It is of a cabover design, with a square three-man cab; the driver's seat is adjustable. The 110.16 AWM can carry cargo, passengers, or containers in its cargo bed, which may have hard or canvas sides and roof. The 110.16 AWM has a roof hatch on the cab with a weapon mount; alternatively, a canvas cab roof may be provided with a ventilation flap in it. A 5000 kilogram-capacity winch is in the front bumper, and stowage is provided for 5 jerry cans. Standard fuel tankage is 130 liters, but a larger 200-liter tank may be installed. Behind the cab, a spare tire and wheel are provided. The engine is a Deutz BF 6L 913 turbocharged diesel delivering 168 horsepower, coupled to a manual transmission. Steering and brakes are power assisted. Maximum towed load is 11.8 tons. The 110.16 AWM is in widespread service worldwide.

The 110.17 AM is a 4x2 version of the 110.16 AWM. Except for its lesser off-road performance and somewhat better on-road, and the spare tire and wheel being under the frame, it is identical to the 110.16 AWM. It is also shorter in total length by 46 centimeters and shorter in wheelbase by 60 centimeters.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
110.16 AWM	$8,924	D, A	5.5 tons	11.8 tons	3+18	8	Headlights	Open

w/Enlarged Fuel Tank	$8,994	D, A	5.5 tons	11.87 tons	3+18	8	Headlights	Open
110.17 AM	$8,566	D, A	5.5 tons	11.8 tons	3+18	8	Headlights	Open
w/Enlarged Fuel Tank	$8,636	D, A	5.5 tons	11.87 tons	3+18	8	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
110.16 AWM	134/68	38/19	130	61	Stnd	W(2)	HF1 HS1 HR1
w/Enlarged Fuel Tank	134/67	37/18	200	49	Stnd	W(2)	HF1 HS1 HR1
110.17 AM	148/34	42/10	130	49	Stnd	W(2)	HF1 HS1 HR1
w/Enlarged Fuel Tank	148/34	41/9	200	49	Stnd	W(2)	HF1 HS1 HR1

IVECO Magirus 120.19 ANWM

Notes: This is an enlarged version of the 90-13 ANWM. It has a more powerful Deutz F6L 413F 192-horsepower diesel engine, a longer wheelbase, and wider manual-transmission gear range. The cargo body may be fitted with a variety of containers and hard or soft covers, and has drop sides and tailgate which are removable. The cab has a roof hatch with a weapon mount, and has a large one-piece windshield; alternatively, a canvas cab roof may be provided with a ventilation flap in it. Behind the cab, a spare tire and wheel are provided. Steering and brakes are power assisted. The 120.19 ANWM is fitted with either a 5000-kilogram or 8000-kilogram winch in the front bumper. A wading kit is available which allows fording to a depth of 1.2m; without it, the maximum fording is 80 centimeters. Maximum towed load is 6 tons. This vehicle is in service with many countries worldwide.

The 130-liter and 200-liter fuel tanks are single tanks; the 330-liter fuel tankage actually has a separate 200-liter and a 130-liter tank installed. These tanks are identical to those installed on the 110.16 AWM above.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
120.19 ANWM (5-Ton Winch)	$9,619	D, A	5 tons	12.3 tons	3+20	8	Headlights	Open
120.19 ANWM (8-Ton Winch)	$10,369	D, A	5 tons	12.33 tons	3+20	8	Headlights	Open
120.19 ANWM (5-Ton Winch, 200-liter Tank)	$9,689	D, A	5 tons	12.37 tons	3+20	8	Headlights	Open
120.19 ANWM (8-Ton Winch, 200-liter Tank)	$10,439	D, A	5 tons	12.4 tons	3+20	8	Headlights	Open
120.19 ANWM (5-Ton Winch, 330-liter Tank)	$9,819	D, A	5 tons	12.5 tons	3+20	10	Headlights	Open
120.19 ANWM (8-Ton Winch, 330-liter Tank)	$10,569	D, A	5 tons	12.53 tons	3+20	10	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
120.19 ANWM (5-Ton Winch)	143/72	40/20	130	56	Stnd	W(2)	HF1 HS1 HR1
120.19 ANWM (8-	142/72	40/20	130	56	Stnd	W(2)	HF1 HS1 HR1

Ton Winch)									
120.19 ANWM (5-Ton Winch, 200-liter Tank)	142/72	40/20	200	56	Stnd	W(2)	HF1	HS1	HR1
120.19 ANWM (8-Ton Winch, 200-liter Tank)	142/72	40/20	200	56	Stnd	W(2)	HF1	HS1	HR1
120.19 ANWM (5-Ton Winch, 330-liter Tank)	141/71	39/20	330	56	Stnd	W(2)	HF1	HS1	HR1
120.19 ANWM (8-Ton Winch, 330-liter Tank)	141/71	39/20	330	56	Stnd	W(2)	HF1	HS1	HR1

IVECO Magirus 160.23 ANWM

Notes: The 160-23 is a lengthened and three-axle version of the 120.19. It exists as a basic cargo/troop carrier, tanker, command post carrier, and mobile workshop. The basic version has a canvas cover over bows for the cargo area. The winch capacity is increased to 8000 or 10000 kilograms. The maximum towed load is 12 tons. A wading kit is available which allows fording to a depth of 1.2m; without it, the maximum fording is 80 centimeters. The engine is a Deutz F8 L419 232-horsepower diesel; coupled with the standard IVECO manual transmission with six forward gears and one reverse gear. The cab is conventional, with a hood which raises to the rear, and an adjustable driver's seat and a bench seat for two passengers. The cab may have a canvas roof with a ventilation flap in it, or may be a hard top with a roof hatch and a weapon mount. Behind the cab, a spare tire and wheel are provided. Stowage for 5 jerry cans and personal gear is provided. Standard fuel tankage is 200 liters, but a larger 300-liter tank may be installed or both a 200 and 300-liter tank may be installed.

The 160.25 ANWM is almost the same as the 160.23 ANWM, but has a strengthened suspension, and can haul 8 tons.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
160.23 ANWM (8-Ton Winch, 200-Liter Tank)	$11,365	D, A	7 tons	16.4 tons	3+18	12	Headlights	Open
160.23 ANWM (8-Ton Winch, 300-Liter Tank)	$11,465	D, A	7 tons	16.5 tons	3+18	12	Headlights	Open
160.23 ANWM (8-Ton Winch, 500-Liter Tanks)	$11,665	D, A	7 tons	16.7 tons	3+18	12	Headlights	Open
160.23 ANWM (10-Ton Winch, 200-Liter Tank)	$11,865	D, A	7 tons	16.42 tons	3+18	12	Headlights	Open

160.23 ANWM (10-Ton Winch, 300-Liter Tank)	$11,965	D, A	7 tons	16.52 tons	3+18	12	Headlights	Open
160.23 ANWM (10-Ton Winch, 500-Liter Tanks)	$12,365	D, A	7 tons	16.72 tons	3+18	12	Headlights	Open
160.25 ANWM (8-Ton Winch, 200-Liter Tank)	$12,312	D, A	8 tons	16.8 tons	3+18	12	Headlights	Open
160.25 ANWM (8-Ton Winch, 300-Liter Tank)	$12,412	D, A	8 tons	16.9 tons	3+18	12	Headlights	Open
160.25 ANWM (8-Ton Winch, 500-Liter Tanks)	$12,612	D, A	8 tons	17.1 tons	3+18	12	Headlights	Open
160.25 ANWM (10-Ton Winch, 200-Liter Tank)	$12,812	D, A	8 tons	16.82 tons	3+18	12	Headlights	Open
160.25 ANWM (10-Ton Winch, 300-Liter Tank)	$12,912	D, A	8 tons	16.92 tons	3+18	12	Headlights	Open
160.25 ANWM (10-Ton Winch, 500-Liter Tanks)	$13,112	D, A	8 tons	17.12 tons	3+18	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
160.23 ANWM (8-Ton Winch, 200-Liter Tank)	134/68	38/19	200	68	Stnd	W(3)	HF1 HS1 HR1
160.23 ANWM (8-Ton Winch, 300-Liter Tank)	133/67	37/18	300	68	Stnd	W(3)	HF1 HS1 HR1
160.23 ANWM (8-Ton Winch,	132/67	37/18	500	68	Stnd	W(3)	HF1 HS1 HR1

500-Liter Tanks)									
160.23 ANWM (10-Ton Winch, 200-Liter Tank)	134/68	38/19	200	68	Stnd	W(3)	HF1	HS1	HR1
160.23 ANWM (10-Ton Winch, 300-Liter Tank)	133/67	37/18	300	68	Stnd	W(3)	HF1	HS1	HR1
160.23 ANWM (10-Ton Winch, 500-Liter Tanks)	132/67	37/18	500	68	Stnd	W(3)	HF1	HS1	HR1
160.25 ANWM (8-Ton Winch, 200-Liter Tank)	132/66	37/18	200	68	Stnd	W(3)	HF1	HS1	HR1
160.25 ANWM (8-Ton Winch, 300-Liter Tank)	132/66	37/18	300	68	Stnd	W(3)	HF1	HS1	HR1
160.25 ANWM (8-Ton Winch, 500-Liter Tanks)	131/66	37/18	500	68	Stnd	W(3)	HF1	HS1	HR1
160.25 ANWM (10-Ton Winch, 200-Liter Tank)	132/66	37/18	200	68	Stnd	W(3)	HF1	HS1	HR1
160.25 ANWM (10-Ton Winch, 300-Liter Tank)	131/66	37/18	300	68	Stnd	W(3)	HF1	HS1	HR1
160.25 ANWM (10-Ton Winch, 500-Liter Tanks)	131/66	37/18	500	68	Stnd	W(3)	HF1	HS1	HR1

IVECO Magirus 200.23 ANWM

Notes: The 200.23 is similar to the 160.23, but is larger, and has a more powerful engine. The basic version has a canvas cover over bows for the cargo area. The winch capacity is increased to 8000 or 10000 kilograms. The maximum towed load is 18 tons. A wading kit is available which allows fording to a depth of 1.2m; without it, the maximum fording is 80 centimeters. The cab is conventional, with a hood which raises to the rear, and an adjustable driver's seat and a bench seat for two passengers. The cab may have a canvas roof with a ventilation flap in it, or may be a hard top with a roof hatch and a weapon mount. Behind the cab, a spare

tire and wheel are provided. Stowage for 5 jerry cans and personal gear is provided. Standard fuel tankage is 200 liters, but a larger 300-liter tank may be installed or both a 200 and 300-liter tank may be installed. The engine of the 200.23 ANWM is a Deutz F8 L413F 232-horsepower diesel, with the standard IVECO manual transmission with six forward and one reverse gear.

The 210.32 is the same truck, but it is powered by a 320-horsepower F10 L413F Deutz diesel. The more powerful engine makes the 210.32 a little heavier, but the 210.32 can haul slightly more weight.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
200.23 ANWM (8-Ton Winch, 200-Liter Tank)	$12,589	D, A	10 tons	20.4 tons	3+18	16	Headlights	Open
200.23 ANWM (8-Ton Winch, 300-Liter Tank)	$12,689	D, A	10 tons	20.5 tons	3+18	16	Headlights	Open
200.23 ANWM (8-Ton Winch, 500-Liter Tanks)	$12,889	D, A	10 tons	20.7 tons	3+18	16	Headlights	Open
200.23 ANWM (10-Ton Winch, 200-Liter Tank)	$13,089	D, A	10 tons	20.42 tons	3+18	16	Headlights	Open
200.23 ANWM (10-Ton Winch, 300-Liter Tank)	$13,189	D, A	10 tons	20.52 tons	3+18	16	Headlights	Open
200.23 ANWM (10-Ton Winch, 500-Liter Tanks)	$13,389	D, A	10 tons	20.72 tons	3+18	16	Headlights	Open
210.32 ANWM (8-Ton Winch, 200-Liter Tank)	$12,809	D, A	10.3 tons	21 tons	3+18	16	Headlights	Open
210.32 ANWM (8-Ton Winch, 300-Liter Tank)	$12,909	D, A	10.3 tons	21.1 tons	3+18	16	Headlights	Open
210.32 ANWM (8-Ton Winch, 500-Liter Tanks)	$13,109	D, A	10.3 tons	21.3 tons	3+18	16	Headlights	Open

210.32 ANWM (10-Ton Winch, 200-Liter Tank)	$13,309	D, A	10.3 tons	21.02 tons	3+18	16	Headlights	Open
210.32 ANWM (10-Ton Winch, 300-Liter Tank)	$13,409	D, A	10.3 tons	21.12 tons	3+18	16	Headlights	Open
210.32 ANWM (10-Ton Winch, 500-Liter Tanks)	$13,609	D, A	10.3 tons	21.32 tons	3+18	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
200.23 ANWM (8-Ton Winch, 200-Liter Tank)	117/59	32/16	200	68	Stnd	W(3)	HF1 HS1 HR1
200.23 ANWM (8-Ton Winch, 300-Liter Tank)	117/59	32/16	300	68	Stnd	W(3)	HF1 HS1 HR1
200.23 ANWM (8-Ton Winch, 500-Liter Tanks)	115/58	32/16	500	68	Stnd	W(3)	HF1 HS1 HR1
200.23 ANWM (10-Ton Winch, 200-Liter Tank)	117/59	32/16	200	68	Stnd	W(3)	HF1 HS1 HR1
200.23 ANWM (10-Ton Winch, 300-Liter Tank)	117/59	32/16	300	68	Stnd	W(3)	HF1 HS1 HR1
200.23 ANWM (10-Ton Winch, 500-Liter Tanks)	115/58	32/16	500	68	Stnd	W(3)	HF1 HS1 HR1
210.32 ANWM (8-Ton Winch,	141/71	39/20	200	90	Stnd	W(3)	HF1 HS1 HR1

200-Liter Tank)								
210.32 ANWM (8-Ton Winch, 300-Liter Tank)	141/71	39/20	300	90	Stnd	W(3)	HF1	HS1 HR1
210.32 ANWM (8-Ton Winch, 500-Liter Tanks)	140/70	39/20	500	90	Stnd	W(3)	HF1	HS1 HR1
210.32 ANWM (10-Ton Winch, 200-Liter Tank)	141/71	39/20	200	90	Stnd	W(3)	HF1	HS1 HR1
210.32 ANWM (10-Ton Winch, 300-Liter Tank)	141/71	39/20	300	90	Stnd	W(3)	HF1	HS1 HR1
210.32 ANWM (10-Ton Winch, 500-Liter Tanks)	140/70	39/20	500	90	Stnd	W(3)	HF1	HS1 HR1

IVECO Magirus 240.25

Notes: This vehicle replaced the 160-23 and 200-23 in production. It is basically an enlarged version of those vehicles. The 240.25 comes in two versions, a short wheelbase version with a wheelbase of 4.2 meters and a long wheelbase variant with a wheelbase of 5.25 meters. The full length of these versions is 8.55 meters and 9.2 meters. The basic version has a canvas cover over bows for the cargo area. The winch capacity is increased to 8000 or 10000 kilograms. The maximum towed load is 11.5 tons. A wading kit is available which allows fording to a depth of 1.2m; without it, the maximum fording is 80 centimeters. The cab is conventional, with a hood which raises to the rear, and an adjustable driver's seat and a bench seat for two passengers. The cab may have a canvas roof with a ventilation flap in it, or may be a hard top with a roof hatch and a weapon mount. Behind the cab, a spare tire and wheel are provided. Stowage for 5 jerry cans and personal gear is provided. The 240.25 is powered by a Deutz F8 L513 264-horsepower diesel engine, coupled with the standard Magirus manual transmission with 6 forward gears and one reverse gear. Steering and brakes are power assisted.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
240.25 SWB w/8-Ton Winch	$13,452	D, A	12 tons	24.5 tons	3+28	20	Headlights	Open
240.25 SWB w/10-Ton Winch	$13,952	D, A	12 tons	24.52 tons	3+28	20	Headlights	Open
240.25 LWB w/8-Ton Winch	$13,838	D, A	12 tons	25 tons	3+28	20	Headlights	Open
240.25 LWB w/10-Ton Winch	$14,338	D, A	12 tons	25.02 tons	3+28	20	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
240.25	114/58	32/16	300	78	Stnd	W(3)	HF1 HS1 HR1

SWB 240.25 LWB	113/57	31/16	300	78	Stnd	W(3)	HF1 HS1 HR1

MAN 11.136 HA

Notes: This is a heavy 4x4 truck used by Belgium. It is the replacement for the MAN 630 in Belgian service. The layout is conventional, with the engine front, cab center, and cargo body to the rear. The cab has an adjustable seat for the driver and a bench seat for the two passengers. The engine compartment has a reinforced hood and windshield. The 11.136 HA has locking differentials, and a buzzer sounds when the differential locks are engaged or removed. The rear cargo area has a canvas cover, steel frame, and steel drop sides and tailgate. The floor of the cargo area is made of pine. The 11.136 HA is powered by a MAN/Renault 797/06 diesel developing 150 horsepower.

The 11.136 H is a variant, designed primarily for civilian concerns, which has a 4x2 suspension. Other details are the same as the 11.136 HA.

The 11.136 Expedition Truck is an example of several heavy and medium trucks which have been made over into mobile homes. The rear cargo area is made over into a box body, which is insulated and provided with air conditioning and heating. The suspension is re-tuned to give a softer ride, and an automatic transmission is an option. The box body has within it a retractable double bed. The area has a kitchenette with an oak counter, a two-burner induction stove top, a large sink with a separate faucet providing filtered drinking water and a washing tap, and a refrigerator with a small freezer. There is also s small bathroom with a shower and a separate composting toilet. Other refinements include a 300Ah/27V lithium battery, 1200-watt solar panels on the roof, a TV and radio, numerous outlets, a system to control and monitor the electrical system, four cameras around the truck to monitor the outside and two dashcams, and a bike rack for two bicycles. The interior of the box body has a couch and two other chairs. Water is provided by a 350-liter tank for the kitchen and bathroom. The fuel tankage is also increased. The sides have racks for outsized pieces of equipment and belongings. The cab has a CB radio, with auxiliary controls in the box body. The interior of the truck, in both the cab and box body, are luxurious.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
MAN 11.136 HA	$7,283	D, A	5 tons	11 tons	3+20	8	Headlights	Open
MAN 11.136 H	$6,919	D, A	5 tons	11 tons	3+20	8	Headlights	Open
MAN 11.136 Expedition Truck	$21,849	D, A	5 tons	11 tons	3+20	8	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Stnd	Armor
MAN 11.136 HA	131/66	37/18	200	44	Stnd	W(2)	HF2 HS1 HR1
MAN 11.136 H	144/33	40/9	200	44	Stnd	W(2)	HF2 HS1 HR1
MAN 11.136 Expedition Truck	131/66	37/18	300	44	Stnd	W(2)	HF2 HS1 HR1

MAN 14.240 FAEG/20.280 DFAEG

Notes: This medium 4x4 truck was based on standard commercial components, with minor modifications for military use. It is an upgrade of the MAN 11.136 HA, and is in service with various North African and South American countries. The layout is conventional, and the rear cargo area has a steel frame, aluminum drop sides and tailgate, a tarpaulin cover, and a floor made of pine. The cab is of the cabover type, with an adjustable seat for the driver and a bench for the two passengers in the cab, and a small space behind the seats for the crew's belongings. The 20.280 DFAEG is a larger version of the same truck, with a 6x6 suspension, more powerful engine, and higher load-carrying ability. The 14.240 is powered by a MAN D2566 MPG diesel developing 240 horsepower; the 20.280 uses a 280-horsepower MAN D2566 MTPG diesel.

In the civilian world, the 14.240 and 20.280 are used as the chassis for a host of buses, such as the MCV Evolution.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
14.240 FAEG	$8,119	D, A	6 tons	14.35 tons	3+24	10	Headlights	Open
20.280 DFAEG	$9,819	D, A	10 tons	20.3 tons	3+40	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
14.240 FAEG	151/76	42/21	310	71	Stnd	W(2)	HF1 HS1 HR1

20.280 DFAEG	132/67	37/18	310	83	Stnd	W(3)	HF1 HS1 HR1

MAN 18.284/18.223 LAE

Notes: This is a civilian truck (the M2000) modified to military standards. The 18.284 is compact, with an length of only six meters, but sturdy. The cab is of the cabover type, with an adjustable seat for the driver and a bench for the two passengers in the cab, and a small space behind the seats for the crew's belongings. A spare wheel and tire is stowed on a rack attached to the rear of the cab. The 18.284 may tow up to 30 tons. It is otherwise an unremarkable truck except for its cargo capacity. The 18.284 uses a MAN Type D0836 280-horsepower diesel, coupled with an Eaton 8209 manual transmission with nine forward and one reverse gear.

The 18.223 is similar to the 18.284, but can carry more cargo due to a reinforced suspension. The M2000 is the civilian version, with a 4x2 suspension and greater cargo capacity than the 18.284. It's listed cargo capacity on roads; cargo capacity drops to 9 tons off-road. M2000s will rarely be found in a troop-carrying configuration; they will be flatbeds, crane carriers, container and pallet carriers, tankers, etc. – almost any configuration a civilian business may need.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
18.284	$7,827	D, A	10.2 tons	16 tons	3+32	12	Headlights	Open
18.223	$8,227	D, A	11.27 tons	17 tons	3+36	14	Headlights	Open
M2000	$7,788	D, A	12.2 tons	18 tons	3+32	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
18.284	155/78	43/22	200	83	Stnd	W(2)	HF1 HS1 HR1
18.223	150/75	41/21	200	83	Stnd	W(2)	HF1 HS1 HR1
M2000	157/36	44/10	200	83	Stnd	W(2)	HF1 HS1 HR1

MAN 630

Notes: This medium 4x4 truck was the standard truck in its class in the German Army until recently. It is still used in large numbers by Germany, and by Belgium, India, and several nations in Central and South America. Variants include an ambulance, a decontamination vehicle, an RPV carrier, a field kitchen, a radar vehicle, a tanker, a dump truck, and a hard-bodied shelter carrier.

Several base variants are available, including the L1 4x2 civilian model and its off-road variant, the L1A civilian model with switchable 4x2/4x4 drive and is equivalent to the L2A for game purposes. The L2A is the base military model, also with switchable 4x2/4x4 drive; the L2AE is a variant with single rear tires instead of the dual rear tires of the L2A. The L3 is another civilian base model, with rear-wheel drive; it can be had in long-hood versions or with a cabover layout. Civilian models will have almost any configuration possible, from giant vacuum cleaners to tanker trucks that transport sewage to a flatbed container or pallet carrier. Civilian versions are relatively rare, with most models produced being the military L2AE variant.

The engine of most variants is the MAN D1246 130-horsepower multifuel engine, coupled with a ZF AK6-55 manual transmission. The engine can burn a large number of petroleum-distillate fuels, including gasoline (of several grades), diesel, kerosene, waste oil, and jet fuels of various grades and types; performance may vary depending upon what fuel is being burned. (The stats below are for the 630 burning a mid-grade diesel fuel.) The layout is conventional, and both the cab and cargo area have removable canvas tops. The hood is fairly long, with the cab behind it; the cab has an adjustable seat for the driver, and a bench seat for the two passengers in the cab. Behind the seats is a narrow space for personal gear. Some of these vehicles have a 5000-kilogram-capacity winch mounted at the front.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Open
630L1/L3	$7,340	D, G, AvG, A	5.49 tons	13.2 tons	2+22	10	Headlights	Open
630L2A	$7,645	D, G, AvG, A	5.49 tons	13.2 tons	2+22	10	Headlights	Open
630L2AE	$7,458	D, G, AvG, A	5.22 tons	13 tons	2+22	10	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
630L1/L3	118/27	33/8	110	38	Stnd	W(2)	HF1 HS1 HR1
630L2A	108/54	30/15	110	38	Stnd	W(2)	HF1 HS1 HR1
630L2AE	109/54	30/15	110	38	Stnd	W(2)	HF1 HS1 HR1

Mercedes-Benz 1017

Notes: The 1017 is part of a larger family of German trucks known as the NG (or New Generation). This included the 1017, which was developed to meet the needs of the German Army, and is essentially a commercial vehicle with a minimum of modifications to convert it to military service. It is a 4x4 medium truck with a cabover layout, with a hatch of the cab roof and a weapon mount. The middle seat can be folded to make a platform for a person standing in the roof hatch. Stowage boxes were added to the cargo area and rear wall of the cab. The cab is noise and temperature insulated, and has a heater and air blower (but not an air conditioner). The cargo area is bedded with wood and has attachment points for containers and van bodies, and has drop sides and tailgate. The vehicle comes in two broad versions, the 1017 (4x2) and the 1017A (selectable 4x2/4x4); most details are otherwise the same for the two suspension versions, though dimensions are slightly different. The engine is a Mercedes-Benz OM352A turbocharged diesel engine developing 172 horsepower. The steering is hydraulically boosted, and the brakes are air boosted. The maximum wading

depth is 50 centimeters.

This vehicle is in use by Germany, Belgium, Portugal, and other NATO units.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
1017	$7,644	D, A	5.45 tons	11.7 tons	3+22	8	Headlights	Open
1017A	$7,962	D, A	5.4 tons	12.2 tons	3+22	8	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
1017	151/35	41/10	135	63	Stnd	W(2)	HF1 HS1 HR1
1017A	133/67	37/18	135	63	Stnd	W(2)	HF1 HS1 HR1

Mercedes-Benz 1217CA

Notes: This vehicle is for cargo and personnel transport and for towing of light artillery pieces. It is of cabover design, with either a standard two-door cab or a larger 4-door cab. (You can jam four people into the rear seat, but three people are more comfortable.) The cab in both cases has a roof hatch; the missile seat folds down to provide a platform for a person to stand on and look out of the roof hatch. The vehicle has a winch with a capacity of 5 tons and cable that may be led out to the front or rear. Suspension is 4x4 and the 1217CA has four-wheel boosted antilock brakes. The vehicle is powered by a Mercedes-Benz OM266A turbocharged diesel developing 170 horsepower, coupled to a manual transmission. The 1217CA is able to wade to a one-meter depth of water. Steering is power assisted. The maximum towed load is 10.5 tons.

Variants include an ambulance, commo vehicle, tanker truck, and fire engine.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
1217CA	$9,234	D, A	5.5 tons	14 tons	3+22	10	Headlights	Open
w/Enlarged Cab	$9,907	D, A	5.5 tons	14.23 tons	7+22	10	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
1217CA	122/62	33/17	200	62	Stnd	W(2)	HF1 HS1 HR1
w/Enlarged Cab	121/61	33/17	200	62	Stnd	W(2)	HF1 HS1 HR1

Mercedes-Benz 1222A

Notes: Two versions of this German truck are produced; one has a load area 4.35 meters long, and one has a load area 4.85 meters long. Both have the same cargo capacity. Two cab styles are available, one a standard cab and one an extended cab for more equipment storage behind the seats; no second row seats are installed as standard, and the space was designed for personal gear stowage. A winch may be mounted at the front or rear, with a capacity of 5 tons. The cargo area has drop sides and a drop tailgate; hard-bodied versions are also available. Outside and in front of the load area is a spare wheel and tire. The 1222A's engine is a Mercedes-Benz OM421 diesel developing 216 horsepower, coupled to a manual transmission. Brakes and steering are power boosted.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
1222A SWB	$9,081	D, A	5.5 tons	14 tons	3+22	10	Headlights	Open
w/Enlarged Cab	$9,354	D, A	5.5 tons	14.23 tons	3+22	10	Headlights	Open
1222A LWB	$9,373	D, A	5.5 tons	14.8 tons	3+24	12	Headlights	Open
w/Enlarged Cab	$9,646	D, A	5.5 tons	15.03 tons	3+24	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
1222A SWB	142/72	40/20	200	64	Stnd	W(2)	HF1 HS1 HR1
w/Enlarged Cab	141/71	39/20	200	64	Stnd	W(2)	HF1 HS1 HR1
1222A LWB	137/69	38/19	200	64	Stnd	W(2)	HF1 HS1 HR1
w/Enlarged Cab	135/68	38/19	200	64	Stnd	W(2)	HF1 HS1 HR1

Mercedes-Benz 1628A/2028A/2628A

Notes: The 1628A heavy truck was generally produced for export, and several European and African countries used them, but some were also used by the German Army. The 2028A was likewise produced for export, and is used by Pakistan and the UAE. Like the 1222A, there are two cabs available, a normal one and a larger one with room for equipment storage behind the seats. The 1628A is smaller and has a 4x4 suspension, and the 2028A is larger with a 6x6 suspension. Both are capable of fording depths up to 1 meter, and have aluminum drop sides and tailgate. Both are fitted with a winch at the front or rear with a capacity of 10 tons. Both

are powered by an OM422 280-horsepower diesel, coupled with a manual transmission with six forward and one reverse gear.

The 2628A is a larger version of the 2028A. Like that vehicle, it was designed primarily for export, and one of the countries using it is Brazil, where its chassis forms the basis for the ASTROS II multiple rocket launcher. Another common use for this truck is as an artillery tractor, fitted with equipment and ammunition racks, and they are also used as recovery vehicles for armored personnel carriers; the cargo bed is big enough to carry an M113-sized vehicle, and the cargo capacity is just enough for that purpose. That version can also carry other equipment, and is often used to carry construction or engineer equipment. Like the other vehicles of the series, two cabs may be fitted, and like the 2028A, a 10-ton winch may be fitted either in front or in the rear. The 2628A also uses the OM422 engine.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
1628A	$11,491	D, A	7 tons	16 tons	3+28	12	Headlights	Open
w/Enlarged Cab	$11,764	D, A	7 tons	16.25 tons	3+28	12	Headlights	Open
2028A	$13,225	D, A	10 tons	22 tons	3+40	16	Headlights	Open
w/Enlarged Cab	$13,522	D, A	10 tons	22.25 tons	3+40	16	Headlights	Open
2628A	$14,227	D, A	12 tons	25 tons	3+48	20	Headlights	Open
w/Enlarged Cab	$14,524	D, A	12 tons	25.25 tons	3+48	20	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
1628A	154/78	42/22	300	81	Stnd	W(2)	HF1 HS1 HR1
w/Enlarged Cab	152/77	42/22	300	81	Stnd	W(2)	HF1 HS1 HR1
2028A	124/63	34/18	300	81	Stnd	W(3)	HF1 HS1 HR1
w/Enlarged Cab	123/62	34/18	300	81	Stnd	W(3)	HF1 HS1 HR1
2628A	115/58	32/16	300	81	Stnd	W(3)	HF1 HS1 HR1
w/Enlarged Cab	114/58	32/16	300	81	Stnd	W(3)	HF1 HS1 HR1

Mercedes-Benz LG315/46

Notes: This is a heavy 4x4 truck designed in the late 1950s and used by Germany until the late 1970s. They are still in use by Chile. The LG315/46 is a development of the civilian LG315 heavy truck, and belongs to the first generation of Bundeswehr wheeled vehicles. The Bundeswher decided to adopt the LG315/46 when it became apparent that MAN could not produce the required number of Model 630 trucks in a reasonable measure of time.

It is a conventional design, with a very long hood to house the large multifuel engine. The engine can burn basically any sort of petroleum distillate, including mixtures of different fuels. The engine of the LG315/46 is a Daimler-Benz OM315 145-horsepower engine coupled with an EZF manual transmission. The suspension is a switchable 4x2/4x4. The cargo area has drop sides and a tailgate, as well as a tarpaulin cover over bows. Engineer team variants have additional side openings in the tarpaulin cover and sides. The cab may have a canvas cover with an observation flap in it, or may have a metal roof with an observation hatch in it. The cab has seats for the driver and passenger, and between them is a wooden platform to allow the passenger to become an observer.

One variant is a tanker with a large tank holding 4200-liters; this is divided internally into two 2100-liter tanks. The vehicle has two fueling hoses, meters, and dispensers.

Variants include a tanker, a vehicle with a telescoping observation mast, and a wrecker.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
LG315/46	$7,651	D, G, AvG, A	5 tons	12.85 tons	2+20	10	Headlights	Open
LG315/46 Tanker	$9,302	D, G, AvG, A	4200 liters + 210 kg	12.58 tons	2	10	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
LG315/46	113/58	31/16	140	36	Stnd	W(2)	HF1 HS1 HR1
LG315/46 Tanker	114/58	32/16	140	36	Stnd	W(2)	HF1 HS1 HR1

Unimog Heavy Trucks

Notes: The Mercedes Benz Unimog 1350L is a large truck used by a variety of nations around the world, including Germany and several other NATO countries. It is not by the definition I use a heavy truck (5 tons capacity and up), but is included here for completeness; the U1550L is the same basic vehicle with a more powerful engine. The rear cargo area can be covered by a tarpaulin

over bows; the cab may have a soft or hard top. A weapons mount is not normally supplied, but may be improvised. The 2150L is yet an even larger version of the Unimog series. The U-2150L has larger tires, a different engine, and a larger cargo area. The U-2450L has a 6x6 suspension, larger cargo area, larger fuel tank, supercharged engine, and larger tires.

The U1350L is powered by an OM366A 136-horsepower diesel; the U1550L is basically the same truck (there are some dimensional differences – the U1550L is almost a meter longer) with a more powerful 155-horsepower diesel engine. The U2150L has a more powerful 214-horsepower engine, and the U2450L has an even more powerful 240 horsepower supercharged engine. Each truck has a manual transmission with eight forward and eight reverse gears.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
U1350L	$5,441	D, A	3 tons	7.5 tons	3+16	6	Headlights	Open
U1550L	$6,277	D, A	3 tons	8.5 tons	3+20	6	Headlights	Open
U2150L	$7,166	D, A	5 tons	12.3 tons	3+20	8	Headlights	Open
U2450L	$8,946	D, A	7 tons	17 tons	3+28	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
U1350L	159/80	44/22	160	40	Stnd	W(2)	HF1 HS1 HR1
U1550L	160/81	44/22	160	46	Stnd	W(2)	HF1 HS1 HR1
U2150L	155/78	43/22	160	63	Stnd	W(2)	HF1 HS1 HR1
U2450L	134/68	38/19	165	71	Stnd	W(3)	HF1 HS1 HR1

Csepel D-562/564/566

Notes: The D-566 is a medium 6x6 truck manufactured and used by Hungary, which entered service in 1970. Production was hampered by numerous delays, greatly slowing the replacement of older trucks, and further hampered by cost overruns, which made imported truck designs more economical and almost led to the cancellation of the entire series. As it was, an initial order for 7850 vehicles was reduced bit by bit, and only 3008 D-566s were produced. (I don't have figures on the other two versions.) Despite this, D-566s performed well during Desert Storm; however, in Europe on the swampy terrain often found in Hungary, the D-566 performed poorly, despite having a central tire pressure regulation system. During long trips, the D-566's brakes often failed due to poor design. Spare parts acquisition suffered from severe shortages due to a lack of planning and the Csepel company getting out of the truck business and the failure of the Raba company, who picked up the designs, to pick up on spare parts production. This led to rampant cannibalization.

The D-566 is of cabover design, and the cargo area has a drop tailgate and a canvas cover. The cab has two doors and a hard top, but no hatch or other opening on the roof; it does have ample space behind the seats for crew equipment. The rear cargo body has high sides, but these are not droppable. The cargo body can be covered by a tarpaulin over bows. By staying on roads, the D-562 and D-564 may haul an extra ton and the D-566 an extra 3 tons. The D-562 and D-564 are not reinforced for towing, but the D-566 can tow 5 tons cross-country or 10-tons on roads. The D-562 and 564 have a D-614.33 145-horsepower engine, and the D-566 is powered by a Raba-MAN 200-horsepower engine.

The D-564 is similar, but is of a smaller 4x4 configuration. The D-562 is similar to the D-564, but has a 4x2 suspension.

Variants include a recovery vehicle and a hard body shop/van.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
D-562	$5,836	D, A	4 tons	9.2 tons	2+18	6	Headlights	Open
D-564	$6,079	D, A	4 tons	9.4 tons	2+18	6	Headlights	Open
D-566	$9,450	D, A	5 tons	14 tons	2+20	5	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
D-562	159/36	44/10	300	43	Stnd	W(2)	HF1 HS1 HR1
D-564	142/72	40/20	300	43	Stnd	W(2)	HF1 HS1 HR1
D-566	135/68	38/19	300	59	Stnd	W(3)	HF1 HS1 HR1

Ashok Leyland Super Stallion

Notes: This is the flagship line of Ashok Leyland's heavy truck line. It was developed as a private venture in 2012; the Indian Army quickly showed interest in the Super Stallion, which is so far the only sale of any significant number. The Indian order was for over 40,000 vehicles. The Indian has a lot of uses for the Super Stallion, including general transport, troop transport, artillery tractor, or specialized equipment/command post carrier (with hard sides). A crane is mounted between the rear area and cab with a capacity of 7.4 tons for loading and unloading heavy gear. Smaller sales were made to Saudi Arabia, China, Togo and Zimbabwe, including the Panhard TC54 variant.

The cab of the Super Stallion is all-steel with steel sideboards topped by wooden slats, and the whole rear end may be covered with bows and canvas. The cab has two bench seats with three seats. Behind the seat is an open area which has enough room for a single cot as well as the crewmembers' personal gear, rations, a ration/water heater, and a chilled water tank carrying 30 liters of water. Over the commander's seat is an observation hatch, but the roof of the cab is not strong enough to mount a weapon.

The chassis is 8x8, with steering on the front four axles. Several drive train, transmission, and controls are available according to customer wishes; I will do the stats for an automatic transmission with 7 forward and two reverse gears, as well as power steering and brakes. The Super Stallion is powered by a Neptune 360-horsepower turbocharged diesel. There is a central tire inflation system, as well as ruin flat and puncture resistant tires. The central tire inflation system works automatically, in accordance with terrain traversed. The Super Stallion has a 12-ton winch with 150 meters of cable in the front bumper.

The Indian Standard – The Stallion Mk3/4

The Mk 3 Stallion is a variant for use by the Indian Army, primarily when there are roads or hard-packed trails. It is powered by a W06DTI Turbo/Supercharged Diesel developing 177 horsepower. It is a 4x4 variant, though it has the same drive train, suspension, controls, and transmission as the above vehicle. Being a much smaller version, it is not capable of carrying the load of a Super Stallion. The cab is extended and has room for the above cab accoutrements, as well as room for two cots. Most other details are like the Super Stallion 8x8 above, though it is also used as a tanker truck and light recovery vehicle. It is also used in a 6x6 configuration, larger than the Mk 3, called the Mk 4. It is commensurately larger than the 4x4 and has higher loading, though it has the same features as the Super Stallion above as well as the Stallion Mk 3. The Mk 4 is also equipped with a 260-horsepower engine.

The Panhard TC54 – The French Copy for Export Sales

Designed specifically for Saudi Arabia and China, the TC54 was licensed to France by the Indians, as they could not produce enough vehicles for export while retaining the promised amounts of vehicles to the Indian Military. This version is also used by Togo and Zimbabwe. The Saudis and Chinese normally use them as artillery tractors. It is a 4x4 truck with most of the same features of the Super Stallion above. They entered service in 2011, and other countries a bit later. The TC54 is powered by a Steyr turbocharged diesel engine, developing 215 horsepower, and has a Czech manual transmission with conventional driver controls. A variant of the TC54 has a slightly armored cab, though the rest of the vehicle is not so protected. The TC54 has an MRAP design. Atop the cab of the armored version is an RWS, normally using a light or medium machinegun.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Super Stallion	$11,664	D, A	12 tons	26.3 tons	3+40	20	Headlights	Enclosed
Stallion Mk 3	$7,298	D, A	5 tons	9.5 tons	3+16	6	Headlights	Enclosed
Stallion Mk 4	$9,296	D, A	9.4 tons	18.8 tons	3+28	6	Headlights	Enclosed
Panhard TC54	$13,957	D, A	5 tons	9.3 tons	3+16	6	Headlights	Enclosed
Panhard TC54 (w/Cab Armor)	$63,310	D, A	5 tons	10 tons	3+16	6	Headlights	Enclosed

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Super Stallion	131/66	37/18	270	132	Stnd	W(5)	HF1 HS1 HR1
Stallion Mk 3	162/82	44/22	270	65	Stnd	W(3)	HF1 HS1 HR1
Stallion Mk 4	132/67	37/18	270	96	Stnd	W(4)	HF1 HS1 HR1
Panhard TC54	190/96	52/26	270	79	Stnd	W(3)	HF1 HS1 HR1
Panhard	346/174	97/49	270	79	Stnd	W(3)	HF2 HS2 HR2*

TC54 (w/Cab Armor)

Vehicle	Fire Control	Stabilization	Armament	Ammunition
Panhard TC54 (w/Cab Armor)	+3	Fair	M2HB (RWS)	2500x.50

*The AV listed applies only to the cab; the rest of the truck is AV1. The cab's floor AV is 4Sp.

Percheron Heavy Logistic Vehicle Wheeled (HLVW)

Notes: The HLVW is a heavy 6x6 truck built by an international consortium. It began service with the Canadian forces in 1988. The three cargo variants have a canvas cover over the cargo area, and drop sides and tailgate. The Percheron 276 is the basic cargo carrier; the Percheron 147 adds a 10-ton winch, and the Percheron 388 has a winch and a 3.7-ton material-handling crane.

Other variants include a recovery vehicle with 25-ton-capacity winch (Percheron 124), tractor-trailer which may tow a 25-ton trailer (Percheron 46), dump truck (Percheron 25), ribbon bridging transporter (Percheron 176), and Heavy Mobile Repair Team transporter with 19-ton-capacity crane (Percheron 18).

All of these vehicles have an enclosed cab with heater, a cold weather start capability, and space behind the cab for stowage of a camouflage net.

The Percheron is powered by a Steyr WD 615.98m turbocharged diesel developing 306 horsepower. This is coupled with a ZF WSK 400 automatic transmission. In versions with a winch or crane, the winch and crane operate from a PTO from the engine. The Percheron 388 has a shorter load area to make room for the crane at the front of the cargo area, the Percheron 388 has a five-meter load bed, while the other versions have a 6-meter load area.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Percheron 276	$10,926	D, A	10 tons	22 tons	3+40	18	Headlights	Open
Percheron 147	$12,026	D, A	10 tons	22.1 tons	3+40	18	Headlights	Open
Percheron 388	$15,026	D, A	10 tons	22.44 tons	3+34	19	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Percheron 276	133/67	37/18	400	108	Stnd	W(3)	HF1 HS1 HR1
Percheron 147	133/67	37/18	400	108	Stnd	W(3)	HF1 HS1 HR1
Percheron 388	131/66	37/18	400	108	Stnd	W(3)	HF1 HS1 HR1

Astra HD 66.45/50/56

Notes: This Italian-made heavy truck is primarily produced in civilian versions, but there are some military trucks being made, as well as a tractor-trailer. It is otherwise a conventional truck, notable only for its exceptional cargo capacity. The three variants differ primarily in the engines they are powered by: the 66.45 uses a Cursor 13 turbocharged 450-horsepower diesel, the 66.50 is powered by 500-horsepower turbocharged diesel, and a 560-horsepower turbocharged diesel powers the 66.56. (Military versions are normally the 66.45.) The 66.45 uses a slightly different manual gearbox than the 66.50 and 66.56, but all three have 16 forward gears and two reverse gears.

The two rear axles have locking differentials; a locking differential on the front axle is an options, but not standard. Another option is an air compressor (normally used to inflate tires). The rear tow hook is usually manual, but may be mechanized and automatic. Behind the cab is a small space for equipment and a mount for a spare wheel and tire. Brakes and steering are power assisted.

The cab is a standard cabover sort, with a suspension of its own to help smooth out rough roads and terrain. It has an adjustable seat and steering wheel for the driver and a bench seat for the two cab passengers, and there is a space behind the cab, normally used for crew gear.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
HD 66.45	$11,111	D, A	22.57 tons	33 tons	3+44	28	Headlights	Open
HD 66.50	$11,296	D, A	22.57 tons	33.1 tons	3+44	28	Headlights	Open
HD 66.56	$11,521	D, A	22.57 tons	33.2 tons	3+44	28	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
HD 66.45	132/66	37/18	300	167	Stnd	W(3)	HF1 HS1 HR1
HD 66.50	141/71	39/20	300	179	Stnd	W(3)	HF1 HS1 HR1
HD 66.56	152/77	42/22	300	202	Stnd	W(3)	HF1 HS1 HR1

Astra HD6 84.45

Notes: This is a DROPS (Demountable Rack Offload and Pickup System) truck, similar to the Foden 10-ton truck featured in the *NATO Combat Vehicle Handbook* in that it is designed primarily for the transport of containerized loads, and is ill suited for the transport of troops or non-containerized loads. The crew rating below is for passengers simply climbing onto the flat cargo area. The vehicle has a load-handling system that can raise or lower a fully loaded container from or to the ground, up to 15 tons in weight; alternately, the Load Handling System (LHS) can possibly grab onto smaller containers or flatracks or pallets. Generally, a container is issued with the truck, but trucks found on the battlefield may or may not have one. The HD6 84.45 needs 25 seconds to load a container onto its cargo bed, and can demount and lower to the ground a container in 33 seconds; this is the optimal rate of speed with a standard container and other cargo or containers may take longer or shorter times.

The HD6 84.45 is powered by an IVECO 8280 TCA17 turbocharged diesel with 440 horsepower, coupled to the same transmission as the HD 66.45 above. The LHS operates using a PTO from the engine, and cannot load or demount containers while the truck is in motion.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$24,768	D, A	15 tons	31.2 tons	2 (+20)	28	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
129/65	36/18	300	163	Stnd	W(4)	HF1 HS1 HR1

IVECO/Fiat 6602 CM

Notes: The 6602 is a medium 4x4 truck that is used by the Italian Army. It is of cabover design, and the vehicle is all steel, except for the wood-lined floor of the cargo area. The cab has a heater. The cab and cargo area have removable canvas covers, and the cargo area has a drop tailgate with swing-out steps. The cab has a heater. Along the sides of the cargo area are folding bench seats. The rear of the 6602 has a 9200-kilogram-capacity winch with 60 meters of cable. Cross country, the 6602 CM can tow 4 tons, but on roads, it may tow 10 tons. The engine of the 6602 CM is a Model 8202.02 diesel with 193 horsepower available. The transmission is manual with five forward gears and one reverse gear. The suspension is 4x4.

A tanker version of this vehicle is available; unfortunately, I do not have any RL data for it, and I can't stat it out at this time.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$9,446	D, A	6.14 tons	13.54 tons	2+24	10	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
135/68	38/19	230	57	Stnd	W(2)	HF1 HS1 HR1

IVECO/Fiat 6605

Notes: The 6605 is a heavy 6x6 truck. The 6605 A is the cargo truck version of the 6605 series. The 6605 FH hauls the

ammunition for the artillery piece towed by the 6605 TM. The 6605 FH is equipped with a 3.7-ton cargo handling crane, normally used to load the 6605 FH with ammunition and unloading it for use by the towed gun of the 6605 TM. The 6605 TM is designed for use as an artillery tractor, with the 6605 TM towing the actual artillery piece and carrying the crew. All may tow 15 tons on road and 6 tons off road. The truck is of cabover design, with a canvas cab roof and cover for the cargo area; the 6605 FH and TM have greatly expanded cabs to carry gun crews. The cab has a heater and ventilator. The sides of the cargo area consist of two boards on each side, with the front boards droppable and the rear boards fixed. The tailgate may also be dropped. The cargo space may be divided into three areas with removable partitions. Suspension for all is 6x6. The engine is a Model 8212.02 diesel developing 219 horsepower; this is coupled with a manual transmission with eight forward and two reverse gears.

Italy, Libya, and Somalia use this vehicle.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
6605 A	$9,220	D, A	8.5 tons	20.5 tons	2+34	16	Headlights	Open
6605 FH	$11,505	D, A	6.62 tons	19.22 tons	12+26	16	Headlights	Open
6605 TM	$7,205	D, A	5 tons	16.8 tons	12+20	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
6605 A	113/57	31/16	360	64	Stnd	W(3)	HF1 HS1 HR1
6605 FH	118/59	32/17	360	64	Stnd	W(3)	HF1 HS1 HR1
6605 TM	128/64	36/18	360	64	Stnd	W(3)	HF1 HS1 HR1

IVECO/Fiat 6607 CM

Notes: The 6607 is a medium 6x6 truck that is used by the Italian Army. It is a development of the 6602 CM described above, and uses many components of that truck, but has a 6x6 suspension. The frame has a high degree of flexibility to help in off-road travel. The vehicle is of cabover construction, and is all steel except for the wood-lined floor of the cargo area. Both the cab and cargo area have a removable canvas cover, and the cab has a heater. The rear of the vehicle has a 9200-kilogram-capacity winch with 60 meters of cable. The cargo area has folding wooden benches along both sides, and a drop tailgate that is also removable. Cross country, the 6607 CM can tow 4 tons, but on roads, it may tow 10 tons. The engine of the 6607 CM is a Model 8202.02 diesel with 193 horsepower available. The transmission is manual with five forward gears and one reverse gear.

Like the 6602 CM, the 6607 CM is lo longer in Italian service, with a drawdown starting in the mid-1990s until they were fully replaced. They are, however, still in use by other countries, most notably Romania, and by civilian concerns throughout Europe.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$9,693	D, A	6.17 tons	15 tons	2+24	12	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
127/64	36/18	230	57	Stnd	W(3)	HF1 HS1 HR1

IVECO Heavy Range

Notes: This is a newer series of heavy tactical trucks by IVECO. As much as possible, the components are the same from truck to truck, with a high degree of parts commonality. In addition, the Heavy Range keeps as much commonality as possible with the Iveco Eurotrakker and Eurocargo ranges of (smaller) trucks.

The cab is constructed of fiber-reinforced resin, and can be supplemented with an add-on armor kit. The roof has a hatch over the commander's seat, and this hatch has a ring mount for a light or medium machinegun. These vehicles use similar engines, transmissions, and structural components, making manufacturing and maintenance as simple as possible. Options include heating and air conditioning for the cab, a 10-ton capacity winch that can be led out from the front or rear. The engine for the 150.30 is a Euro III 9.5-liter turbocharged diesel developing 300 horsepower; for the 250.37 it is a Euro III 13.8-liter turbocharged diesel developing 370 horsepower; and for the 320.42 a Euro III 13.8-liter turbocharged diesel developing 420 horsepower. The transmission may be a manual ZF WSK 400 or a ZF 6 HP 800 automatic transmission. Towed load in all cases is 20 tons.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
M 150.30 WM	$9,169	D, A	7 tons	17 tons	3+28	12	Headlights	Open
w/Winch	$11,669	D, A	7 tons	17.1 tons	3+28	12	Headlights	Open
w/Armored Cab	$10,264	D, A	7 tons	18.1 tons	3+28	12	Headlights	Open
w/Winch and Armored Cab	$12,764	D, A	7 tons	18.2 tons	3+28	12	Headlights	Open
M 250.37 WM	$11,894	D, A	12 tons	25 tons	3+48	20	Headlights	Open
w/Winch	$14,394	D, A	12 tons	25.1 tons	3+48	20	Headlights	Open
w/Armored Cab	$12,989	D, A	12 tons	26.1 tons	3+48	20	Headlights	Open
w/Winch and Armored Cab	$15,489	D, A	12 tons	26.2 tons	3+48	20	Headlights	Open
M 320.42 WM	$12,769	D, A	15 tons	32 tons	3+48	26	Headlights	Open
w/Winch	$15,269	D, A	15 tons	32.1 tons	3+48	26	Headlights	Open

w/Armored Cab	$13,864	D, A	15 tons	33.1 tons	3+48	26	Headlights	Open
w/Winch and Armored Cab	$16,364	D, A	15 tons	33.2 tons	3+48	26	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
M 150.30 WM	157/79	43/22	300	111	Stnd	W(2)	HF1 HS1 HR1
w/Winch	155/78	43/22	300	111	Stnd	W(2)	HF1 HS1 HR1
w/Armored Cab	150/75	41/21	300	111	Stnd	W(2)	HF1 HS1 HR1
w/Winch and Armored Cab	149/75	41/21	300	111	Stnd	W(2)	HF1 HS1 HR1
M 250.37 WM	139/70	39/19	300	137	Stnd	W(3)	HF1 HS1 HR1
w/Winch	139/70	39/19	300	137	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	135/68	38/19	300	137	Stnd	W(3)	HF1 HS1 HR1
w/Winch and Armored Cab	134/68	38/19	300	137	Stnd	W(3)	HF1 HS1 HR1
M 320.42 WM	129/65	36/18	300	155	Stnd	W(4)	HF1 HS1 HR1
w/Winch	127/64	36/18	300	155	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	123/62	35/17	300	155	Stnd	W(4)	HF1 HS1 HR1
w/Winch and Armored Cab	122/63	35/17	300	155	Stnd	W(4)	HF1 HS1 HR1

Mitsubishi FW415

Notes: This heavy Japanese truck replaced the FW115 truck in production, though both are still used. It is of cabover construction, and comes in many variants, including cargo/troop carriers, recovery vehicle, tractor truck, and artillery tractor. The cab has a heater and a hard top, but no overhead hatch. Behind the cab is a space for vehicle equipment, and to the rear of that is a spare wheel and tire. The FW415L is the standard cargo/troop carrier version; the cargo area has a canvas cover over bows, as well as bench seats on either side of the cargo bed. The FW415L has a drop tailgate; drop sides are an option for the cargo area. A variant of the FW415L (which will not be covered here due to lack of data) has a 35mm antiaircraft autocannon mounted in the cargo bed, and the bench seats, sides, and tailgate deleted; another variant is used as an artillery tractor for a similar weapon. The FW415L3 is similar to the FW415L, but has a longer center section and a shorter cargo bed in order to mount a 2-ton capacity cargo handling crane in front of the cargo bed. The FW415L3 also has a 10-ton capacity winch mounted at the rear of the truck. The FW415LD1 is also similar to the FW415L, but has a 6-ton capacity winch mounted at the rear of the truck. The FW415M has a longer wheelbase and longer cargo bed (about 30 centimeters longer) and has drop sides. The engine for all versions is a Mitsubishi 8DC9-1A diesel with 320 horsepower, and coupled with a manual transmission.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
FW415L	$8,937	D, A	7 tons	19.82 tons	3+28	16	Headlights	Open
FW415L3	$13,237	D, A	6 tons	19.67 tons	3+24	16	Headlights	Open
FW415LD1	$10,483	D, A	7 tons	19.81 tons	3+28	16	Headlights	Open
FW415M	$9,847	D, A	7 tons	19.85 tons	3+32	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
FW415L	148/74	41/21	270	95	Stnd	W(3)	HF1 HS1 HR1
FW415L3	148/74	41/21	270	95	Stnd	W(3)	HF1 HS1 HR1
FW415LD1	148/74	41/21	270	95	Stnd	W(3)	HF1 HS1 HR1
FW415M	147/74	41/21	270	95	Stnd	W(3)	HF1 HS1 HR1

Mitsubishi FW419

Notes: This is an updated version of the FW415, which replaced the FW415 in production. It follows the same form factor as the FW419, with a cabover front end and the rear cargo area covered by a tarpaulin over bows. There are folding bench seats on each side of the cargo area, and the center area between the cab and cargo area has space for vehicle tools and a spare wheel with tire. There are several variants; some of them are presented here. The FW419L is the basic cargo truck version, and has a drop tailgate; drop sides are an option for the cargo area. The FW419L3 is the counterpart of the FW415L3 above, with a 2-ton capacity crane at the front of the cargo area and a 10-ton winch at the rear. The FW419LD has a 6-ton winch mounted in the center of the frame; the cable may be led out to the front or rear. The FW419LD1 is the same truck with a 10-ton winch mounted in the rear of the vehicle. The FW419M is the counterpart of the FW415M above, with a longer wheelbase and cargo area. The engine for all versions is the Mitsubishi 8DC11-1A diesel with 355 horsepower, and coupled to a manual transmission.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
FW419L	$9,890	D, A	7 tons	19.44 tons	3+28	16	Headlights	Open
FW418L3	$14,208	D, A	5.8 tons	19.86 tons	3+24	16	Headlights	Open
FW419LD	$11,311	D, A	7 tons	18.73 tons	3+28	14	Headlights	Open
FW419LD1	$12,311	D, A	7 tons	19.45 tons	3+28	16	Headlights	Open
FW419M	$10,923	D, A	7 tons	18.23 tons	3+32	14	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
FW419L	160/81	44/22	270	105	Stnd	W(3)	HF1 HS1 HR1
FW419L3	158/80	43/22	270	105	Stnd	W(3)	HF1 HS1 HR1
FW419LD	164/83	46/23	270	105	Stnd	W(3)	HF1 HS1 HR1
FW419LD1	160/81	44/22	270	105	Stnd	W(3)	HF1 HS1 HR1
FW419M	168/85	47/23	270	105	Stnd	W(3)	HF1 HS1 HR1

Mitsubishi Type 74 Special Large Truck

Notes: This is the Japanese military's truck for very heavy and large loads. It is based on the civilian Fuso Great series of trucks. It is of cabover construction, and has drop sides and tailgate, and a canvas cover for the cargo area. Variants include a cargo/troop carrier and a bridging carrier, as well as other large equipment and shelter carriers. Short Wheelbase models are 8.3 meters long, while Long Wheelbase models are 9.22 meters long. Short Wheelbase models are normally general load haulers, and Long Wheelbase versions carry very large or outsized cargoes and hard-sided shelters. The truck features a very long cargo area with a tarpaulin cover over bows, and a relatively small cabover cab. The cargo area of the Long Wheelbase has drop sides and a drop tailgate; the Short Wheelbase model does not have drop sides, but does have a drop tailgate. The engine is a 300-horsepower Mitsubishi diesel.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
SWB	$9,678	D, A	9.5 tons	19.1 tons	3+36	16	Headlights	Open
LWB	$10,607	D, A	10 tons	19.85 tons	3+40	8	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
SWB	144/73	40/20	275	89	Stnd	W(3)	HF1 HS1 HR1
LWB	141/71	39/20	275	89	Stnd	W(3)	HF1 HS1 HR1

Mitsubishi W121P

Notes: This is a larger medium truck used by the Japanese forces. It is an old truck, developed in the 1950s, but still in active use by the Japanese. It is a standard layout truck, with a front engine, cab behind it, and rear cargo area. Behind the cab on the right side is a winch with a capacity of 10 tons and 60 meters of cable. In Japanese service, this truck is most often used to tow artillery and antiaircraft pieces, and carry their ammunition. The standard maximum load is 6 tons, but if the W12P stays on roads, it can carry 12 tons. The W12P uses a 200-horsepower Mitsubishi diesel (one of the most powerful available in Japan at the time of the development of the W12P, but decidedly underpowered today), with a manual transmission.

Variants include a cargo/troop carrier, tractor truck, and wrecker.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$10,177	D, A	6 tons	15.7 tons	2+24	12	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
125/63	34/18	270	59	Stnd	W(3)	HF1 HS1 HR1

Natech P6-300M

Notes: Developed by Natech (Narvik Technology) with the help of the Finnish company of Hydrolink, the P6-300M was designed for the Norwegian Army for use in high arctic conditions and mountainous regions, both of which Norway has in abundance. Entering service in 1997, the first P6-300Ms were outfitted as electronic warfare vehicles and equipped with EW devices made in Germany; however, the P6-300M is capable of a wide variety of roles from cargo carrier to specialist vehicle, and can carry a staggering amount of weight for its size. Norway's original requirement was for 1000 P6-300Ms, but budget concerns will probably make this expected acquisition much smaller.

The P6-300M is similar in concept to vehicles such as the Finnish NA series and the Bv-206, having a front drive/passenger section and a rear section connected to the front by an articulated coupling, and capable of carrying anything from cargo to specialist equipment. It uses special wide tracks, hydraulic boosts for steering and the final drives, stepless speed control, and digital assist for the steering and load control. The front section is fully enclosed and made form steel, with large windows all around. The rear unit can be quickly reconfigured for many roles, from fully enclosed and heated passenger carrier to a flatbed configuration. The rear section can be outfitted with items such as cranes, shelter carriers, tilt beds, containerized loads, and specialist systems. The rear section has automatic load leveling.

Power is provided by a Cummins 6CTA8 diesel developing 260 horsepower.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$7,040	D, A	7 tons	12 tons	1+5 (+ up to 16 in rear)	8	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
163/114	45/32	300	77	Stnd	T2	HF1 HS1 HR1

Yasoob

Notes: This is a heavy truck used by Pakistan; the project was devised to help reduce the huge number of truck models in service and reduce the large amount of logistical headaches caused by the large numbers of different trucks. It is of conventional construction, and is used as a logistics vehicle, cargo/troop carrier, and artillery tractor. The cargo area has drop sides and tailgate and can be covered with a canvas top. The Yasoob project suffered from many delays and cost overruns, The axles were not able to be manufactured in Pakistan due to materials-handling requirements and the axles are being manufactures in Hungary by Raba. Several small components, such as the instruments, are also being manufactured by Western concerns. Costs rose sharply and the initial order of 600 vehicles was downgraded to 300 vehicles. The Pakistani has sort of a hot/cold view of the Yasoob, but the commercial market is very pleased with the Yasoob. The Pakistani Army primarily uses the Yasoob as an artillery tractor, towing from heavy mortars to medium artillery pieces. The 6x6 model can tow 10 tons, while the 4x4 model can tow 3 tons. The 6x6 model is powered by an 8.3-liter diesel engine developing 240 horsepower; the 4x4 model is powered by a 5.88-liter diesel developing 180 horsepower. Its about a 75/25 chance that players will find a Yasoob truck with a manual or automatic transmission. If the 4x4 version stays on roads, it can carry 4 tons; if the 6x6 model stays on roads, it can carry 12 tons. The 4x4 version is actually a Medium Unarmored Vehicle, but included here for completeness.

Variants include a hard body, dump truck, wrecker, and tanker, tractor truck that can tow 25 tons.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
4x4	$6,567	D, A	3 tons	9.4 tons	3+12	6	Headlights	Open
6x6	$8,191	D, A	6 tons	21.5 tons	3+24	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
4x4	165/83	46/23	170	53	Stnd	W(2)	HF1 HS1 HR1
6x6	117/58	32/16	270	71	Stnd	W(3)	HF1 HS1 HR1

Mazur D-350

Notes: This artillery tractor was replaced in production by the Bumar Labedy, but is still being used in Polish service, as well as by the Czech Republic and Slovakia. Production was short, from 1958 to 1961, as the Russian ATS-59, produced in Poland under license, proved to be a superior artillery tractor. Approximately 1000 D-350s were produced, and they were used until the late 1970s, then passed on to allied countries (most notably North Vietnam) or civilian concerns. From there, they ended up in museum or static displays or as range targets.

The Mazur D-350 (also known in Polish service as the Masurian Tractor) is a tracked towing vehicle for field artillery and for carrying ammunition and gun crews. The D-350 can tow 15 tons on roads and 10 tons off road. The engine fitted to the D-350 is a PZL Wola W-54 diesel developing 350 horsepower, coupled to a manual transmission. Suspension is by torsion bar on five roadwheels per side, and a front sprocket and rear idler wheel. The cab is behind the engine, and has two doors on either side for entry. The rear cargo area has a tarpaulin cover over bows and a drop tailgate. There is a 17-ton capacity winch with 80 meters of cable at the rear. The cab has a square hatch over the commander's position with a weapon mount.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$7,648	D, A	10 tons	17.06 tons	9+20	12	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
157/110	44/31	395	104	Stnd	T2	HF1 HS1 HR1

Star 244

Notes: This truck was derived from the predecessor of the Star 266, the 200 series; it differs from the Model 200 primarily in the change from 4x2 suspension to 4x4 suspension. The Star 244 is a physically compact truck designed from the start to be a military and civilian truck. The air filter was also repositioned, and the Star 244 can ford 1.2 meters of water (though it is not amphibious). The Star 244 is powered by an S-359 diesel developing 150 horsepower, with a ZF S5-45 manual transmission. The Star 244 has power assisted brakes and steering. The powerpack is housed under a cabover cab. Towing limit is 8.5 tons.

Variants include the Star 244RS agricultural services model; A244 shelter carrier, the P244L fire engine, and the 3W244 dump truck.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$6,814	D, A	5 tons	10.5 tons	3+20	8	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
135/68	38/19	180	39	Stnd	W(2)	HF1 HS1 HR1

Jelcz 315

Notes: These are heavy trucks designed in the late 1960s and still in use in Poland. They were some of the earliest post-war East-West cooperation, being built with Austrian assistance. These vehicles are just as common in civilian as in military service. The Jelcz 315A is slightly larger in size and has a 20-centimeter-longer cargo deck than the Jelcz 315MA, and the Jelcz 315MA has a taller shelter-carrier cargo area, but the two trucks are physically very similar and the cab and engine compartment are identical. The trucks have similar, though not identical engines; the Jelcz 315A is powered by an SW 680/49 200 horsepower engine, while the Jelcz 315MA is powered by a base version of the same engine, an SW 680. The Jelcz 315 has a 4x2 suspension and has limited off-road capability.

Variants include a tractor truck, tipper, dump truck, and tanker.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Jelcz 315A	$8,782	D, A	8 tons	14.98 tons	3+32	12	Headlights	Open
Jelcz 315MA	$7,428	D, A	8 tons	15.4 tons	3+16	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Jelcz 315A	162/33	45/9	150	59	Stnd	W(2)	HF1 HS1 HR1
Jelcz 315MA	160/32	45/9	150	59	Stnd	W(2)	HF1 HS1 HR1

Jelcz S662D.43

Notes: This is a platform truck designed primarily to carry large bulk loads, containerized cargo, and palletized cargo. It is specifically designed for the carriage of dangerous cargo, such as explosives, ammunition, and POL. The truck is fitted with a mounting point (in front of the cargo deck) for a materials-handling crane or winch with a capacity of 10 tons. If fitted with a winch, the winch may pull to the front or rear of the S662D.43. The S662D.43 is a modification of an earlier civilian truck (the Jelcz P662), redesigned to conform to NATO specifications. The cab is a sleeper cab with special shock-absorbing seats and is air conditioned

and heated; cab armor is optional. There is a hatch over the commander's position, but no weapon mount is provided. The S662D.43 can be fitted with drop sides and bench seats for carrying troops if required. The engine of the S662D.43 is an Iveco Cursor 10 turbocharged diesel developing 430 horsepower, which has a lot of torque and can tow 19 tons.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Jelcz S662D.43	$12,290	D, A	10.7 tons	23 tons	2+44	18	Headlights	Open
w/Winch	$14,790	D, A	10.7 tons	23.1 tons	2+44	18	Headlights	Open
w/Crane	$22,290	D, A	10.7 tons	23.3 tons	2+44	18	Headlights	Open
w/Cab Armor	$13,385	D, A	10.7 tons	24.1 tons	2+44	18	Headlights	Open
w/Cab Armor & Winch	$15,885	D, A	10.7 tons	24.2 tons	2+44	18	Headlights	Open
w/Cab Armor & Crane	$23,385	D, A	10.7 tons	24.4 tons	2+44	18	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Jelcz S662D.43	163/82	46/23	500	159	Stnd	W(3)	HF1 HS1 HR1
w/Winch	162/82	46/23	500	159	Stnd	W(3)	HF1 HS1 HR1
w/Crane	162/82	44/22	500	159	Stnd	W(3)	HF1 HS1 HR1
w/Cab Armor	158/80	43/22	500	159	Stnd	W(3)	HF1 HS1 HR1
w/Cab Armor & Winch	157/80	43/22	500	159	Stnd	W(3)	HF1 HS1 HR1
w/Cab Armor & Crane	157/80	43/22	500	159	Stnd	W(3)	HF1 HS1 HR1

Bravia Pantera

Notes: This truck resembles a much larger version of the US M809 truck – fitting, since it was in fact based on that vehicle. It has over twice the cargo capacity (12 tons) of the M809 on roads, but looks similar; off roads, it still has a larger cargo capacity than the M809. The Pantera is also similar to the Bravia Leonardo Mk III 3-Ton Truck, another vehicle that was based on the M809. Other features of the Pantera are locking differentials, a central tire inflation system, and an MU12 9.07-ton winch in the front. Optionally, tracks may be added to the two rear wheels to increase rough or sloppy terrain performance. Other than the cargo capacity, it is a conventional truck. At its introduction, it could be powered by a Cummins V-378 developing 136 horsepower, a Perkins V-8-510 diesel developing 170 horsepower, a Perkins V-8-540 diesel with 180 horsepower, or a Dodge 361-4 gasoline engine developing 305 horsepower. However, the Pantera is currently available only with a Cummins turbocharged diesel developing 250 horsepower. The brakes and steering are power assisted; the transmission may be manual or automatic.

Variants include a dump truck, tractor truck, road paving truck, and a cement mixer.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Pantera (136 hp)	$9,746	D, A	6 tons	18.99 tons	2+24	16	Headlights	Open
Pantera (170 hp)	$9,832	D, A	6 tons	18.99 tons	2+24	16	Headlights	Open
Pantera (180 hp)	$9,856	D, A	6 tons	18.99 tons	2+24	16	Headlights	Open
Pantera (250 hp)	$10,339	D, A	6 tons	18.99 tons	2+24	16	Headlights	Open
Pantera (305 hp)	$10,166	G, A	6 tons	18.99 tons	2+24	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Pantera (136 hp)	91/46	26/13	500	40	Stnd	W(3)	HF1 HS1 HR1
Pantera (170 hp)	102/51	29/14	500	50	Stnd	W(3)	HF1 HS1 HR1
Pantera (180 hp)	105/53	29/14	500	53	Stnd	W(3)	HF1 HS1 HR1
Pantera (250 hp)	129/65	36/18	500	92	Stnd	W(3)	HF1 HS1 HR1
Pantera (305 hp)	147/74	41/21	500	135	Stnd	W(3)	HF1 HS1 HR1

DAC 13.215 FAEG

Notes: This may be regarded as a larger version of the DAC 11.154 FAEG found in Romanian Medium Unarmored Vehicles. The cab is identical to the 11.154, and the only major change is in the wheelbase, engine, and transmission. The vehicle has a cabover design, and the driver has an adjustable seat, seat belts for the cab crew. The rear cargo area has a drop tailgate; folding bench seats are sometimes fitted but not always. The vehicle has a 6-ton capacity winch with 60 meters of cable which may be led out to the front or the rear of the truck. Towing capacity is 5 tons cross-country or 8.5 tons on road. The 13.215 FAEG is powered by a Type D2158 HMN8 diesel developing 215 horsepower. This is coupled with an AK6-80 M manual transmission on a 4x4 suspension. Steering and brakes are power assisted.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$8,875	D, A	5 tons	13.5 tons	4+20	10	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
145/74	40/19	220	63	Stnd	W(2)	HF1 HS1 HR1

DAC 15.215 DFAEG

Notes: The DAC 15.215 DFAEG (originally the DAC 665T) is a medium 6x6 truck used by Romania. It is an enlarged DAC 444T (see Romanian Medium Unarmored Vehicles), and shares many components with that vehicle. It is of a cabover design, with the crew cab located over the engine and transmission, and the cargo compartment to the rear. The cab is unusually large for a vehicle not designed as an artillery tractor and is heated. The cargo compartment is all metal, with a drop tailgate and removable tarpaulin cover. There are folding bench seats on either side, facing inward. The cab is also all metal, with a hatch on the right side of the roof with a weapon mount. There is a spare tire behind the cab on the right side. The 15.215 DFAEG has a winch with a 10-ton capacity and 60 meters of cable. The 15.215 DFAEG is powered by the same engine as the 13.215 FAEG above, along with the same transmission, and has a 6x6 suspension.

Variants of this vehicle include a carrier for a Romanian-built 40-round 122mm rocket launcher, and a resupply vehicle for the rocket launcher that has a 6-ton capacity loading crane.

The 15.240 DFAEG is virtually the same, but is powered by a Deutz BF 6M 1013EC 236-horsepower turbocharged diesel engine, coupled with an SS-100 manual transmission.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
15.215 DFAEG	$10,874	D, A	5 tons	15.6 tons	6+20	12	Headlights	Open
15.240 DFAEG	$10,937	D, A	5 tons	15.66 tons	6+20	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
15.215 DFAEG	132/66	37/18	220	63	Stnd	W(3)	HF1 HS1 HR1
15.240 DFAEG	142/71	39/20	220	71	Stnd	W(3)	HF1 HS1 HR1

DAC 16.215/240 FA

Notes: This is a heavy 4x4 truck designed for use as an artillery tractor, general troop/cargo carrier, or with a flatbed modification, for palletized or containerized loads. It is of a cabover design, with the crew cab located over the engine and transmission, and the cargo compartment to the rear. The cab has a heater and an adjustable seat and steering column for the driver. The cab is also all metal, with a hatch on the right side of the roof with a weapon mount. The cargo compartment is all metal, with a drop tailgate and removable tarpaulin cover. There are folding bench seats on either side, facing inward; these seats are not normally extended as the vehicle is used to transport ammunition. The engine of the 16.215 FA is a variant of that of the 15.215 DFAEG; it is a Type D2156 HMN8 diesel developing 215 horsepower. The transmission is the same as the 15.215 DFAEG, the AK6-80 M manual transmission, and on a 4x4 suspension.

The 16.240 FA is the same, but is powered by a Deutz BF 6M 1013EC 236-horsepower turbocharged diesel engine, coupled with an SS-100 manual transmission. The suspension has also been upgraded, allowing for an increase in cargo capacity.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
16.215 FA	$8,974	D, A	6.77 tons	15.5 tons	4+28	12	Headlights	Open
16.240 FA	$9,027	D, A	7 tons	15.56 tons	4+28	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
16.215 FA	132/66	37/18	220	63	Stnd	W(2)	HF1 HS1 HR1
16,240 FA	142/71	39/20	220	71	Stnd	W(2)	HF1 HS1 HR1

DAC 21.410 VFAEG

Notes: This heavy 8x8 cargo truck is designed to be able to tow heavy trailers and artillery pieces without a significant loss of mobility, and is able to tow loads of up to 16 tons. The truck design is cabover, with the driver and front passenger having adjustable seats supported on shock absorbers. The cab is also all metal, with a hatch on the right side of the roof with a weapon mount. The truck has a center-mounted winch able to be led out the front or back, and with a capacity of 14 tons. Power is provided by a Deutz BF6M1015C Euro II turbocharged diesel developing 408 horsepower, coupled to a ZF 6 HP automatic transmission. Steering and brakes are power assisted. It is otherwise similar to other trucks of the DAC line.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$13,615	D, A	7 tons	20.8 tons	4+28	16	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
169/85	47/24	840	151	Stnd	W(4)	HF1 HS1 HR1

DAC 33.360 DFA

Notes: This heavy 6x6 truck is a PLS/DROPS type vehicle, designed for the transport of containerized or palletized loads. Loads are handled by the Multilift Mk 4 LHS (Load Handling System). It can use the LHS to muscle aboard an 18-ton container to its load platform, or a number of smaller loads. The truck is powered by a Deutz BF6M 1015C Euro II turbocharged diesel developing 360 horsepower; this is coupled with a ZF 16S-151 manual transmission. The brakes and steering are power assisted. The 33.360 is not designed for towing, but has a tow pintle at the front and rear. The 33.360 is not meant to transport troops, but a figure for a jury-rigged seating arrangement is provided. The cab is heated and air conditioned, and has a hatch over the commander's position (without a weapon mount).

The only known variant is a 10,000-liter tanker.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$15,253	D, A	19.4 tons	33 tons	4+38	28	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
114/58	32/16	310	133	Stnd	W(3)	HF1 HS1 HR1

Myzlshev AT-T

Notes: The AT-T is an ancient Soviet artillery tractor, introduced in 1950. It was once used widely throughout the former Soviet Union and Warsaw Pact, the former Yugoslavia, and several former Soviet client states in the Middle East and North Africa. The AT-T is now unlikely to be found in any sort of military service in Russia or the former Warsaw Pact, and would probably be rare even in the former Yugoslavia, Middle East, and North Africa. Most examples would probably be found these days in museums, private collections, and in the hands of collectors.

The AT-T is a decent-sized vehicle (especially in width), and has a roomy cab seating up to four across one row of seats. The tracked suspension does well over broken ground, though a ride in an AT-T is described by some as a miserable experience due to excessive bouncing and jolting. The rear section is normally used to carry ammunition, equipment, and crews for the artillery pieces it normally tows, but it can also carry up to four rows of seats facing forward and seating up to four troops across. The cargo area in either case is either open or covered with bows and a canvas cover. The cab, on the other hand, is fully enclosed. Engine power is abundant (necessary due to the high weight of the AT-T), with the AT-T rocking a V-401 diesel with 415 horsepower, but the transmission is manual and like many early Soviet military vehicles, a bit obtuse. Towing capacity is likewise large, with the AT-T able to tow up to 25 tons. Early production models were capable of fording up to 0.75 meters, but later examples can ford a full meter of water.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$7,580	D, A	5 tons	25 tons	4+16	20	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
134/94	37/26	1415	122	Stnd	T2	HF1 HS1 HR1

Ishimbai DT-10/DT-30 Vityaz

Notes: This is a series of tracked all-terrain vehicles, the first of which (the DT-10P) appeared in 1982. They have the same basic configuration as do many such vehicles, with a front section carrying the engine and drive components and much of the crew, and a rear section connected by an articulated coupling carrying cargo, more personnel, or specialist equipment (The DT-30 is an exception). All of these vehicles are still in production with the exception of the DT-30, and none of them have ever been exported outside Russia and the former Soviet republics. They are optimized for deep snow and swamps, with very wide rubber tracks that have steel shoes (960mm wide in the case of the DT-10s, and 1100mm for the DT-30s). The roadwheels have independent suspension via torsion bars, and steering is hydraulically assisted. Engines have a preheater for use in very cold climates, and the cab is also heated. All use the same engine, a multifuel development of the engine used in the T-64 main battle tank, with the exception of the more powerful engines used in the DT-10PM and DT-30PM.

The original DT-10P is the smallest of the series. The cab/crew section carries ten crew and passengers, and there are two cargo areas, one behind the engine (which is behind the cab) and one in the rear module. Both load areas may be fitted with bows and a tarpaulin cover. The DT-10P is amphibious. The DT-10P is powered by a V-46-5 multifuel engine, essentially the same engine as the T-64, but given a rebuild; it develops 710 horsepower. The DT-10PM is an updated version of the DT-10P, with a more powerful YaMZ-847.10 diesel engine developing 800 horsepower and a hydromechanical transmission with a torque converter. It is also amphibious.

As stated above, the DT-30 has a single body supporting a flatbed cargo trailer connected to the main vehicle with a gimbal. It is not amphibious. It is typically used to carry shelter bodies, containerized loads, and items such as rubber fuel bladders or tank bodies for water or fuel. The DT-30P is a more normal version of this series of vehicles, with twin bodies like the DT-10P, and is basically a larger version of the DT-10P. The DT-30P is amphibious, and it has a 10-ton material-handling crane. The DT-30PM is the DT-30P's counterpart to the DT-10PM, with a more powerful engine and improved transmission.

Twilight 2000 Notes: The DT-10PM and DT-30PM are fairly rare compared to the other vehicles of these series in the Twilight 2000 timeline.

Merc 2000 Notes: Some of these series, most notably the DT-10PM, are in use by the UN and by civilian Arctic and Antarctic research outfits, while more, including both the DT-10PM and DT-30PM, are used by those looking for or drilling for oil in the far north reaches of the Earth.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
DT-10P	$13,214	D, G, AvG, A	10 tons	27.5 tons	2+8 (+26)	22	Headlights	Open
DT-30	$24,516	D, G, AvG, A	30 tons	43 tons	2+8	34	Headlights	Open
DT-30P	$19,266	D, G, AvG, A	30 tons	44 tons	2+8 (+52)	36	Headlights	Open
DT-10PM	$13,359	D, A	10 tons	27 tons	2+8 (+26)	20	Headlights	Open
DT-30PM	$19,949	D, A	30 tons	45 tons	2+8 (+52)	18	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
DT-10P	187/131	52/36/7	1200	210	Stnd	T3	HF1 HS1 HR1
DT-30	134/94	37/26	1200	210	Stnd	T3	HF1 HS1 HR1
DT-30P	132/93	37/26/5	1200	210	Stnd	T3	HF1 HS1 HR1

DT-10PM	208/146	58/41/8	1200	237	Stnd	T3	HF1 HS1 HR1
DT-30PM	142/99	39/28/5	1200	237	Stnd	T3	HF1 HS1 HR1

Metrovagonmash GM-569A

Notes: This new tracked carrier first appeared in reports in the West in 1990, but probably had been in use for a couple of years prior to that. It is basically a new design, but uses drive components of the T-64 main battle tank, but with three possible and increasingly-powerful engines. All are variants of the V-64DT, which is itself a variant of the T-64's engine. The transmission is an improved hydromechanical design, with a reduction mechanism, a hydraulic torque converter, an equalizing block, and hydraulically assisted steering. It is essentially a sophisticated form of automatic transmission, but drivers require special training to properly operate the vehicle and get the best performance out of it; mechanics likewise require special training. When properly employed, high speed and tight turns are possible on difficult terrain, and even pivot turns at maximum speed are possible on hard surfaces. Though the primary engine is a multifuel diesel engine, a small gas turbine is used to power the GM-569A's two electrical system generators. (A drawback of these systems is the relatively high weight of the vehicle.) The body of the GM-569A has a forward crew/passenger compartment and cargo compartment at the front in a low superstructure; the rear of the vehicle houses the engine in a higher-roofed compartment. The GM-569A has six roadwheels and four return roadwheels on each side. The primary role of the GM-569A in the Russian Army is that of artillery tractor, but it can be used as a general-purpose carrier as well.

A variant of the GM-569A, the GM-5955, is longer, with seven roadwheels on each side. Its primary role in the Russian Army is to carry components of the Tor-M1 SAM system, but it also can be used for general cargo-carrying duties when required.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
GM-569A (710 hp)	$8,426	D, G, AvG, A	10.65 tons	35.8 tons	3+20	30	Headlights	Open
GM-569A (780 hp)	$8,603	D, G, AvG, A	10.65 tons	35.9 tons	3+20	30	Headlights	Open
GM-569A (840 hp)	$8,749	D, G, AvG, A	10.65 tons	36 tons	3+20	30	Headlights	Open
GM-5955 (710 hp)	$9,013	D, G, AvG, A	11 tons	37 tons	3+20	30	Headlights	Open
GM-5955 (780 hp)	$9,189	D, G, AvG, A	11 tons	37.1 tons	3+20	30	Headlights	Open
GM-5955 (840 hp)	$9,336	D, G, AvG, A	11 tons	37.2 tons	3+20	30	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
GM-569A (710 hp)	154/108	43/30	575	210	Stnd	T3	HF1 HS1 HR1
GM-569A (780 hp)	165/115	46/32	575	232	Stnd	T3	HF1 HS1 HR1
GM-569A (840 hp)	173/121	48/34	575	249	Stnd	T3	HF1 HS1 HR1
GM-5955 (710 hp)	150/105	42/29	575	210	Stnd	T4	HF1 HS1 HR1
GM-5955 (780 hp)	158/111	44/31	575	232	Stnd	T4	HF1 HS1 HR1
GM-5955 (840 hp)	169/118	47/33	575	249	Stnd	T4	HF1 HS1 HR1

Kirov K-61

Notes: Also known as the GPT, the K-61 replaced the earlier BAV-485 as an amphibious carrier. Primarily meant for use in shallow-water and riverine operations, the K-61 can also be used to carry troops from assault units to shore. The K-61 is far larger than the BAV-485, and uses a tracked suspension instead of wheels. The engine is partially in front and partially underneath the driver/crew compartment, and the rear has a large cargo/passenger compartment at the rear accessed by a drop ramp. Both the driver/crew compartment and the cargo compartment are normally open, but both may be covered by a tarpaulin cover (the compartments are high enough that bows are not necessary). The cargo/passenger compartment is large enough to allow cargo as large as a light truck, several 120mm mortars, light field guns, or three AA guns such as a ZPU-2 or ZPU-4. The sides of the compartment have fold-down seats for troops as well. Propulsion in the water is provided by a pair of 3-bladed propellers at the rear of the K-61, under the ramp. Power is provided by a YaAZ-204V 128.2-horsepower diesel engine. The fuel storage is split between two 130-liter tanks.

Once common throughout the former Warsaw Pact, Soviet Union, and several client states, the K-61 was almost totally replaced by the PTS series starting in the mid-1960s. Egypt is known to have retained a few, and Vietnam still uses the K-61.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$11,551	D, A	3 tons (5 tons on Water)	21.05 tons	2+60	16	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
76/53/21	21/15/6	260	39	Stnd	T2	HF1 HS1 HR1

KamAZ-5350 Myctahr

Notes: The KamAZ-5350 Myctahr (Mustang) is part of a family of trucks, including the KamAZ-4350 and KamAZ-6350. These trucks have a high degree of parts commonality. These trucks are known for their high-efficiency engines and long range. The cargo body has drop sides and a drop tailgate; it is made of all-steel components. The truck is of the cabover configuration, and is equipped with a heater for the cab; the cab has seating for three people, including an adjustable seat and steering column for the driver, and also has sleeping berth behind the seats. The cab may be protected by armor modules including additional mine protection. There are

otherwise at least ten variants of the KamAZ-5350, ranging from long wheelbase versions to APCs based on the chassis. The truck is powered by a KamAZ 13-260 turbocharged diesel engine developing 260 horsepower. The KamAZ-5350 is equipped with a cold weather starting device which is effective down to -50 degrees Celsius. Note that if the 5350 stays on roads, it can haul up to 7.3 tons. Towing is likewise affected by the surface upon which the 5350 rides; off road, towing is 8 tons, while on road the limit is 12 tons.

The KamAZ-53501 is a long wheelbase version of the 5350 which also has a beefed-up suspension to allow it to carry larger and heavier cargo. The 53501 is often used to carry heavy specialist equipment or large shelter bodies containing C3I elements. Again, as much parts commonality as possible are used in the construction of the 53501; for example, the cab is identical, as are the armor modules for the cab, the tires, the wheels, the engine and transmission, and the suspension elements and some other elements. If the 53501 stays on roads, it may haul 11.3 tons. Towing is the same as on the 5350.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
KamAZ-5350	$9,465	D, A	6 tons	15.2 tons	3+30	12	Headlights	Open
w/Armored Cab	$10,603	D, A	6 tons	16.3 tons	3+30	12	Headlights	Open
KamAZ-53501	$9,850	D, A	10 tons	20.65 tons	3+30	16	Headlights	Open
w/Armored Cab	$10,988	D, A	10 tons	21.75 tons	3+30	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
KamAZ-5350	153/77	42/22	295	96	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	145/74	40/21	295	96	Stnd	W(3)	HF2 HS2 HR2*
KamAZ-53501	124/63	34/18	295	96	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	121/61	33/17	295	96	Stnd	W(3)	HF2 HS2 HR2*

*The AV listed applies only to the cab; the rest of the truck is AV1. The cab floor has an AV of 4Sp.

KamAZ-6350 Myctahr

Notes: This is one of the largest of the KamAZ-built trucks, as well as being the largest of the Myctahr series. It is related to the 5350 above and 4350 in Russian Medium Unarmored Vehicles, with a lot of parts commonality between the vehicles. The 6350 uses the same cab, an engine which is a variant of the 5350's engine, and even some of the same suspension elements, including the same wheels and tires. The 6350 has an 8x8 suspension and is powered by a KamAZ-740.50-360 turbocharged diesel developing 360 horsepower, coupled with a ZF 16 S1820 manual transmission. The 6350 is actually able to haul 12.5 tons if the vehicle sticks to roads; likewise, the 6350 can tow 12 tons off road, but 15 tons on road. The cargo body has drop sides and a drop tailgate; it is made of all-steel components. The truck is of the cabover configuration, and is equipped with a heater for the cab; the cab has seating for three people, including an adjustable seat and steering column for the driver, and also has sleeping berth behind the seats. The cab may be protected by armor modules including additional mine protection. The 6350 has an 8x8 suspension, but steering is only on the front axle, so turning radius is nothing to write home about. The 6350 is not amphibious, but can ford a water obstacle 1.75 meters deep.

There are several variants, including the two listed below, and several specialist versions, ranging from hard-sided shelter versions to electronic warfare carriers to command vehicles.

The KamAZ-63501 is similar to the 53501 version above, but based on the 6350. The 63501 can be found in a basic truck version, but is more likely to be found as a specialist hard-side shelter carrier version; there is also a pontoon bridge carrier version. The wheelbase is the same as on the 6350, but the chassis and cargo bed are actually slightly shorter on the 63501 than on the 6350. The 63501 can haul 15.3 tons on roads; the 63501 can tow 11 tons off road, or 15 tons on road. The basic truck version is given below.

The KamAZ-6560 is a long wheelbase version with a beefed-up suspension, able to haul an enormous amount of cargo. However, the 6560 is mostly found as a chassis for various weapons systems and specialist vehicles or large shelter bodies containing C3I elements. The basic truck version is given below. The 6560 is physically an enormous truck, over ten meters long with a 7.5-meter-long cargo bed. It has a KamAZ-740.632-400 turbocharged 400-horsepower diesel, coupled to the same transmission as the 6350 and 63501. The fuel tank is almost twice what the 6350 and 63501 have. Nonetheless, parts commonality is foremost in the design, with the 6560 using the same cab, an uprated version of the same engine, and sharing suspension elements. As with the other trucks in this line, the 6560 can carry more cargo if it stays on roads – 22.4 tons on road. The 6560 can tow 7.5 tons off road, but 12 tons on road.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
KamAZ-6350	$12,022	D, A	10.2 tons	22.6 tons	3+40	18	Headlights	Open
w/Armored Cab	$13,160	D, A	10.2 tons	23.7 tons	3+40	18	Headlights	Open
KamAZ-	$12,263	D, A	14 tons	26.75 tons	3+40	20	Headlights	Open

63501 w/Armored Cab	$13,401	D, A	14 tons	27.85 tons	3+40	20	Headlights	Open
KamAZ-6560	$12,503	D, A	20.1 tons	37.1 tons	3+40	25	Headlights	Open
w/Armored Cab	$13,641	D, A	20.1 tons	38.2 tons	3+40	25	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
KamAZ-6350	145/74	40/20	375	133	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	141/71	39/20	375	133	Stnd	W(4)	HF2 HS2 HR2*
KamAZ-63501	130/66	37/18	375	133	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	123/62	34/18	375	133	Stnd	W(4)	HF2 HS2 HR2*
KamAZ-6560	113/58	31/16	700	147	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	112/56	31/16	700	147	Stnd	W(4)	HF2 HS2 HR2*

*The AV listed applies only to the cab; the rest of the truck is AV1. The cab floor has an AV of 4Sp.

MAZ-200

Notes: This is a post-World War 2 truck similar to many US trucks of the World War 2 period, particularly the Studebaker and Ford trucks supplied via Lend Lease to the Russians during World War 2. It is a rather light truck for its size, constructed of sheet steel and light frame. The suspension is a 4x2 suspension and has limited off road utility, though it has high road speeds for a truck of its time period. This increased with the MAZ-200P, which had the more powerful YaMZ-236 engine developing 150 horsepower. Off-road performance increased with the MAZ-502, which had a 4x4 suspension and the YaMZ-236 engine as standard. Standard engine for early production of the MAZ-200 was the YaMZ-M204-4 developing 120 horsepower. (This engine is a copy of the Detroit Diesel Series 71 engine.) Note that if the MAZ-200 stays on roads, it can haul 7 tons; similarly, the MAZ-200 can tow 7.5 tons off road, but can tow 9.5 tons on roads.

Other variants include a tanker, a mobile crane, 2 tractor trucks, a dedicated trailer towing truck, and a dump truck. There are also several civilian versions, most notably a logging truck. Prototype 6x6 modifications to the MAZ-200 led to the Ural-375 truck.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
MAZ-200	$7,546	D, A	5 tons	13.63 tons	3+20	10	Headlights	Open
MAZ-200P	$7,623	D, A	5 tons	13.73 tons	3+20	10	Headlights	Open
MAZ-502	$7,623	D, A	5 tons	13.8 tons	3+20	10	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
MAZ-200	126/25	35/7	225	30	Stnd	W(2)	HF1 HS1 HR1
MAZ-200P	144/29	41/8	225	44	Stnd	W(2)	HF1 HS1 HR1
MAZ-502	114/58	31/16	225	44	Stnd	W(2)	HF1 HS1 HR1

MAZ-500 Silovik

Notes: This is a civilian vehicle adapted for military use. It was used by Russians for cargoes ranging from bulk supplies to bridging equipment, but the main use was as a box-body command vehicle or as a troop carrier. The cab is the forward control type (cabover), and is all-steel; indeed, the MAZ-500 is all steel except for the bed of its cargo box, which is of beech. The cabover design, a little-used design at the time of the MAZ-500's advent, was chosen to allow an increase in the cargo bed size while decreasing weight. A further design innovation was the forward tilting cab to access the engine and transmission, virtually never used at the time. The cab also has something little seen in military trucks: a sleeping berth behind the seats. The seats are known to be quite comfortable, though they are not adjustable. The suspension was beefed up over the MAZ-200, leading to a reasonably comfortable ride; the MAZ-500's roots as a civilian truck also helped here. Another design feature which was little seen in the Soviet military was the ability to start the engine by use of a slave cable, making starts of the engine with a dead battery easier. The suspension is, unfortunately, a 4x2 suspension, with rear-wheel drive, and the MAZ-500 has limited off-road capability.

The standard engine for about half of the MAZ-500 series was the YaMZ-236 diesel, developing 180 horsepower, coupled with a manual transmission retained from the civilian truck base. The MAZ-500 was well known for its dirty, oily exhaust – the MAZ-500 is definitely a pollution packer. An unmodified MAZ-500 cannot even be legally driven on European roads today, due to its exhaust. Initially the clutch was a single-plate design, but starting in 1970 this was replaced by a double-plate clutch, which made shifting gears much easier. The MAZ-500 has all-wheel braking.

For game purposes and due to a lack of data, only the following variants will be covered here: MAZ-500S is a variant for Arctic

realms; the cab is better insulated, a more efficient heater is installed, and a starting system which works down to -50 degrees Celsius is installed. Otherwise, the MAZ-500S is identical to the MAZ-500. The MAZ-500YU is the opposite of the MAZ-500S; it is designed for hot weather and has additional insulation and cab ventilation. It is otherwise the same as the MAZ-500. The MAZ-500V is designed specifically for military transport and is the variant most the players will most often encounter; this version has folding troop seats on either side of the cargo bed, facing in. The MAZ-500V is fitted with the more powerful YaMZ-238 240-horsepower diesel. The MAZ-500G is designed for outsized cargo and has a flat load bed with no tarpaulin cover or troop seats; it is relatively rare. The MAZ-505 was an experimental version of the MAZ-500V with a 4x4 suspension; it is not likely to be encountered, but is included here for completeness. The MAZ-500A has an optimized transmission, along with suspension changes; the MAZ-500A can haul 8 tons and has better fuel economy than the MAZ-500.

Other variants which will not be covered here include two dump trucks, a logging truck, and at least three tractor trucks.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
MAZ-500/S/YU	$7,450	D, A	7.5 tons	14.23 tons	3+24	12	Headlights	Open
MAZ-500V	$8,200	D, A	7.5 tons	14.23 tons	3+30	12	Headlights	Open
MAZ-500G	$6,252	D, A	7.5 tons	13.73 tons	3 (+20)	12	Headlights	Open
MAZ-505	$8,300	D, A	7.5 tons	14.23 tons	3+30	12	Headlights	Open
MAZ-500A	$7,983	D, A	8 tons	14.23 tons	3+24	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
MAZ-500/S/YU	158/32	43/9	200	53	Stnd	W(2)	HF1 HS1 HR1
MAZ-500V	190/38	53/11	200	71	Stnd	W(2)	HF1 HS1 HR1
MAZ-500G	161/32	45/9	200	53	Stnd	W(2)	HF1 HS1 HR1
MAZ-505	151/76	42/22	200	71	Stnd	W(2)	HF1 HS1 HR1
MAZ-500A	158/32	43/9	200	48	Stnd	W(2)	HF1 HS1 HR1

MAZ-543

Notes: Russian, former Pact, Iraqi, and Yugoslav units use this 8x8 heavy truck family. It is designed for off-road use, with a heavy-duty suspension. It is not normally a troop carrier (such are exceedingly rare), but is instead used to transport fire direction centers, command posts, Scud and Scaleboard missiles, or heavy cargoes or tanker bodies.

The MAZ-543 has an unusual split cab, with a driver on each side of the split and the two cabs on each side of the front of the vehicle. The split cabs are fabricated of fiberglass and connected by an intercom system. The tops of the cabs hinge open to the front for entrance and exit. The MAZ-543 is powered by a D12A-525 tank diesel engine developing 525 horsepower, along with a heavy-duty automatic transmission. The suspension is 8x8 and steers with the front two axles. Each wheel has an independent suspension. The axles have locking differentials, and the tires are very large and puncture resistant.

The MAZ-543M, MAZ-543P, MAZ-543P, MAZ-547, MAZ-7910, MAZ-73132, and MAZ-74106 are used to carry large MRLs, SSMs, or radar sets, and will not be elaborated here (except for the MAZ-543M). The MAZ-7310 is used for rough-terrain oil prospecting and drilling, and often operates with a large trailer as a road-train. It is also used as the basis for an airfield firefighting engine. It will not otherwise be elaborated here. A tractor truck was also devised, but not manufactured on a large scale; its purpose was to transport long tank trailers used to transport a tank and equipment for it. Another use is a mobile hotel with 24 rooms, a mobile shower, and a mobile laundry unit.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
MAZ-543	$15,417	D, AvG, A	19.1 tons	36.6 tons	4 (+60)	28	Headlights	Open
MAZ-543A	$15,614	D, AvG, A	19.4 tons	43.3 tons	4 (+60)	36	Headlights	Open
MAZ-543M	$16,619	D, AvG, A	22.2 tons	46.1 tons	4 (+60)	36	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
MAZ-543	135/69	38/19	550	150	Stnd	W(5)	HF1 HS1 HR1
MAZ-543A	122/62	34/17	740	150	Stnd	W(5)	HF1 HS1 HR1
MAZ-543M	118/59	32/17	740	150	Stnd	W(5)	HF1 HS1 HR1

MT-S

Notes: This vehicle entered service at about the same time as the MT-T below, but was not built in large numbers (as a cargo carrier) and is no longer in service in large numbers in Russia. It was never exported. Little is known about the MT-S, but it is powered by an engine similar to that of the MT-T (a V-64-4 diesel developing 710 horsepower), and the chassis is derived from that of

the 2S3 Akatsiya self-propelled howitzer. Though not used much as a cargo carrier, the MT-S has been used as the basis of some specialist vehicles, including the GMZ minelayer and a resupply and radar vehicle for the SA-11 surface-to-air missile.

The MT-SM is a modernized version of the MT-S; while it does share some many components with the MT-S, including the basic body and chassis, it also shares many components with the GM-569A general-purpose carrier. The engine has been replaced with a more powerful V-84Zh 780-horsepower multifuel engine with a preheater. The purpose of the MT-SM ranges from large bulk cargo transport to acting as an artillery and radar tractor. The MT-SM can tow 15 tons. This version is much more common, but again has not been exported outside Russia and the former Soviet republics.

In both cases, the crew cab is in a tandem configuration, with two crewmembers up front and two to the rear in the case of the MT-S, and one in front and one to the rear in the case of the MT-SM. The engine compartment is to the right of the cab. In the rear is the cargo section, which has bows and a canvas tilt over it. The MT-SM is further differentiated by its smaller roadwheels.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
MT-S	$10,249	D, A	10.2 tons	33.7 tons	4+40	30	Headlights	Open
MT-SM	$12,482	D, G, AvG, A	10 tons	34 tons	2+40	30	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
MT-S	161/112	45/31	975	211	Stnd	T3	HF1 HS1 HR1
MT-SM	171/120	48/33	1075	231	Stnd	T3	HF1 HS1 HR1

MT-T

Notes: The MT-T is a Russian tracked logistics carrier used for the transporting of heavy loads. The chassis of the MT-T is the basis for several other vehicles, including the BAT-2 engineer vehicle, the PMM-2 bridging vehicle, the PTS-2 amphibious tracked vehicle (below), and as a vehicle carrying the SA-12 surface to air missile system. The V-64-4 diesel engine in the MT-T is derived from that of the T-72 tank, and the suspension is derived from the T-64 tank; the engine outputs 710 horsepower. The engine is directly behind the forward cab, with a rear cargo area covered with a canvas top. The roof of the cab has a hatch with a mount for a machinegun. The cab occupants are protected by an NBC Overpressure system and radiation shielding. The rear of the vehicle has a winch with a capacity of 25 tons. The MT-T is not amphibious, but can ford 1.3 meters depth.

Since the Russians have replaced most of their towed guns with self-propelled guns, many MT-Ts have become available for general towing and cargo carrying duties.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$24,822	D, A	12 tons	37 tons	5+18	30	Headlights	Shielded (Cab Only) or Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
161/112	45/31	705	211	Stnd	T3	HF1 HS1 HR1

MZKT-79191

Notes: Perhaps one of the largest military trucks anywhere, the MZKT-79191 is a 12x12 vehicle able to switch power from one of its axles to conserve fuel. The size is phenomenal, with a length of over 16 ½ meters. It uses a forward control cab and low-pressure tires to help off-road mobility. Most of these gigantic trucks are used by civilian concerns, especially the mining and oil industries, but some are used by the Russian military, primarily to transport IRBM and ICBM-type missiles. Power is provided by a YaMZ-8401 turbocharged diesel developing 650 horsepower, a Deutz TBD 616 diesel developing 653 horsepower, or a Daimler Benz diesel developing 677 horsepower, coupled with a quite complicated automatic transmission. The driver has power steering and power brakes to aid in maneuvering the vehicle. The truck has locking differentials and steers on its front three and rear two axles, giving it a remarkable turning radius for its huge size. The MZKT-79191 is not generally set up to carry personnel, though it sometimes carries large cargo; the Crew Rating listed below is for a jury-rigged setup.

Twilight 2000 Notes: Neither the Deutz nor the Daimler Benz engines are available in the Twilight 2000 timeline.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
650 hp	$24,690	D, A	55.15 tons	90 tons	3 (+110)	38	Headlights	Open
653 hp	$23,888	D, A	55.15 tons	90 tons	3 (+110)	38	Headlights	Open
677 hp	$23,948	D, A	55.15 tons	90 tons	3 (+110)	38	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
650 hp	92/46	26/13	900	240	Stnd	W(6)	HF1 HS1 HR1
653 hp	92/46	26/13	900	193	Stnd	W(6)	HF1 HS1 HR1
677 hp	93/47	26/13	900	200	Stnd	W(6)	HF1 HS1 HR1

MZKT Volat 79098

Notes: Described by the Russians as a “heavy-duty cargo truck,” the Volat is able to transport enormous loads across difficult terrain. It is optimized for hot weather (it was designed for export to the Middle East), able to operate in temperatures of up to 55

degrees Celsius without difficulty. It is a huge vehicle; just the load area is 5.82x2.85 meters in size. A crane is located at the rear of the cargo area with a capacity of 1.17 tons and a reach of 7 meters. The suspension is 8x8 with independent suspension for each wheel. The Volat can ford a 1-meter depth, but is not amphibious. The vehicle is of cabover design, tilting forward for access to the engine and transmission. The cab is air conditioned and there is a hatch on the roof with a weapon mount. The Volat is powered by either a Deutz V8 turbocharged diesel developing 544 horsepower, or a Mercedes Benz turbocharged diesel developing 503 horsepower. This is coupled with an Alison CLT 754 automatic transmission.

Variants include a tanker and a heavy wrecker.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
503 hp	$19,423	D, A	20.5 tons	44.45 tons	4+62	36	Headlights	Open
544 hp	$19,578	D, A	20.5 tons	44,95 tons	4+62	36	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
503 hp	117/59	32/16	600	185	Stnd	W(4)	HF1 HS1 HR1
544 hp	122/62	34/17	600	200	Stnd	W(4)	HF1 HS1 HR1

Krasnoyarsk PTS

Notes: This is a large amphibious logistics carrier used to carry large loads and offload assault ships. The PTS is controlled from a cab at the front of the vehicle. Some of these vehicles have a weapon mount over the commander's position, but most are unarmed. The cargo area is large, wide, and open-topped. Troops and equipment are loaded and unloaded over the top or by a powered ramp at the rear of the vehicle. The PTS is powered by an A-712P 300-horsepower diesel, coupled with a semiautomatic transmission. For amphibious operations, the PTS uses a PTO propeller drive. The cab of the PTS is equipped to operate in NBC environments and is NBC sealed (but not equipped with an NBC Overpressure system). Most former Pact members as well as Algeria, Angola, Congo, Cuba, Egypt, India, Iran, Libya, Tanzania, Vietnam, Yemen, and Yugoslavia use the PTS-M series, though in most Pact countries it has been largely replaced by the newer PTS-M and even newer PTS-2.

The PTS-M is virtually identical to the PTS, but is powered by a V-54P diesel developing 350 horsepower.

The PTS-2 is the replacement for the PTS-M. It is basically a PTS-M with a far more powerful engine (derived from that of the T-72 MBT), a 710-horsepower V-64-4; a revised running gear with 7 roadwheels on each side, NBC sealing protection, and a rear ramp. The PTS-2 is also 500mm longer and wider, and the PTS-2 can carry more cargo.

The PTS-4 is an almost new design, based on the T-80, and with the engine of a T-90; this is a V-84MS diesel, with an output of 840 horsepower. The PTS-4's cab has an NBC Overpressure system, and the vehicle is protected by a remote Kord machinegun on a mount in front of the cab. The PTS-4 is almost entirely cargo bay; though more compact than the PTS and PTS-M, it can carry much more cargo. One of the big reasons the Russians came up with the PTS-4 was that the PTS, PTS-M, and PTS-2 were designed and built in Ukraine, and they lost control of these Ukrainian facilities. The PTS-4 is built in Omsk. The Russians also took the opportunity to make improvements. Perhaps the real ancestor of the PTS-4 is the K-61 (above).

The PTS-3 was an aborti9ve design based on the T-64 tank chassis. The Russians decided that the PTS-3 design would not move forward, as the production facilities for the T-64 are in Ukraine, and the Russians did not have access to them after Ukrainian independence. The PTS-3 will not be detailed further here.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
PTS	$29,647	D, A	(Land) 5 tons, (Water) 10 tons	27.7 tons	2+70	22	Passive IR (D), WL Searchlight	Open
PTS-M	$29,832	D, A	(Land) 5 tons, (Water) 10 tons	27.7 tons	2+70	22	Passive IR (D), WL Searchlight	Open
PTS-2	$34,354	D, A	(Land) 7.5 tons, (Water) 12 tons	38 tons	2+84	30	Passive IR (D), WL Searchlight	Open
PTS-4	$47,760	D, A	(Land) 10 tons (Water) 18 tons	33.15 tons	2+72	28	Passive IR (D), Image Intensification (G)	Shielded (Cab) or Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
PTS	102/72/26	28/20/7	705	104	Stnd	T3	HF1 HS1 HR1
PTS-M	113/79/28	31/22/8	705	129	Stnd	T3	HF1 HS1 HR1
PTS-2	147/103/37	41/29/10	705	262	Stnd	T3	HF1 HS1 HR1
PTS-4	185/129/46	51/36/13	705	312	Stnd	T4	HF1 HS1 HR1

Vehicle	Fire Control	Stabilization	Armament	Ammunition
PTS-4	+2	Fair	Kord (RWS)	400x12.7mm

Ural-377

Notes: This is a 6x4 heavy truck with fair cross-country performance, based upon the Ural-375. The Ural-377 is an old truck, with examples being produced from 1965-1983. The military version is the Ural-377M; it has a central tire regulation system not found on the basic version or civilian versions. (The Ural-377M is the version detailed below.) Layout is conventional, with engine in front, cab behind it, and a rear cargo bed. The rear cargo area is of wooden construction over steel, and is much longer than the Ural-375's cargo area, as the spare wheel was shifted to under the rear frame instead of being at the front of the cargo body. Standard equipment includes a cab heater, and the cab has room for the driver and two passengers. The towing capacity of the Ural-377 is 5.6 tons cross-country and 10.5 tons on roads. The Ural-377 is powered by a ZIL-375Ya gasoline engine developing 175 horsepower as the rather high RPM of 3000 (some sources say 3100 RPM) coupled with a manual transmission.

The Ural-377D is the winterized version, with an insulated cab, snow tires, and windows with double-paned glass. The Ural-377S is a semi-tractor trailer version of the basic truck; it has no cargo bed, and instead has a fifth wheel for towing the trailers.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$6,938	G, A	7.73 tons	15 tons	3+20	12	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
150/30	42/8	300	77	Stnd	W(3)	HF1 HS1 HR1

Ural-4320

Notes: This is a 6x6 truck that is a development of the Ural-375. The original gasoline engine is replaced with a more powerful diesel engine, fuel consumption is cut, and cargo capacity is increased. The cab is increased in size to allow three persons. The 4320 has two folding bench seats in the rear, in addition to a removable center bench. The Ural-4320-10 has a front-mounted winch with a capacity of 7 tons, and has 60 meters of cable; it is powered by a 180-horsepower YaMZ-236M2 diesel engine. The 4320-31 is powered by a 240-horsepower YaMZ-238M2 diesel engine and also has a winch. The 4320-300 has a reinforced chassis, suspension, and frame, allowing for a dramatic payload increase; it is powered by a YaMZ-238MB diesel developing 300 horsepower. It also has a winch. The 4320VV is an armored version used by Internal Security troops; it is powered by a 270-horsepower diesel engine of unknown type and has a large fuel tank, and a roof hatch with a weapon mount. It also has the winch of the 4320-10. Its armor will stop small arms rounds, but the 4320VV is not suited for frontline combat.

This vehicle is available as a cargo/troop carrier, tanker, recovery vehicle, and workshop.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
4320-10	$9,787	D, A	5 tons	13.33 tons	3+27	10	Headlights	Open
4320-31	$9,937	D, A	6 tons	14.6 tons	3+27	12	Headlights	Open
4320-300	$10,087	D, A	9.5 tons	18.55 tons	3+27	16	Headlights	Open
4320VV	$11,039	D, A	3 tons	17.3 tons	3+16	14	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
4320-10	130/66	37/18	270	53	Stnd	W(3)	HF1 HS1 HR1
4320-31	149/75	41/21	360	71	Stnd	W(3)	HF1 HS1 HR1
4320-300	148/74	41/21	360	89	Stnd	W(3)	HF1 HS1 HR1
4320VV	143/73	40/20	400	80	Stnd	W(4)	HF2 HS2 HR2

Ural-43223

Notes: This is a truck designed for extreme environments, operating reliably in temperatures from -50 to +50 degrees Centigrade and at altitudes up to 4000 meters. The cab is heated, and the driver's seat is adjustable. The truck has a conventional layout with the engine up front, cab in the center, and a rear cargo bed. The air intake for the engine and the exhaust are mounted high on the truck to allow 1.75 meters of fording (though it is not amphibious). On the front is mounted an 8-ton-capacity winch. The Ural-43223 is powered by a Ural-744 diesel engine with 234 horsepower; only 405 of these engines were produced, and it is the only engine to power the Ural-43223, so production of the truck is probably less than those 405 engine examples.

Variants such as a van/shelter body or tanker are available.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$9,011	D, A	5.5 tons	14.55 tons	3+32	12	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
147/74	41/21	259	69	Stnd	W(3)	HF1 HS1 HR1

Zil-133

Notes: This is a 6x4 version of the Zil-130. The Zil-133 base model has a 220 hp engine, but this was found to be so fuel hungry and prone to overspeeding that it was replaced by a version of the same engine that is much less powerful at 180 horsepower. By the early 1980s, the Zil-133G1 was in production, and these were later replaced by more modern vehicles; however, a variant designated the Zil-133G2 was also produced, with a beefed-up suspension to allow a greater load limit. In 1979, another engine was available, the 207-horsepower KamAZ-740 diesel; the Zil-133 which received this engine was designated Zil-133GYa, and in 1983 the Zil-133G1

and G2 were taken out of service in favor of the Zil-133GYa. (This variant has a longer nose due to the larger engine.) Production greatly increased and some sources say that production for the military continued until 1992, others say 1994. Production continued in civilian form (mostly produced with a bare frame, allowing customers to have them finished as desired) until 2002.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Zil-133	$8,962	G, A	8 tons	14.2 tons	3+40	12	Headlights	Open
Zil-133G1	$8,862	G, A	8 tons	14.88 tons	3+40	12	Headlights	Open
Zil-133G2	$9.094	G, A	10 tons	17.1 tons	3+40	12	Headlights	Open
Zil-133GYa	$9,325	D, A	10 tons	17.3 tons	3+40	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Zil-133	181/36	50/10	170	97	Stnd	W(3)	HF1 HS1 HR1
Zil-133G1	154/31	42/8	170	79	Stnd	W(3)	HF1 HS1 HR1
Zil-133G2	141/28	39/8	170	79	Stnd	W(3)	HF1 HS1 HR1
Zil-133GYa	153/30	42/8	250	61	Stnd	W(3)	HF1 HS1 HR1

Zil-135

Notes: An 8 x 8 heavy truck with decent cross-country performance, the Zil-135 is the carrier for the Bm-27 rocket launcher system. It is also used as a FROG-7 launcher, cruise missile launcher, ZU-23 twin autocannon carrier, and cargo/troop carrier. Many countries use the Zil-135, including former Warsaw Pact, Russia, Algeria, Egypt, Cuba, Iraq, North Korea, Yemen, and Yugoslavia.

A secondary benefit of being a missile truck is that the Zil-135's cab is protected by NBC Overpressure, more to keep it safe from contaminants in the fuel for rockets and missiles than to keep safe from contaminants on the NBC battlefield. The Zil-135 has two engines – one powers the wheels on the left side of the vehicle, and one powers those on the right side of the vehicle. The engines are Zil-375 VA gasoline engines, each with 180 horsepower. The transmission is hydromechanical, with the power assist necessary to provide oomph to gear changes from the driver that had to span two engines. Steering and brakes are power assisted and steering is by the front and rear axles. The later (1965) Zil-135E uses a diesel-electric transmission, which eliminates the need for a mechanical gearbox and essentially provides an automatic transmission, but is otherwise for game purposes identical to the base Zil-135.The Zil-135L4 is the dedicated cargo truck variant. The cab was made out of plastic, with three windshields (all with a separate windshield wiper) that were downsloped to help eliminate glare. The Zil-135MB has an improved suspension and is able to carry a larger load; it is also powered by a single 300-horsepower diesel engine.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Open
Zil-135LM	$15,961	G, A	10 tons	20 tons	3+30	16	Headlights	Open
Zil-135MB	$15,815	D, A	11.5 tons	21.4 tons	3+30	7	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Zil-135LM	159/80	44/22	768	159	Stnd	W(4)	HF1 HS1 HR1
Zil-135MB	134/67	38/18	769	89	Stnd	W(4)	HF1 HS1 HR1

SAMIL 100

Notes: This is the one of the standard heavy trucks of South Africa. It is a large truck made of pressed steel with drop sides and tailgate for the cargo area; the sides and tailgate are also removable for the transport of outsized cargoes. The cab windows and members can likewise be folded down. The cargo area is large, with a 7-meter cargo bed. The cargo bed and cab are on spring-loaded mountings to reduce crew fatigue, cargo damage, and enhance vehicle flexibility on rough terrain. The fuel capacity is split between two 200-liter tanks. The cargo carriers have a crane with a 1.2-ton capacity at five meters. Towing capacity is 10 tons.

The Kwevoel is a version with an armored cab, a V-hull, and belly armor running down its entire length. The SAMIL 100 is powered by a Deutz Magirus V10 with an output of 268 horsepower.

There is a water tanker version (very important in South Africa's hot weather) which has five taps on each side at the bottom of the tanker body from which water may be drawn. At the rear of the tank is a drawing pipe from which is suspended a shower sprinkler which is large enough for two soldiers to shower. There is also a water pump from which water may be drawn at a rate of 500 liters per minute for filling smaller water tanks or trailers, water bags, etc.

There is a fuel tanker version which is equipped with a single hose, reel, and fuel valve per section to fill other vehicles or containers, at a rate of 500 liters per minute. The tank is divided into four sealed sections.

An Artillery tractor variant is made, used to tow the G5 howitzer and provide initial ammunition. This has an enlarged cab for the driver and part of the howitzer crew, a 10-ton winch in the rear which may be led out the front or rear, and a crane which can lift 800 kilograms at a range of 3.5 meters. The artillery tractor has an oil tank in its bed with a capacity of 150 liters and a water tank with a capacity of 200 liters. On top of these tanks are forward-facing seats for another part of the gun crew. The cab of the artillery tractor has a hatch with a weapon mount. There is space for artillery projectile pallets (15x189-kilogram pallets).

The Mark 2 version features a more powerful Deutz F10L 413F diesel developing 315 horsepower, and may be coupled with an automatic or manual transmission. The load carrying capability has also been increased, and the chassis has been lightened.

Other variants include a dump truck, a tanker, an artillery tractor, a field kitchen, a refrigerator truck, a beer canteen (!), a mobile canteen, an ambulance, a recovery vehicle, a carrier for a multiple rocket launcher, and a carrier for a 23mm antiaircraft gun.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
SAMIL 100	$22,334	D, A	10 tons	21.14 tons	3+50	16	Headlights	Open
Kwevoel	$21,799	D, A	8 tons	24 tons	3+30	18	Headlights	Open
Fuel Tanker	$29,134	D, A	13000 liters + 620 kg	22.43 tons	3	17	Headlights	Open
Water Tanker	$25,234	D, A	9100 liters + 508 kg	21.77 tons	3	17	Headlights	Open
Artillery Tractor	$25,001	D, A	9.7 tons	22.9 tons	7+10	18	Headlights	Open
Mark 2	$22,451	D, A	11 tons	21 tons	3+50	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
SAMIL 100	112/56	31/16	400	79	Stnd	W(3)	HF1 HS1 HR1
Kwevoel	102/52	29/14	400	79	Stnd	W(5)	HF2 HS2 HR2*
Fuel Tanker	108/54	30/15	400	79	Stnd	W(3)	HF1 HS1 HR1
Water Tanker	110/55	30/15	400	79	Stnd	W(3)	HF1 HS1 HR1
Artillery Tractor	105/54	29/15	400	79	Stnd	W(3)	HF1 HS1 HR1
Mark 2	127/64	36/18	400	93	Stnd	W(3)	HF1 HS1 HR1

*The AV shown applies only to the cab; the rest of the Kwevoel is AV1, except for the entire belly, which is AV4Sp.

KM500

Notes: This South Korean 6x6 truck is similar in appearance to the US M809 series; however, the engines are produced by the German firm of MAN. The standard cargo vehicle has wooden, removable sides, a drop tailgate, and removable canvas covers over the cab and cargo area, the latter supported by bows. Most of these vehicles have a winch located in the front bumper with a capacity of 9.07 tons and 61 meters of cable. Note that if the KM500 stays on roads, it can haul 9.07 tons; similarly, the KM500 may tow 10 tons cross country, but if it stays on roads, it can haul 13.61 tons. The front wheels have shock absorbers in addition to leaf springs; the rear wheels do not have shock absorbers, but have the semi-elliptical leaf springs, so ride quality in the cab is better than the rear. The KM500 originally had a MAN diesel engine with an output of 236 horsepower, but the engine of newer ones develop 270 horsepower. The rear axles have locking differentials. The cab's roof is canvas, and the windshield may be folded.

The vehicle comes in several variants, including the KM501 dump truck, the KM502 wrecker, the KM503 tractor truck, and the KM507 expansible van.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
KM500 (Original)	$15,768	D, A	5 tons	15.62 tons	3+20	12	Headlights	Open
KM500 (Current)	$15,851	D, A	5 tons	15.82 tons	3+20	6	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
KM500 (Original)	127/64	36/18	416	70	Stnd	W(3)	HF1 HS1 HR1
KM500 (Current)	139/70	39/19	416	80	Stnd	W(3)	HF1 HS1 HR1

ENASA Pegaso 3050

Notes: This is a heavy truck produced by Spain, and also used by Nigeria. It is of cabover construction, using the same cab as the 3045. The standard version is a cargo/troop carrier, with a cargo area covered by canvas and troop seats down the center facing out. As with many trucks, the 3050 could haul more on road – 10 tons. The 3050 can tow 7.5 tons cross country or 14.5 tons on road. The 3050 has an optional winch with a capacity of 6 tons. Each axle has a locking differential, and the truck also has a pump to give it forced lubrication, a plus on steep roads. The 3050 has power assisted steering and brakes, and is powered by a Pegaso 910/40 diesel developing 170 horsepower; its weakness is this engine, which makes the 3050 underpowered. The engine is coupled with a manual transmission.

Other versions include a bridging vehicle, dump truck, recovery vehicle, shop van, and tractor truck.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Pegaso 3050	$11,740	D, A	6 tons	14.5 tons	2+24	12	Headlights	Open
w/Winch	$13,240	D, A	6 tons	14.6 tons	2+24	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Pegaso 3050	107/54	30/15	250	50	Stnd	W(3)	HF1 HS1 HR1
w/Winch	105/54	29/14	250	50	Stnd	W(3)	HF1 HS1 HR1

ENASA Pegaso 3055

Notes: This heavy truck supplements the 3050 in Spanish service. It was designed for off-road use, with a better suspension than the 3050, while the 3050 was primarily designed for on-road use. It is also used by Morocco. The 3055 is known for its durability and strength of chassis. The 3055 has a 6x6 suspension and is powered by a Pegaso 9220/10 turbocharged diesel developing 200 or 220 horsepower; the 220-horsepower engine is the one used by the Spanish military, while the 200-horsepower is used by civilian concerns. The cab is the same as used on the 3050, but the cargo bed is larger. The 3055 has an optional winch with a capacity of 6 tons. The 3050 has power assisted steering and brakes. Like the 3050, the 3055 is a trifle underpowered, even with the 220-horsepower engine.

Variants include a tanker, an artillery tractor, a carrier for an artillery rocket launcher called the Tereul, as a tractor for the Selenia Aspide SAM launcher, crane truck, tractor truck, recovery vehicle, fire truck, dump truck, and with van bodies for communications, ambulance, command post, or refrigerator truck duties.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
200 hp	$12,870	D, A	6 tons	15 tons	2+30	12	Headlights	Open
w/Winch	$14,370	D, A	6 tons	15.1 tons	2+30	12	Headlights	Open
220 hp	$12,945	D, A	6 tons	15 tons	2+30	12	Headlights	Open
w/Winch	$14,445	D, A	6 tons	15.1 tons	2+30	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
200 hp	115/58	32/16	350	74	Stnd	W(3)	HF1 HS1 HR1
w/Winch	115/58	32/16	350	74	Stnd	W(3)	HF1 HS1 HR1
220 hp	124/62	34/18	350	81	Stnd	W(3)	HF1 HS1 HR1
w/Winch	123/62	34/18	350	81	Stnd	W(3)	HF1 HS1 HR1

UROVESA TT

Notes: The TT is a series of URO trucks, which come in military and civilian versions. The TT is built to be tough, tough to take military off-road situations. So far, there has only one export made (Morocco), but the TT has seen combat service in Afghanistan, Iraq, and Lebanon. The division of UROVESA that produced military trucks also produces heavy vehicles, ranging from heavy-lift forklifts to fire engines. Several other countries are testing the TT, after its performance in Afghanistan and other war zones. Military versions can range from load carriers to shelter carriers to cranes and mortar and SAM carriers. Significant numbers are used by civilians, for tasks ranging from firefighting to logging. In either military or civilian guises, a snowplow can be fixed to the front (AV2).

The TT has a 4x4 off-road suspension, with run-flat and puncture-resistant tires. They are each independently suspended, increasing off-road capability. The TT is capable of fording mud, show, and water up to 800mm, and can be transported by C-130-class aircraft. It may be parachuted with a reduced suspension, which can be raised to operational levels in less than a minute after crews get to them. The wheels have differential locking and can operate in low and high-suspension mode. (400 millimeters is standard.) In certain special conditions, the TT can reach a grade of 100 degrees, and 40 degrees side slope. Tow capacity is equal to its cargo capacity. Winches are an options; they can feed out the front of the bumper, be fixed to the center of the vehicle, and the line can be led out the front or rear. The standard winch for this vehicle is a 5-ton winch which is in the front bumper and affixed to the frame. The winches can have a capacity of 5 tons (included below) or 10 tons. Air conditioning is an option for the cab, which may be two-man or five-man. (The version below has AC). Even light armor can be added to the TT.

Military-wise, the base member of the TT line is the F3-21.14. This variant has a 210-horsepower Iveco turbocharged diesel with an optional manual or automatic transmission. Construction is largely of light alloy overlaid with steel; the tubular elements and bars are for the most part light alloy, while the overlying sheets of metal are steel. The engine has an aluminum block and cylinders. Brakes are drum brakes with ceramic shoes. A commander's machinegun and mount are also an option (included below). Other options include cargo/shelter bodies, workshops, van bodies for load carrying, a tanker bed, and a military firefighter; URO will also add options to TT for the most part as desired by the buyer.

The F3-24-14 is essentially the same as the F3-21-14, but with a larger cargo body and carrying capacity. It is, in general, a heavier vehicle. The F3-28.20 is an even larger version of this vehicle. It uses a 275 hp turbocharged Iveco engine and has in general a heavier, and a larger cargo body.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
F3-21.14	$7,470	D, A	4.97 tons	12.97 tons	5+17	12	Headlights	Open
w/Armored Cab	$8,145	D, A	4.97 tons	14.07 tons	5+17	12	Headlights	Open
F3-24.14	$7,996	D, A	5.35 tons	15.1 tons	5+19	12	Headlights	Open
w/Armored Cab	$8,774	D, A	5.35 tons	16.2 tons	5+19	14	Headlights	Open
F3-28.20	$8,652	D, A	6.31 tons	17.82 tons	5+24	16	Headlights	Open
w/Armored Cab	$9,531	D, A	6.31 tons	18.92 tons	5+24	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
F3-21.14	148/74	41/21	180	78	Stnd	W(2)	HF1 HS1 HR1
w/Armored Cab	140/70	39/20	180	78	Stnd	W(2)	HF2 HS2 HR2*
F3-24.14	133/67	37/18	180	78	Stnd	W(2)	HF1 HS1 HR1
w/Armored Cab	128/64	36/18	180	78	Stnd	W(2)	HF2 HS2 HR2*
F3-28.20	143/72	40/20	180	102	Stnd	W(2)	HF1 HS1 HR1
w/Armored Cab	138/70	38/19	180	102	Stnd	W(2)	HF2 HS2 HR2*

*The AV listed applies only to the cab; the rest of the truck is AV1. The floor of the cab is AV4Sp.

Scania P93 5-Ton

Notes: This is a Swedish 4x4 truck used by Sweden, Norway, Brazil, Angola, and Greece. The P93 has all-wheel drive, and an automatic transmission is optional. The cab has a heater, and additional improvements for cold-weather operation may be fitted. Variants include the usual assortment of cargo trucks and panel van bodies. The MK 4x4Z is smaller than the 4x4-8T; the 4x4-8T is about 1.4 meters longer. The P113 is not as long as the 4x4-8T, but is also longer than the 4x4Z, though not as long as the 4x4-8T. The MK 4x4Z and 4x4-8T are powered by a DS9 diesel developing 252 horsepower; the P113 is powered by a DS11 turbocharged diesel with 310 horsepower. Suspension is 4x4 for the MK 4x4Z and 4x4-8T, and 6x6 for the P113.

The P113 HK is a heavy cargo truck that is related to the Scania P93 trucks listed below. It is an 6x6 truck used by Sweden, Norway, Brazil, Angola, and Greece. Most of these trucks are heavy flatbed load carriers designed to haul NATO-compatible pallets and containers. The cab has a heater, and additional improvements for cold-weather operations may be fitted.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
P93 MK 4x4Z	$7,730	D, A	5 tons	14.3 tons	3+20	10	Headlights	Open
P93 MK 4x4-8T	$9,649	D, A	8 tons	17.5 tons	3+32	6	Headlights	Open
P113 HK	$11,523	D, A	11.54 tons	24.94 tons	3+46	9	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
P93 MK 4x4Z	157/78	43/22	265	74	Stnd	W(2)	HF1 HS1 HR1
P93 MK 4x4-8T	135/69	38/19	265	74	Stnd	W(2)	HF1 HS1 HR1
P113 HK	124/62	34/18	265	114	Stnd	W(3)	HF1 HS1 HR1

Scania P124

Notes: These are a family of PLS/DROPS-type vehicles used primarily for the transport of containerized, palletized, or bulk loads, rather than troops or loose cargo. They can also carry vehicles that will fit on their flatracks. All of them have an optional crew cab, able to seat the driver and up to 6 others, but the normal cab is a sleeper cab that carries the driver and two others. They are equipped with an integral load handling system to allow easy loading of pallets, containers, vehicles, etc. They are equipped with winches that may be led out the front or rear and have a capacity of 70 tons with 50 meters of cable. The engine is equipped with a preheater for cold weather operations, and a cab heater.

The CB6x6NZ360 has a 6x6 suspension and is powered by a Scania DSC1202 diesel developing 360 horsepower. The CB8x6/4NZ360 has an 8x6 suspension which may be switched to 8x4 for road use and is powered by a Scania DSC1202 diesel developing 360 horsepower. The CB8x8HZ420 has an 8x8 suspension and is powered by a Scania DSC1201 turbocharged diesel developing 420 horsepower. The GB6x2NZ360 has a 6x2 suspension and limited off-road utility; it is powered by a Scania DSC1202 diesel developing 360 horsepower.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
P124CB6x6NZ360	$28,946	D, A	20.14 tons	34 tons	3+40	28	Headlights	Open
P124CB8x6/4NZ360	$30,105	D, A	25 tons	40.5 tons	3+50	34	Headlights	Open
P124CB8x8HZ420	$30,687	D, A	23.18 tons	41 tons	3+46	34	Headlights	Open
P124GB6x2NZ360	$27,052	D, A	15.2 tons	29 tons	3+30	24	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
P124CB6x6NZ360	112/57	31/16	350	106	Stnd	W(3)	HF1 HS1 HR1
P124CB8x6/4NZ360	102/51	29/14	400	106	Stnd	W(4)	HF1 HS1 HR1
P124CB8x8HZ420	110/56	31/15	400	155	Stnd	W(4)	HF1 HS1 HR1
P124GB6x2NZ360	157/31	43/9	500	106	Stnd	W(3)	HF1 HS1 HR1

Scania-Vabis L36

Notes: This is a medium 4x2 truck developed from a Swedish civilian truck known as the L3642. It is an older truck that ceased production in 1967 after about 800 were built. It is of conventional construction, with a three-seat cab and rear cargo area. The cargo area has drop sides and a drop tailgate, and various enclosed cargo bodies also exist. Some models have a cargo crane at the rear of the cab with a capacity of 2 tons. The L36 and L36 Super are identical except for their engines; the L36 has a Scania-Vabis D5 diesel engine with 90 horsepower, while the L36 Super is equipped with the supercharged DS5 diesel engine developing 120 horsepower. Both engines are designed to be compact and fuel-efficient, and both render the L36 underpowered. Both are also nothing to write home about their off-road capability. The L36 is available in hard side van bodies as well as a conventional cargo truck.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
L36	$5,825	D, A	5.92 tons	10.5 tons	3+18	8	Headlights	Open
L36 Super	$6,047	D, A	5.92 tons	10.6 tons	3+18	8	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
L36	126/25	35/7	100	26	Stnd	W(2)	HF1 HS1 HR1
L36 Super	147/29	41/8	100	44	Stnd	W(2)	HF1 HS1 HR1

Volvo BM A25C

Notes: This is the largest Volvo military truck, and one of the largest trucks in the world. It is designed over an articulated chassis with all-terrain bogies to provide good off-road mobility, and the cab is roll protected and lined with foam rubber cushions. The truck is equipped with a HIAB 8801/3 material-handling crane able to lift 7 tons. The cab and cargo section may be at up to an angle of 45 degrees to each other while traveling. The six wheels have independent suspension. The cab may be armored as well. The BM A25C is not normally used to carry large amounts of personnel, but may be set up for that by adding benches in the rear. The BM A25C is powered by a Volvo 7-liter 6-cylinder turbocharged diesel developing 255 horsepower. The engine is underpowered in the area of raw power, but posses a large amount of torque. The primary users of this truck are Swedish self-propelled artillery batteries, to haul ammunition and personnel equipment.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
BM A25C	$24,496	D, A	19 tons	40.27 tons	2+76	28	Headlights	Open
w/Armored Cab	$26,350	D, A	19 tons	41.37 tons	2+76	28	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
BM A25C	85/43	23/12	360	93	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	84/42	23/12	360	93	Stnd	W(3)	HF2 HS2 HR2*

*The AV listed applies only to the cab; the rest of the BM A25C is AV1. The floor of the cab is AV4Sp.

Volvo FL6

Notes: Though this truck was designed and tested in Sweden, production is actually carried out in Volvo's plant in Belgium. It is a lightweight truck capable of heavy cargo hauling, and is a military version of a commercial truck. The FL6 does not normally carry troops, but can be fitted with benches in the rear cargo section. It is basically a standard sort of truck with a forward control cab. Suspension is 4x4 with fair off-road capability. They are designed to fit in car lanes on city roads, and has power steering and brakes to help maneuver in tight traffic. Variations include a version designed for airdropping, a desert/tropicalized model, and shelter carriers. Military variants have a number of engines available for them, powered by Volvo D6A180 180-horsepower turbocharged diesels, D6A207 207-horsepower turbocharged diesels, D6A220 220-horsepower turbocharged diesels, D6A230 230-horsepower turbocharged diesels, or D6A250 250-horsepower turbocharged diesels.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
180 hp	$8,517	D, A	9.02 tons	13.91 tons	3+36	12	Headlights	Open
207 hp	$8,617	D, A	9.02 tons	13.99 tons	3+36	12	Headlights	Open
220 hp	$8,667	D, A	9.02 tons	14 tons	3+36	12	Headlights	Open
230 hp	$8,707	D, A	9.02 tons	14.01 tons	3+36	12	Headlights	Open
250 hp	$8,777	D, A	9.02 tons	14.01 tons	3+36	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
180 hp	127/64	36/18	200	66	Stnd	W(2)	HF1 HS1 HR1
207 hp	139/70	39/19	200	76	Stnd	W(2)	HF1 HS1 HR1
220 hp	144/73	40/20	200	81	Stnd	W(2)	HF1 HS1 HR1
230 hp	149/75	41/21	200	85	Stnd	W(2)	HF1 HS1 HR1
250 hp	158/79	43/22	200	92	Stnd	W(2)	HF1 HS1 HR1

Volvo N10

Notes: The N10 is a heavy Swedish truck that is one or two weight classes below the F10. It is a conventional 6x6 truck, with the engine to the front, a cab behind that, and a rear cargo area covered by canvas. Some of these vehicles are fitted with a material-handling crane to the rear of the cab; this has a capacity of 1.1 tons. Military models have a 275-horsepower turbocharged diesel. The cabs of the N10 are very modern in construction and design. The N10 is designed to be modular, with a plain frame top that simplifies bodybuilding; the fuel tank is low down in the frame to keep it from being in the way of body mounting. For this reason, N10s are often used for hard-side shelter-carrying.

Variants include office bodies, dump trucks, maintenance workshops, wreckers, and ambulances. This vehicle is built in Sweden, but not used by that country; instead, the N10 is used by Belgium and the United Nations. Production lasted until 1990.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
N10	$10,292	D, A	13 tons	26.49 tons	3+42	21	Headlights	Open
w/Crane	$11,392	D, A	13 tons	26.79 tons	3+42	22	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
N10	111/56	31/15	300	101	Stnd	W(3)	HF1 HS1 HR1
w/Crane	111/56	31/15	300	101	Stnd	W(3)	HF1 HS1 HR1

Volvo NL10/12

Notes: This Swedish-built heavy truck is in service with Sweden, Australia, Brazil, Iran, Morocco, and Peru. The NL10 and 12 are known for their good off-road performance, and replaced the N10 listed above in Belgian and UN service. They are also available in a variety of configurations, ranging from wreckers to hard-side shelter carriers. The trucks have rigid axles to increase off-road performance and comfort of ride. They are also known as EDCs (Electronic Diesel Control), for their finely tuned, computer-controlled engines. These engines are for the NL10 Volvo 9.6-liter turbocharged diesel engines developing 275 or 320 horsepower; for the NL12, they are Volvo 12-liter turbocharged diesels developing 320 or 405 horsepower.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
NL10 (275 hp)	$9,629	D, A	12.82 tons	19.74 tons	3+34	16	Headlights	Open
NL10 (320 hp)	$9,799	D, A	12.82 tons	19.82 tons	3+34	16	Headlights	Open
NL12 (320 hp)	$11,445	D, A	23.7 tons	32.85 tons	3+44	28	Headlights	Open
NL12 (405 hp)	$11,760	D, A	23.7 tons	33.01 tons	3+44	28	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
NL10 (275 hp)	133/67	37/18	600	101	Stnd	W(2)	HF1 HS1 HR1
NL10 (320 hp)	148/74	41/21	600	118	Stnd	W(2)	HF1 HS1 HR1
NL12 (320 hp)	108/54	30/15	600	118	Stnd	W(3)	HF1 HS1 HR1
NL12 (405 hp)	123/62	34/18	600	150	Stnd	W(3)	HF1 HS1 HR1

Saurer 4CM

Notes: This is basically a larger version of the Saurer 2DM. It was built from 1940 to 1967, and remained in common use in Switzerland, though more and more often in civilian hands, where they can take forms limited only by ingenuity. Many of the automotive components are the same as on the 2DM, such as the cab, which is all-metal and has an observation hatch in the roof. An odd feature is the engine; it is a rather low-powered one for the size of the vehicle; it is a Model CT2D diesel developing 120 horsepower. A 7-ton-capacity winch with 50 meters of cable is standard on the 4CM. The suspension is 4x4 and the rear axle has a locking differential. The brakes and steering are power assisted.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$9,275	D, A	5 tons	12 tons	2+32	8	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
108/54	30/15	160	35	Stnd	W(2)	HF1 HS1 HR1

Saurer 6 DM/10 DM

Notes: These two related Swiss trucks differ only in size. They are in common use by Swiss forces, but rarely found outside the armed forces of that country, except in UN service. They both use the same engine, and both have a semi-flexible frame that helps cross-country performance. Some of them have a 10-ton winch mounted; if they do, it takes up part of the space used for the fuel tank and a smaller fuel tank must be fitted. They are both powered by a Saurer D4KT turbocharged diesel developing 250 horsepower, coupled with an FBW PG10 ZF A800/3D semiautomatic transmission. The 6DM has a 4x4 suspension; the 10DM has a 6x6 suspension. On the 6DM, the rear axle has a locking differential; on the 10DM, both rear axles have locking differentials.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
6 DM	$9,507	D, A	6 tons	16 tons	3+24	12	Headlights	Open
w/Winch	$11,947	D, A	6 tons	16.14 tons	3+24	12	Headlights	Open
10 DM	$11,275	D, A	10 tons	22 tons	3+40	8	Headlights	Open
w/Winch	$13,775	D, A	10 tons	22.14 tons	3+40	8	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
6 DM	143/72	40/20	360	92	Stnd	W(2)	HF1 HS1 HR1
w/Winch	142/72	40/20	300	92	Stnd	W(2)	HF1 HS1 HR1
10 DM	117/59	32/16	360	92	Stnd	W(3)	HF1 HS1 HR1
w/Winch	116/59	32/16	300	92	Stnd	W(3)	HF1 HS1 HR1

MANAS 16.230 FAEG/26.372 DFAEG

Notes: These two trucks were developed by Germany for Turkish service. They share most of their components, except for the engine, transmission, and certain structural members; they also share much in common with the German MAN trucks of the same designation. The cab has a hatch over the commander's position (not normally with a weapon mount). The trucks have a winch which can be led out to the front or the rear; capacity is 10 tons if led out to the rear, and 5 tons if led out to the front, and 60 meters of cable are available. Variants include a snowplow, tipper, tanker, and fire engine.

The 16.230 is powered by a MAN D 0826 LF08 turbocharged diesel developing 230 horsepower; the 26.372 has a MAN D 2866 LF15 turbocharged diesel developing 370 horsepower. The 16.230 has a 4x4 suspension, while the 26.372 has a 6x6 suspension. The 16.230 has nine forward and one reverse gear; the 26.372 has 16 forward gears and two reverse gears. The 26.372 is 20 centimeters longer than the 16.230. The cabs are identical, but the frame of the 26.372 is longer than the 16.230. Behind the cab on both models is space for vehicle tools, fuel cans, and some personal equipment stowage.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
16.230 FAEG	$11,571	D, A	8.55 tons	16 tons	3+34	12	Headlights	Open
26.372 DFAEG	$12,347	D, A	16.23 tons	25 tons	3+36	20	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
16.230 FAEG	137/69	38/19	300	85	Stnd	W(2)	HF1 HS1 HR1
26.372 DFAEG	139/70	39/19	300	136	Stnd	W(3)	HF1 HS1 HR1

KrAZ-214

Notes: This vehicle was in production for 11 years until replaced by the KrAZ-255B. It is a large 6x6 truck of conventional design. The KrAZ-214 is a descendant of the post-World War 2 YAZ-214, which itself was a descendant of wartime Lend Lease Studebaker trucks. The KrAZ-214 has much more load-carrying capacity and has a more powerful engine, and is physically a larger vehicle than its Studebaker ancestor. The KrAZ-214 has an 8-ton capacity winch and a cab heater. The rear cargo area can be covered by a tarpaulin over bows, and has removable sides and a removable tailgate for transporting outsized cargo. The engine of the KrAZ-214 is a YaMZ-M206B diesel developing 205 horsepower; this was a very powerful engine for a Soviet truck of its time period. Note that if the KrAZ-214 stays on roads, it can haul up to 7 tons; the KrAZ-214 can tow 10 tons cross-country, but on roads, the enormous torque of the KrAZ-214's engine enables it to tow 50 tons. (It is for this reason that a tank transporter variant of the KrAZ-214 was in production.)

The primary variant, the KrAZ-214B, featured a more robust electrical bus and a better suspension (primarily producing a better ride). For game purposes, the KrAZ-214B is identical to the KrAZ-214. It should be noted that, despite the major use of the KrAZ-214 by the Soviet military, production took place in Kremenchug in Ukraine; there was a lot of civilian ownership of KrAZ-214s in Ukraine after military production stopped, and KrAZ-214s pop up here and there in the current Russian Invasion of Ukraine. Variants of the KrAZ-214 included pontoon bridge carriers, the TMM bridgelayer, the E-205 power shovel, and the FM truck-mounted crane. In addition, several tanker truck variants were made, and several hard-sided shelter carrier trucks were made.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$11,423	D, A	5 tons	19.3 tons	3+26	16	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
112/57	31/16	450	75	Stnd	W(3)	HF1 HS1 HR1

KrAZ-255B

Notes: The KrAZ-255B is the replacement for the Ural-377 and KrAZ-214 in Russian and former Bloc service. The layout is conventional, with an engine in front, cab in the center, and cargo area in the rear. The cargo area has hinged tailgate and removable canvas cover. The cab has a heater and room for the driver and two passengers, and the truck has a front-mounted winch with a 12-ton capacity. When using the winch, the suspension may be locked if necessary. The KrAZ-255B looks similar at first glance to its predecessor, the KrAZ-214, but it is somewhat larger than the KrAZ-214, and has a more powerful YaMZ-236 engine developing 240 horsepower, as well as the more reliable YaMZ-236N transmission. The KrAZ-255B also has wider tires, giving the vehicle a much lower ground pressure, helping out when traveling off road. (The KrAZ-255B was called the "Lapteznik" by its crews – Russian for "fat tires.") The KrAZ-255B has a 6x6 suspension and a central tire pressure regulation system. The turning radius is wide sue to the wide tires, at 14.5 meters. The KrAZ-255B can ford one meter of water. The cab not only has room for three people, but it also has a space behind the seat with a narrow sleeping bunk. The fuel tankage is actually split into two 165-liter tanks.

The KrAZ-255B1 has a number of small structural improvements, and improved brakes. For game purposes, it is the same as the KrAZ-255B. The last ten years of KrAZ-255Bs were actually KrAZ-255B1s.

There are many variants, including the basic cargo/troop carrier, an artillery tractor, an aircraft tractor, a semi-tractor trailer that can tow an 18-ton trailer, a crane shovel, tanker, pontoon bridge, and pile driver. It was also used as a base for the TMM-3 bridging vehicle, the PMP collapsible ferryboat, and the PRV-9/1RL19 Naklon and PRV-16/1RL132 Nadyozhnost radars. In Tajikistan, the KrAZ-255B is used as a base for a BM-21 MRL, while in Cuba, it is used as a base for a 130mm SP gun. Civilian variants include a logging truck, concrete mixer, and dump truck. Some have gone to the US, Canada, and England, into the hands of private collectors. Some 21 countries use the KrAZ-255B, and there are four former operators. The KrAZ-255B was produced from 1965 to 1994.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$11,638	D, A	7.5 tons	19.45 tons	3+22	16	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
123/62	34/18	330	71	Stnd	W(3)	HF1 HS1 HR1

KrAZ-260

Notes: While the KrAZ-255B replaced the Ural-377 and the KrAZ-214, the KrAZ-260 replaced the KrAZ-255B, although all four are still used by the former Bloc and Russia. It was first seen in 1985 towing the 2A36 152mm nuclear-capable howitzer in a parade, but is believed to have officially entered service with the Soviet Union in 1979. 80% of the parts of the KrAZ-260 (other than the engine) are interchangeable with those of the KrAZ-255B. The cargo body has hinged tailgate with a canvas cover. The cab has a heater and room for the driver and two passengers, and the truck has a front-mounted winch with a 12-ton capacity. When using the winch, the suspension may be locked if necessary. Early KrAZ-260s used the YaMZ-238L 288-horsepower turbocharged diesel engine, but later models are equipped with the more reliable, higher torque and higher output 300-horsepower turbocharged YaMZ-238N. (For game purposes they are identical, but the version with the YaMZ-238N is designated the KrAZ-260A.) Both use a 4-speed YaMZ-238B manual transmission. The fuel supply is split into two 165-liter tanks; the KrAZ-260A adds a 50-liter reserve tank (the fuel from this tank is generally used last). The KrAZ-260 can ford 1.2 meters and climb a 58% gradient; the radius when turning a complete circle is 26 meters. The maximum towing capability is 30 tons on roads or 10 tons off road.

The KrAZ-260 has many versions, including the basic cargo/troop carrier, artillery tractor, semi-tractor trailer (which may tow a 27.5-ton trailer), SA-10 SAM launcher, crane, and dump truck. Current operators include Greece, Serbia, Ukraine, and the UN; there are six former operators, including Russia and surprisingly North Korea.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
KrAZ-260	$12,553	D, A	9 tons	21.78 tons	3+24	16	Headlights	Open
KrAZ-260A	$12,608	D, A	9 tons	22 tons	3+24	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
KrAZ-260	129/65	36/18	330	106	Stnd	W(3)	HF1 HS1 HR1
KrAZ-260A	131/66	37/18	380	111	Stnd	W(3)	HF1 HS1 HR1

Fruehauf LARC-15

Notes: The LARC-15 was developed in the late 1950s and early 1960s to provide the US Army with a means to deliver larger cargoes and amounts of troops to shore from assault ships, and inland if necessary. In the US Army, its role has been taken over by helicopters, and the job of amphibious warfare largely taken over by the US Marines, and thus the LARC-15 is seldom seen in the US except in civilian hands or in museums. The Germans and the French also once used the LARC-15, but theirs have also been retired long ago. Most active LARC-15s are in the service of scientific or exploratory agencies and no longer used by the military.

The LARC-15 is essentially a large amphibious truck with a 4x4 off-road suspension, and a boat-like hull made from aluminum plates over an aluminum framework. The LARC-15 looks like its backwards, with the cab at the rear of the vehicle, the engine underneath the cab, and the cargo section up front. The driver normally stands to operate the vehicle. The design allows cargo and troops to be offloaded quickly after the LARC-15 is driven ashore. The bow has a ramp over which a longer ramp with retractable rollers may slide out if necessary. The LARC-15 is also low enough to be easily loaded with forklifts, and the cargo section is large enough to accept standard NATO CONEX and MILVAN containers or equipment of a similar size. The LARC-15 is propelled by a single four-bladed propeller in the water and steered by a combination of a rudder and the wheels; on land, the driver may choose 2-wheel drive (for road use), 4-wheel drive, or crab steering, where the wheels may be turned virtually sideways and the LARC-15 driven at slow speeds to the sides. The LARC-15 is powered by a pair of 300-horsepower Cummins diesels, with one powering each side of the craft. The transmission is automatic, with the driver only selecting high, medium, or low range.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$36,314	D, A	13.61 tons	34.1 tons	2+60	26	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
155/78/42	43/22/12	1363	221	Stnd	W(3)	HF1 HS1 HR1

Pacific Car and Foundry LARC-60

Notes: One of the largest of the “amphibious trucks” ever designed or produced, the LARC-60 was designed in the early 1950s for the US Army to deliver large amounts of troops and/or heavy cargoes to beach landings and beyond. Once used by the US Army, the LARC-60’s role was made unnecessary by the heavy-lift helicopter and hovercraft-type beach assault vehicles; in addition, the amphibious warfare role in the US military was basically made the exclusive province of the Marines in the 1960s. The original designation for the LARC-60 was the BARC.

The LARC-60 has a large boat-like hull, with an additional 4x4 suspension underneath. The bow has a hydraulic ramp in front to unload troops and cargo; in addition, a further ramp may be extended that has retractable rollers to make the loading of cargo into the hold easier. Like the LARC-15, the LARC-60 looks “backwards,” with the crew compartment at the extreme rear and the cargo hold up front and taking up most of the vehicle. There are a total of four GM 6-71 265-horsepower diesel engines, one over each wheel and powering that wheel exclusively (though there are provisions for the other engines to take over the work of a damaged engine). In the water, the LARC-60 is propelled by a pair of propellers; in this case, the two engines power each propeller. The tires of the LARC-60 have a central tire pressure regulation system. The transmission of the LARC-60 is automatic; shifting the gears of the four engines would be a nightmare otherwise. While the standard Load figure is listed below, the LARC-60 can carry an emergency overload of 100 tons in both water and on land. This is extremely stressful on almost every component of the LARC-60, and the maintenance figure for the vehicle should be doubled in any period that an overload is carried.

The LARC-60 was never exported to any other countries’ militaries, and it has long been out of use in the US Army. Most have gone to scrapyards or museums or private collections by now, but a very few are still operating here and there in roles ranging from scientific exploration to oil exploration to tour vehicles.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$164,824	D, A	60 tons	97 tons	5+120	41	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
114/58/50	31/16/14	2271	314	Stnd	W(3)	HF1 HS1 HR1

AM General M54

Notes: This medium 6x6 truck is the immediate predecessor of the M809 5-ton truck (the standard 5-ton truck listed in the *Twilight: 2000 Version 2.2* rules). Most statistics are similar, and in fact the M813 is merely an upgraded M54 (which is, for that matter, merely an upgraded M39). The M54 entered US service in 1950, and large numbers were still used by the time of the Twilight War. The standard vehicle has wooden side rails in the cargo bed that are removable, and a removable canvas cover. Some of these vehicles have a front-mounted winch with a capacity of 9.07 tons. Variants include a dump truck, a tractor-trailer that can tow 13.6 tons, a long wheelbase version with a 6.15-meter cargo bed (the M55, below), a wrecker, a version with a fully enclosed cargo body, and an expandable-side version, and a truck that carries bridging components. Some of these trucks have a ring mount over the commander's position for a weapon. Note that if the M54 or M55 sticks to roads, it can haul 9.07 tons, similarly, the M54 and M55 can tow 6.8 tons cross-country, but 13.61 tons on roads. The M54 and M55 are powered by a Cummins NHC-250 250-horsepower multifuel engine, contained in a unitary powerpack.

This vehicle is in use by the US and countries that have received American aid or have been US allies.

The M54A1C is a version of the M54 with drop sides, allowing them to be loaded from the sides with forklifts. The M54A1C is otherwise the same as the M54 for game purposes. The M55 does not have a drop sides version.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
M54	$7,095	D, G, AvG, A	4.54 tons	13.27 tons	3+20	10	Headlights	Open
w/Winch	$9,363	D, G, AvG, A	4.54 tons	13.3 tons	3+20	10	Headlights	Open
M55	$10,549	D, G, AvG, A	4.54 tons	15.46 tons	3+40	12	Headlights	Open
w/Winch	$12,817	D, G, AvG, A	4.54 tons	15.49 tons	3+40	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
M54	163/82	46/23	295	72	Stnd	W(3)	HF1 HS1 HR1
w/Winch	163/82	46/23	295	72	Stnd	W(3)	HF1 HS1 HR1
M55	147/74	41/21	295	72	Stnd	W(3)	HF1 HS1 HR1
w/Winch	147/74	41/21	295	72	Stnd	W(3)	HF1 HS1 HR1

Caterpillar M520 Goer

Notes: This vehicle was formerly the US Army's standard heavy tactical truck before its replacement by the HEMTT, and it was still found in large numbers in National Guard and even some Reserve units. It never served outside the US Army however, and was thus a relatively rare vehicle outside of US units. The Goer is somewhat of an oddity among trucks, being amphibious and articulated. The front unit is independent of the rear cargo area; the truck can flex and is very sure over rough terrain. In the US's involvement in the Vietnam War, the Goer developed a reputation of being able to go where other trucks could not, and it was one of the preferred resupply vehicles after its introduction in 1966. They achieved a 90% availability rate even though spare parts for the Goer were not an official part of the US Army inventory until 1971. The front-mounted cab has a canvas cover over a tilt, and the windshield could be folded forward. The front of the vehicle has a winch with a capacity of 4.54 tons and 61 meters of cable. Some of these vehicles (M877s) are equipped with a material-handling crane with a capacity of 4 tons. A kit was available that added a ring mount for a weapon over the commander's position, but this was not a standard installation. The engine is a Caterpillar D333 turbocharged diesel developing 213 horsepower. Steering and brakes are power assisted. The suspension is 4x4.

The M559 is a fuel tanker version of the M520. Modifications include a sealed stainless-steel tank in place of the cargo bed and four discharge hoses (two 189 liters per minute, one 375-liter per minute, and one 1135-liter per minute)

Variants include a wrecker able to tow or recover a 10-ton vehicle. The Goer was replaced in US Army service by the HEMTT (below).

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
M520	$12,316	D, A	8.26 tons	18.5 tons	2+32	14	Headlights	Open
M877	$16,316	D, A	8.26 tons	19 tons	2+32	14	Headlights	Open
M559	$17,979	D, A	9463 liters + 237 kg	20.98 tons	2	16	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
M520	118/59	32/17/3	416	78	Stnd	W(3)	HF1 HS1 HR1
M877	115/58	32/16/3	416	78	Stnd	W(3)	HF1 HS1 HR1
M559	109/55	30/15/3	416	78	Stnd	W(3)	HF1 HS1 HR1

FMC M548

Notes: This logistics carrier is based on the chassis and automotive components of the M113 series armored personnel carrier. It does not have armor, but instead carries large loads over terrain too difficult for wheeled load carriers. The number of variants is almost bewildering, ranging from a basic load carrier to radar and electronic warfare variants to minelayers to missile carriers such as for Lance ballistic missiles or the Chaparral SAM system. There is a cab for the crew with doors on either side, and the rear area is accessed by a rear that has double watertight doors. The cargo area is covered by a canvas tilt over bows. The base M548 is amphibious; however, after many sinkings, the amphibious capability of US M548s was removed and water crossing barred by policy. At the front of the vehicle is a winch with a capacity of 9.07 tons. Over the commander's position is a ring mount for a weapon; normally, an M2HB is used, but a weapon does not come with the vehicle.

The M548 is powered by a 204-horsepower Detroit Diesel 6V53 engine. The M548A1 uses the same engine uprated to 215 horsepower. The M548A1E1 is a little-produced stretched variant of the M548A1, about 0.66 meters longer and having one more roadwheel on each side. It is powered by a 6V53T turbocharged diesel engine developing 300 horsepower. The M4548A3 has the same improvements as the M113A3, including the 275-horsepower turbocharged engine, an Allison X200-4 automatic transmission, a driver's station with a steering yoke and gas and brake pedals, and the fuel tanks in the rear on either side of the door. The M548A3's cab is also protected by an NBC Overpressure system.

The M548 of various models is used by some 19 nations; in addition, ISIS is known to have captured and is using two M548s from Iranian units operating in Iraq.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
M548	$8,726	D, A	5.44 tons	12.88 tons	2+22	12	Headlights	Enclosed
M548A1	$8,752	D, A	5.44 tons	12.88 tons	2+22	12	Headlights	Enclosed
M548A1E1	$10,044	D, A	6.05 tons	16.17 tons	2+24	12	Headlights	Enclosed
M548A3	$10,145	D, A	5.44 tons	12.88 tons	2+22	12	Headlights	Enclosed

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
M548	131/91	36/25/4	397	60	Stnd	T2	HF1 HS1 HR1
M548A1	135/95	38/26/4	397	63	Stnd	T2	HF1 HS1 HR1
M548A1E1	146/102	41/28/4	416	105	Stnd	T2	HF1 HS1 HR1
M548A3	162/113	45/31/5	397	102	Stnd	T2	HF1 HS1 HR1

M809

Notes: This is the standard 5-ton truck described in the *Twilight: 2000 Version 2.2* rules. However, the statistics given are not exactly correct. Alternate statistics are given below. The standard vehicle has all-metal construction, with a drop tailgate, removable wooden fence-type side rails, and a tarpaulin cover. There were three wheelbase models: the short wheelbase version was used for tractors and dump trucks, the standard long wheelbase was used for cargo trucks, wreckers and bolsters, and the extra long wheelbase was used for long cargo trucks, tractor wreckers, and expansible vans. The M809 could have a winch in the front bumper with a capacity of 9.07 tons. The M809 series is powered by a Cummins NHC-250 240-horsepower diesel engine, with a manual transmission.

The M813 is the standard cargo version of the M809 series. The M813 could not be loaded from the sides with a forklift, so a variant called the M813A1 was devised, with drop sides. It is otherwise the same as the M813 for game purposes. The M814 is the version of the M813 with an extra long wheelbase and a 6.2-meter cargo bed. There were no drop sides versions of the M814; designed specifically for large, long cargoes, there were no troop seats fitted, but a version with troop seats added on is presented below. The cab is the same as on the M54, but the hood is longer as the engine is larger. This cab may be hard-topped or soft-topped, and the windshield may be folded forward.

The M809 has many variants, including a model with drop sides, a long wheelbase version, a wrecker, a tractor-trailer which can tow 17 tons, an expandable van, a bridging transporter, and various hard cargo area versions which are used as workshops, command posts, or communications vehicles. Some M809s have ring mounts above the commander's position for a weapon. The M809 series is in use by the US and countries that received US aid or are US allies; some 35 countries use the M809 series. An undisclosed number were supplied to China in the early 1990s.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
M813	$8,200	D, A	4.54 tons	14.27 tons	3+26	10	Headlights	Open
w/Winch	$10,468	D, A	4.54 tons	14.57 tons	3+26	10	Headlights	Open
M814	$9,628	D, A	5.37 tons	15.05 tons	3+32	12	Headlights	Open
w/Winch	$11,896	D, A	5.37 tons	15.35 tons	3+32	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
M813	151/76	42/21	295	66	Stnd	W(3)	HF1 HS1 HR1
w/Winch	149/75	41/21	295	66	Stnd	W(3)	HF1 HS1 HR1
M814	145/74	40/20	295	66	Stnd	W(3)	HF1 HS1 HR1
w/Winch	143/72	40/20	295	66	Stnd	W(3)	HF1 HS1 HR1

AM General M939

Notes: This series of 5-ton trucks is based on the M809 series; in fact, a significant portion of the M939 series trucks (the M939A0 versions) are actually M809 series trucks with a Product Improvement Package applied to them. They are improved in three basic areas, the transmission, the transfer case, and the brakes. As the transmission on the M809 was under capacity and mismatched to the output of the engine, it was replaced on the M939 to prevent the engine from overspeeding. In addition, this new transmission is automatic instead of the manual transmission of earlier US trucks. The new transfer case is pressure-lubricated and has the ability to shift into 6x4 mode to conserve fuel. The new brakes are air brakes, which have four times the life of the shoe-based brakes on the M809. In addition, the noise in the cab was reduced, and for the first time, a heavy US military vehicle met the Surgeon General's requirements for noise. Some M939s has a winch in the front bumper that has a capacity of 8 tons with 80 meters of cable. The engine is the same as on the M809 for M939s and M939A1s, but on the M939A2 it is a much lighter Cummins 6CTA8 240-horsepower turbocharged diesel.

The M939 uses standard tires, with dual wheels on the rear axles. The M939A1 and A2 instead use single wheels with oversized tires on the rear axles; this gives the M939A1 and A2 better mobility on soft ground. In addition, the M939A2 has a CTIS (Central Tire Inflation System). The M809 had an unusual air-over-hydraulic brake system; the M939 series uses a commercially available all-air system modified where appropriate for military use. Starting in 1999, M939A2s were fitted with an antilock braking system. Like the M809, there are three wheelbases available – the short wheelbase, used for tractor trucks and dump trucks; the long wheelbase, used for standard cargo trucks and wreckers; and the extra long wheelbase, used for long cargo trucks and expansible vans. The standard

cargo truck is the M923; with a winch, this becomes the M925. Both have drop sides, a canvas cover over bows, and a drop tailgate. The M927 was the extra-long wheelbase version; with a winch, it was the M928. This version did not have drop sides. Like the M814, it did not have troop seats as standard, but they were an option.

There are many variants of the M939 series, including the basic cargo, long wheelbase cargo, a dump truck, a tractor-trailer, an expandable van, a hard-bodied van, a wrecker, and a tanker (with fuel and water variants). About 40,000 of these trucks were produced between 1981 and 1992 for the US, Egypt, Saudi Arabia, and a few other countries.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
M923/A1	$7,964	D, A	4.54 tons	14.34 tons	3+24	10	Headlights	Open
M925/A1	$10,656	D, A	4.54 tons	14.68 tons	3+24	12	Headlights	Open
M927/A1	$9,486	D, A	5.37 tons	15.56 tons	3+30	12	Headlights	Open
M928/A1	$11,763	D, A	5.37 tons	16.07 tons	3+30	12	Headlights	Open
M923A2	$8,490	D, A	4.54 tons	14.03 tons	3+24	10	Headlights	Open
M925A2	$10,763	D, A	4.54 tons	14.53 tons	3+24	10	Headlights	Open
M927A2	$10,072	D, A	5.37 tons	15.33 tons	3+30	12	Headlights	Open
M928A2	$12,389	D, A	5.37 tons	15.83 tons	3+30	12	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
M923/A1	151/76	42/21	295	66	Stnd	W(3)	HF1 HS1 HR1
M925/A1	148/74	41/21	295	66	Stnd	W(3)	HF1 HS1 HR1
M927/A1	142/72	40/20	295	66	Stnd	W(3)	HF1 HS1 HR1
M928/A1	139/70	39/19	295	66	Stnd	W(3)	HF1 HS1 HR1
M923A2	153/77	42/22	295	88	Stnd	W(3)	HF1 HS1 HR1
M925A2	149/75	41/21	295	88	Stnd	W(3)	HF1 HS1 HR1
M927A2	143/73	40/20	295	88	Stnd	W(3)	HF1 HS1 HR1
M928A2	140/71	39/20	295	88	Stnd	W(3)	HF1 HS1 HR1

Oshkosh M977 HEMTT

Notes: The HEMTT (Heavy Expanded Mobility Tactical Truck) is the primary heavy truck of the US Army, and is also used by Bahrain, Egypt, Israel, South Korea, Kuwait, Saudi Arabia, and Taiwan. It is designed for heavy loads and rough terrain. The rear set of wheels and the front set of wheels steer separately, allowing for a tighter turning radius than might otherwise be expected from a truck of the HEMTT's size. The cab is a forward control type; in the A0 and A2 versions, it is basically a plain vanilla cab (though with excellent visibility) with an optional armor kit. The A4 version uses the slightly larger cab from a PLS A1 truck, which has integrated floor armor, optional all-around armor, a roof hatch with a machinegun mount, and air conditioning. The A0 and A1 are powered by a Detroit Diesel 8V92TA diesel engine developing 445 horsepower. A DDECIV version of this engine powers the A2; this is identical for to the A0/A1 for game purposes, but the main difference is that the A2 engine is electronically controlled and configured, and this (at the GM's option) may allow the A2 to accelerate faster and get better fuel milage. (I have a difference in Fuel Consumption listed below.) The DDECIV engine is also easier to maintain, as you can hook a computer up to it and see everything that is wrong or mis-timed with the engine. The A4 uses a Caterpillar C-15 515-horsepower diesel. A0s and A1s are equipped with an Allison HT7400 4F/1R automatic transmission. A2s have an Allison HD 4560P 6F/1R automatic transmission. A4s use the Allison 4500SP 5F/1R automatic transmission. The brakes and steering are power assisted. All axles have differential locks. Suspension on all models except the A4 is leaf springs; the A4 has air suspension, which means that the suspension may be configured to the load.

The M977 is a basic cargo truck. It comes in A0, A2 and A4 models, and has a material-handling crane with a capacity of 5 tons. The M978 is a 9500-liter capacity tanker; only 18 water tanker versions were produced, and there were only A0 and A4 variants. The M983 is used to tow Patriot missile system components. The M984 wrecker is the only an A1 variant; it is currently found in US Unarmored Recovery Vehicles. The M985 is a cargo variant specialized to support the M270 MLRS, and generally tows an M989A1 HEMAT trailer. The M985 GMT (Guided Missile Transporter) is the same as the standard M985 but supports the Patriot missile units. Current models are A4s. The M1120 LHS (Load Handling System) variant is equipped with a Multilft Mk 5 10-ton material-handling crane; instead of a cargo bed with sides, it has a flat cargo area with lockdown and tiedown points. They consist of rebuilt and re-equipped M977 cargo trucks, and come in A2 and A4 variants. The M1977 CBT (Common Bridge Transporter) is a further development of the M1120, and is also a rebuilt M977. It is used to transport and deploy Ribbon Bridges, and comes in A2 and A4 variants. The M1142A2 is an airfield fire fighting truck. The M1075 is used to transport and launch components of the THAAD missile system. The HEMTT A3 was an experimental variant powered by a diesel-electric hybrid engine.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
M977	$15,438	D, A	9.48 tons	27.08 tons	2+40	18	Headlights	Open
w/Armored Cab	$16,564	D, A	9.48 tons	28.18 tons	2+40	20	Headlights	Open
M977A2	$15,593	D, A	9.48 tons	27.08 tons	2+40	18	Headlights	Open
w/Armored Cab	$16,730	D, A	9.48 tons	28.18 tons	2+40	20	Headlights	Open
M977A4	$15,639	D, A	9.48 tons	31 tons	2+40	22	Headlights	Open

w/Armored Cab	$16,770	D, A	9.48 tons	32.1 tons	2+40	24	Headlights	Open
M978	$15,974	D, A	9500 liters + 480 kg	26.69 tons	2	21	Headlights	Open
w/Armored Cab	$17,107	D, A	9500 liters + 480 kg	27.79 tons	2	21	Headlights	Open
M978A4	$16,175	D, A	9500 liters + 480 kg	30.61 tons	2	24	Headlights	Open
w/Armored Cab	$17,313	D, A	9500 liters + 480 kg	31.71 tons	2	24	Headlights	Open
M1120A2	$20,456	D, A	14.06 tons	32.21 tons	2+40	26	Headlights	Open
w/Armored Cab	$21,586	D, A	14.06 tons	33.31 tons	2+40	26	Headlights	Open
M1120A4	$20,557	D, A	14.06 tons	36.13 tons	2+40	27	Headlights	Open
w/Armored Cab	$21,791	D, A	14.06 tons	37.23 tons	2+40	28	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
M977	149/75	41/21	589	127	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	145/74	40/20	589	127	Stnd	W(4)	HF2 HS2 HR2*
M977A2	149/75	41/21	589	121	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	145/74	40/20	589	121	Stnd	W(4)	HF2 HS2 HR2*
M977A4	150/76	42/21	589	153	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	147/74	41/21	589	153	Stnd	W(4)	HF2 HS2 HR2*
M978	151/76	42/21	589	127	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	147/74	41/21	589	127	Stnd	W(4)	HF2 HS2 HR2*
M978A4	152/77	42/22	589	153	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	148/74	41/21	589	153	Stnd	W(4)	HF2 HS2 HR2*
M1120A2	133/67	37/18	589	121	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	130/66	37/18	589	121	Stnd	W(4)	HF2 HS2 HR2*
M1120A4	135/69	38/19	589	153	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	133/67	37/18	589	153	Stnd	W(4)	HF2 HS2 HR2*

*Only the cab is so protected; the rest of the truck is AV1. The cab's floor is AV4Sp.

Oshkosh M1074/M1075 Palletized Load System (PLS)

Notes: These vehicles are heavy 10x10 PLS/DROPS trucks designed to carry a number of standardized NATO pallets and containers, similar in concept to the German MAN 7t truck listed in the *NATO Combat Vehicle Handbook*. The primary difference between the two is that the M1074 is equipped with a material-handling crane with a capacity of 1.77 tons, and the M1075 does not have this crane. Both versions have a winch with a capacity of 9.07 tons and A-frame over the front of the vehicle that pulls cargo onto the load bed by means of rollers. The entire truck can be unloaded in less than one minute without the crew leaving the cab of the truck. An optional feature is a hatch on the roof of the cab with a machinegun mount. The PLS is not normally set up for passengers, though an improvised load may be carried; this number is shown below.

Both trucks are 10x10 drive vehicles, with steering on the rear and front axles. The original trucks were powered by a Detroit Diesel 8V92TA DDECIV turbocharged diesel developing 500 horsepower; current, A1 variants are powered by a Caterpillar C-15 600-horsepower turbocharged diesel. Original PLSs are fitted with an Allison CLT-755 ATEC 5F/1R automatic transmission, while A1 variants are fitted with an Allison HD-4500 Gen 4 automatic transmission. Steering axles are on an air-sprung suspension, while other axles use leaf springs. The original cab is an adaptation of the M977 HEMTT's cab; the A1 versions use a variant of the HEMTT A4's cab. The same armor kit as on the HEMTT is available for the PLS's cab. The Multilift Mk 5 LHS (Load Handling System) is a sort of winch/crane-type unit that pulls cargo onto the cargo bed, either ISO containers up to 6.1 meters long and 10 tons, or flatracks up to the same length and weight, onto the cargo bed. Vehicles that fit onto the cargo bed can also be transported. The cargo bed has several lockdown/tiedown locations to secure the cargo onto the cargo bed.

One variant is equipped with Engineer Mission Modules (EMMs) with possibilities including the M4 Bituminous Distributor, the M5 Concrete Mobile Mixer, and the M6 Dump Body. These modules allow the rapid construction of roads, airfields, and other hard-

surface facilities. The PLS may also carry a HEMTT tanker body. Another variant can carry the Heavy Dry Support Bridge system.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
M1074	$24,734	D, A	14.97 tons	39.92 tons	2+20	28	Headlights	Open
w/Armored Cab	$26,190	D, A	14.97 tons	41.02 tons	2+20	28	Headlights	Open
M1074A1	$25,104	D, A	14.97 tons	40.92 tons	2+20	29	Headlights	Open
w/Armored Cab	$26,560	D, A	14.97 tons	42.02 tons	2+20	29	Headlights	Open
M1075	$22,964	D, A	14.97 tons	37.65 tons	2+20	28	Headlights	Open
w/Armored Cab	$24,420	D, A	14.97 tons	38.75 tons	2+20	28	Headlights	Open
M1075A1	$23,334	D, A	14.97 tons	38.65 tons	2+20	29	Headlights	Open
w/Armored Cab	$24,790	D, A	14.97 tons	39.75 tons	2+20	29	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
M1074	124/63	34/18	379	185	Stnd	W(5)	HF1 HS1 HR1
w/Armored Cab	123/62	34/17	379	185	Stnd	W(5)	HF2 HS2 HR2*
M1074A1	138/70	39/19	379	222	Stnd	W(5)	HF1 HS1 HR1
w/Armored Cab	135/69	38/19	379	222	Stnd	W(5)	HF2 HS2 HR2*
M1075	130/66	36/18	379	185	Stnd	W(5)	HF1 HS1 HR1
w/Armored Cab	128/64	36/18	379	185	Stnd	W(5)	HF2 HS2 HR2*
M1075A1	143/72	40/20	379	222	Stnd	W(5)	HF1 HS1 HR1
w/Armored Cab	141/71	39/20	379	222	Stnd	W(5)	HF2 HS2 HR2*

*Only the cab is so protected; the rest of the truck is AV1. The cab's floor is AV4Sp.

Oshkosh Mk 23 Medium Tactical Vehicle Replacement (MTVR)

Notes: This is basically the USMC's equivalent of the US Army's MTV. It is not, however, the same vehicle. The MTVR will replace existing 2 1/2-ton and 5-ton trucks in the US Marine inventory. The MTVR is all around a better truck, with greater load-carrying capability, a more powerful engine, automatic transmission, and a stronger construction. It can be transported in any transport aircraft the size of the C-130 or greater, and in a stripped-down condition, inside a CH-53 helicopter, or sling-loaded in normal order.

There are nine variants and one subvariant of the Mk 23. The Mk 23 is the basic cargo truck; the Mk 25 is the same truck with the addition of a 9.07-ton capacity winch in the rear. The Mk 27 is an extended wheelbase version of the Mk 23; the Mk 28 is the same truck with a winch in the rear. The Mk 29 is a dump truck version; the Mk 30 is the dump truck with a winch. The Mk 31 is a tractor truck variant. The Mk 36 is a long wheelbase wrecker variant. The Mk 37 is a dedicated ammunition resupply version for the HIMARS MLRS. The Mk 38 is a trailer, also used for resupply of the HIMARS; it uses as many components of the Mk 23 series as possible. The Mk 28C is a base platform for a variety of the Special Purpose Vehicle types, and has a long wheelbase. These special vehicles include tankers, earth augers, and modified COTS bodies.

The Mk 23 is constructed of high-strength aluminum and steel members and panels, except for the hood, which is fiberglass. The cab folds down to reduce height for travel in aircraft, and can take an add-on armor kit. The cab remains reducible with the armor kit installed. The roof of the cab has a hatch with a mount for a weapon. The Mk 23 is powered by a Caterpillar C-12 Advanced Diesel Engine Management (ADEM) engine which develops 425 horsepower, coupled with an Allison HD 4070P automatic transmission. The suspension is 6x6 and has independent coil spring suspension for each wheel. The Mk 23 has a Central Tire Inflation System. The Mk 36 and 31 have hydraulic suspension on their rear axles.

The primary users of the Mk 23 series are the US Marines and Navy. There is limited evidence that Egypt may operate some Mk 23 series vehicles. Greece uses 73 Mk 27 chassis, with the first 18 being equipped as wreckers with equipment supplied by Israel, and 40 being used as resupply vehicles for Greece's Leopard tanks. Iraq operates an unknown number of the Mk 23 series; ten of these were captured by ISIS, one of which was turned into a VBIED and triggered at an unknown location. Britain was the first export country for the Mk 23 series; these are all modified into water and fuel tankers.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Mk 23	$9,034	D, A	6.44 tons	26.22 tons	3+26	20	Headlights	Open
w/Armored Cab	$10,114	D, A	6.44 tons	27.32 tons	3+26	20	Headlights	Open
Mk 25	$11,302	D, A	6.44 tons	26.62 tons	3+26	22	Headlights	Open
w/Armored Cab	$12,382	D, A	6.44 tons	27.72 tons	3+26	22	Headlights	Open

Mk 27	$9,976	D, A	6.44 tons	27.3 tons	3+30	22	Headlights	Open
w/Armored Cab	$11,156	D, A	6.44 tons	28.4 tons	3+30	22	Headlights	Open
Mk 28	$12,244	D, A	6.44 tons	27.7 tons	3+30	22	Headlights	Open
w/Armored Cab	$13,424	D, A	6.44 tons	28.8 tons	3+30	22	Headlights	Open

Vehicles	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Mk 23	148/74	41/21	303	121	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	143/73	40/20	303	121	Stnd	W(3)	HF2 HS2 HR2*
Mk 25	147/74	41/21	303	121	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	142/72	40/20	303	121	Stnd	W(3)	HF2 HS2 HR2*
Mk 27	143/73	40/20	303	121	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	140/70	39/20	303	121	Stnd	W(3)	HF2 HS2 HR2*
Mk 28	142/72	40/20	303	121	Stnd	W(3)	HF1 HS1 HR1
w/Armored Cab	139/70	39/19	303	121	Stnd	W(3)	HF2 HS2 HR2*

*Only the cab is so protected; the rest of the truck is AV1. The cab's floor is AV4Sp.

Oshkosh Mk 48 LVS

Notes: The Mk 48 is a heavy 8x8 truck used by the US Marines since 1983. It is also known as the LVS (Logistics Vehicle System) and the "Dragon Wagon" by the Marines. It is a long vehicle of cabover construction. The cab has a roof hatch with a weapon mount, as well as a heater. The engine is behind the cab. The vehicle has excellent cross-country mobility. The LVS is able to haul 22.5 tons on roads.

Variants include the basic cargo/troop carrier (Mk 48/17), a flat-decked logistics platform (Mk 48/14), a recovery vehicle (Mk 48/15), a self-loading transporter (Mk 48/18) and a tractor truck that may pull a 14-ton trailer (Mk 48/16). The Mk 48 is designated by the Mk 48 designation and the Mk xx of the body the Mk 48 is equipped with, as in Mk 48/17 for the basic cargo body, consisting of a Mk 48 truck and the Mk 17 cargo body (with Material Handling Crane). The Mk 48A1 has slight but significant upgrades to the Mk 48 design: a revised battery box, an extra cab entry step on both sides, a modified air intake cover, and added handles and steps to ease climbing on the top and sides of the truck. For game purposes, the Mk48A1 a is otherwise identical to the Mk 48.

The Mk 48/14 is a flatbed unit which has a 6.1-meter cargo bed that features numerous lockdown and tiedown points for cargo. It is optimized for carrying ISO containers and SIXCON units. One Mk 48 can tow an additional Mk 14 module; this is known as a TT configuration (Tandem Tow). The Mk 48/17 is a shorter (4.9 meters) flatbed equipped with a Material Handling Crane (MHC) with a capacity of 6.8 tons. The Mk 48/18 is a self-loading flatbed able to carry things like ribbon bridges, boats, smaller containers, and SIXCON modules. The front of the load platform has a "stick-figure"-shaped Front Lift Adapter (FLA), which does the loading. Adding benches to the these three variants is possible; however, this is rare, as truck transport of Marines is generally done by the Mk 23 MTVR and HMMWVs.

The Mk 48 is powered by a Detroit Diesel 450-horsepower engine with an Allison automatic transmission. (Other sources have this powering as by a Cummins C-12 425-horsepower diesel; I have decided to go with the entry on Wikipedia, which is a newer source.) The cab is a derivative of that of the HEMTT and M1074/1075. It carries two crew and has a hatch in the roof with a ring mount for a weapon. The cab may mount add-on armor modules. The Mk 48 is configured into a Front Power Unit (FPU) coupled with a Rear Body Unit (RBU). The FPU may be driven on its own.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Mk 48/14	$9,607	D, A	11.34 tons	47.63 tons	2+20	28	Headlights	Open
w/Armored Cab	$10,812	D, A	11.34 tons	48.73 tons	2+20	28	Headlights	Open
Mk 48/17	$16,407	D, A	9.07 tons	47.63 tons	2+20	28	Headlights	Open
w/Armored Cab	$17,612	D, A	9.07 tons	48.73 tons	2+20	28	Headlights	Open
Mk 48/18	$19,607	D, A	11.34 tons	47.63 tons	2+20	28	Headlights	Open
w/Armored Cab	$20,812	D, A	11.34 tons	48.73 tons	2+20	28	Headlights	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Mk 48/14	105/54	29/15	568	167	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	104/53	29/14	568	167	Stnd	W(4)	HF2 HS2 HR2*

Mk 48/17	105/54	29/15	568	167	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	104/53	29/14	568	167	Stnd	W(4)	HF2 HS2 HR2*
Mk 48/18	105/54	29/15	568	167	Stnd	W(4)	HF1 HS1 HR1
w/Armored Cab	104/53	29/14	568	167	Stnd	W(4)	HF2 HS2 HR2*

*Only the cab is so protected; the rest of the truck is AV1. The cab's floor is AV4Sp.

FAP-2026 BS/AV

Notes: This is one of the standard heavy trucks of Yugoslavia, and is also in use by Saudi Arabia. It is primarily used as a prime mover, meaning that it carries items such as ammunition, multiple rocket launchers, and scissors bridges, and tows artillery and other heavy specialized trailers. It is sometimes used as a regular troop carrier and cargo hauler, however. The cargo area has drop sides and tailgate, and may be covered with canvas over bows. The FAP-2026 BS/AV may tow up to 7.2 tons. This truck is powered by a Mercedes-Benz OM402 diesel engine developing 279 horsepower. Construction is of tubular steel beams with steel sheets over that, and structural steel beams. The truck is 6x6 and has central tire regulation. The cab is constructed like the rest of the vehicle, and features an adjustable driver's seat. The cab is insulated against cold and heat and has a cab heater. In the front bumper is a 10.2-ton capacity winch with 86 meters of cable.

The FAP-2026 BS/AV is currently used by Croatia and Serbia, as well as Syria.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$10,277	D, A	10 tons	21 tons	2+20	16	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
129/66	36/18	310	82	Stnd	W(3)	HF1 HS1 HR1

FAP-2832 BS/AV

Notes: This is another heavy truck used by Yugoslavia, similar to the FAP-2026 BS/AV. This truck is more likely to be used for general cargo and troop-carrying duties than the FAP-2026 BS, but is also used to carry a multiple rocket launcher, carry ammunition, or tow field guns. The vehicle has a drop tailgate, and a cargo area covered by canvas over bows. The cab is compatible with the FAP 2026 BS/AV, and has the same form. Behind the cab is a spare wheel in a holder which allows the two-man crew to take the wheel down from its holder. There is also space for vehicle tools and for the personal equipment of the crew. The cab is constructed like the rest of the vehicle, and features an adjustable driver's seat. The cab is insulated against cold and heat and has a cab heater. In the front bumper is a 10.2-ton capacity winch with 86 meters of cable. The FAP 2832 BS/AV is powered by a variant of the FAP 2026 BS/AV's engine, a Mercedes-Benz OM403 diesel developing 320 horsepower.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
$12,392	D, A	9 tons	25 tons	2+36	20	Headlights	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
127/64	36/18	450	90	Stnd	W(4)	HF1 HS1 HR1