The Family of Medium Tactical Vehicles (FMTV)

The Family of Medium Tactical Vehicles (FMTV) is a series of vehicles consisting of up to 23 variants and 17 different models, ranging from 2.5-ton to 5-ton payloads. The Department of the Army announced February 12, 2010 that it had re-evaluated the contract award decision for its Family of Medium Tactical Vehicles (FMTV) originally made on Aug. 26, 2009. This change was based on Government Accountability Office's (GAO) recommendations. Accordingly, Oshkosh Corp. was awarded a competitive, five-year requirements contract for production of up to 12,415 trucks, 10,926 trailers, and associated support and engineering services. The total estimated contract value at award was $3.023 billion. The Army originally awarded the contract to Oshkosh, but BAE Systems, Tactical Vehicles LP and Navistar, LLC filed GAO protests against the contract award to Oshkosh. From Dec. 21, 2009, to Jan. 22, 2010, the Army re-evaluated the proposals in accordance with the GAO's recommendation. Subsequently, there was an Office of the Secretary of Defense peer review affirming the Army's reevaluation process. Oshkosh already produces the Army's Family of Heavy Tactical Vehicles (FHTV) and works with nearly every one of the FMTV current component suppliers across the country as integral partners in other military programs. Oshkosh is the only current manufacturer of both medium and heavy tactical wheeled vehicles in the U.S. defense industry, having produced more than 70,000 military-class vehicles in its manufacturing facilities.

The Family of Medium Tactical Vehicles (FMTV) is a series of fourteen variant vehicles based on a common chassis, which vary by payload and mission requirements. The Family of Medium Tactical Vehicles consists of of tactical wheeled vehicles based on a common truck cab, chassis, and internal components and two tactical trailers. The components are primarily non-developmental items integrated in rugged tactical configurations. The FMTVs, all automatic, come in 14 variations of 2.5-ton cargo and van models and 5-ton cargo, tractor, van, wrecker, tanker and dump-truck models. Eighty percent commonality of parts - same engines, transmissions, drivelines, power trains, tires, cabs - in the new trucks is expected to save the Army millions of dollars in maintenance costs. Lighter-weight construction will cut fuel costs dramatically. The vehicle's cab-over design - in which engine, fluids and hydraulics are all accessible in one place, under the cab - makes regular maintenance much easier.

What soldiers do like about the FMTV is its comfortable ride, a shorter turning radius that makes it more maneuverable, and the improved cargo roof. The pitch of the tarp-over-steel bow was increased and replaced tarp over aluminum, after a number of the cargo roofs collapsed under heavy loads.

The FMTV has an unparalleled history of superior reliability and off-road mobility, with an incomparable 13,333 mean miles between hardware mission failure and 98 percent operational readiness. Stewart & Stevenson has produced more than 20,000 FMTV trucks and trailers and has established a record of 37 consecutive months of 100 percent on time delivery of trucks, 28 consecutive months of trailer deliveries and 23 straight months without missing a schedule for spares.

The LMTV (Light Medium Tactical Vehicle) has a 2.5-ton capacity (cargo and van models). The MTV (Medium Tactical Vehicle) has a 5-ton capacity (cargo and long-wheelbase cargo with and without materiel handling equipment, tractor, van, wrecker, and dump truck models). Three truck variants and two companion trailers, with the same cube and payload capacity as their prime movers, provide air drop capability. Van and tanker variants of the MTV will be developed concurrent with the production of other models. The FMTV will perform line haul, local haul, unit mobility, unit resupply, and other missions in combat, combat support, and combat service support units. Vehicles will operate

worldwide on primary and secondary roads and trails. The FMTV will replace over-aged and maintenance-intensive trucks currently in the medium tactical vehicle fleet.

The FMTV replaces obsolete and maintenance-intensive trucks currently in the fleet and performs local and line haul, unit mobility, unit resupply, and other missions in combat, combat support and combat service support units. It is rapidly deployable worldwide and operates on primary and secondary roads, trails, and cross-country terrain, in all climatic conditions. Commonality of parts across truck chassis variants significantly reduces the logistics burden and operating and support costs. New vehicle applications are being developed to meet new requirements.

The Army's medium tactical vehicle inventory, which consisted of approximately 95,460 2-1/2-ton and 5-ton vehicles, was costly to maintain and operate. Also, the 2-1/2-ton vehicle had key operational limitations. The Army planned to modernize the medium tactical vehicle inventory through the FMTV Program. The FMTV Program features non-developmental items whereby existing commercial components are modified as required and integrated into vehicles intended to meet military needs. The FMTV Program was structured to acquire 85,401 medium tactical vehicles by FY 2021. The Army estimated that the total cost of the Program would be $16.3 billion (then-year dollars).

In October 1991, the Army awarded a 5-year, firm-fixed-price contract, valued at $1.2 billion, to Stewart and Stevenson Services, Incorporated (the Contractor), for the production of 10,843 vehicles. As of June 30, 1995, the FMTV Program was about 18 months behind schedule. The Army has awarded a new four-year, multi-year plus option year contract with Stewart and Stevenson (S&S), beginning with FY98 requirements. This new contract is for the "A1" version of the FMTV, which includes a 1998 Environmental Protection Agency-certified engine, upgraded transmission, electronic data bus, an anti-lock brake system and interactive electronic technical manuals. To be built are the new FMTV 2.5-and five-ton tactical trailers that have the same cube and payload capacity as their prime mover. In July 2003 Stewart & Stevenson Services, Inc. (NYSE: SVC), a leading manufacturer, distributor and provider of service for industrial and energy related equipment, and a manufacturer of medium tactical vehicles for the U.S. Army, announced that its subsidiary, Stewart & Stevenson Tactical Vehicle Systems, LP (TVS), has been awarded three contract modifications by The U.S. Army Tank-automotive and Armaments Command (TACOM) totaling more than $80 million for Family of Medium Tactical Vehicles (FMTV) trucks and trailers. The contract modifications include a $42 million option that calls for the delivery of 44 HIMARS Launcher Chassis, 104 HIMARS Resupply Vehicles and 104 Resupply Trailers. Deliveries are scheduled to be completed by December 31, 2004.

By early 2000 more than 7,600 original-model Family of Medium Tactical Vehicle trucks, known as the A0 models, had been delivered to units Armywide since January 1996 as part of a $1.4 billion, five-year contract with the Stewart and Stevenson Company of Houston, Texas. The A0 trucks began replacing the Army's aging, 30-year-old fleet of 2.5-ton and 5-ton trucks, whose parts were becoming obsolete.

The Army's old 5-ton trucks were involved in 428 accidents, 128 of them roll-overs that killed 41 soldiers and 13 civilians, between 1992 and 1995 When the Army chose to develop new trucks, safety was a key concern.

The FMTV program initially experienced some bad press following 13 accidents involving A0-model trucks. One of the accidents resulted in a rollover attributed to a driveline design flaw. A March 1998 safety message to drivers noted that the vehicles can operate at fairly high highway speeds. But at the 45- to 58-mph range, they found a resonance or

vibration in the engine-transmission-driveshaft combination. The vibration stressed the truck's u-joints, which could cause the driveshaft to fail.

Before the recall, soldiers were allowed to operate the vehicles at 55 mph, and most didn't have any real problems. When the 'safety gram' came down because of the vehicle mishaps, drivers had to drop their speed 30 mph. Stewart and Stevenson subcontractors continued to upgrade A0-model FMTVs to reinforce the vehicles' drivelines and u-joints. Besides the company's own on-site retrofit facility, co-located with its assembly facility in Sealy, Texas, retrofit centers were located throughout the Army. In December 1999 three were operating at Fort Bragg, where soldiers from the 528th awaited retrofit of some 375 vehicles. Once the vehicles are retrofitted, soldiers can drive them at normal operating speeds, after completing several simple checks and displaying a black letter "D" in the vehicles' windshields so MPs know they're good to go. As of 01 December 199, 40 percent, about 4,100, of the Army's FMTVs had been retrofitted, and some 6,000 FMTVs remained to be retrofitted.

The trucks had a number of headaches, with numerous glitches truck unit soldiers experienced. Their "headaches" included alternator, battery and headlight failures. Other problems - such as bent tail-light brackets, doors and tailgates - are primarily due to the large number of aluminum parts that replace the sturdier steel parts of the Army's old trucks. Rear bumpers came off in some instances when drivers failed to raise the trucks' mud flaps before backing up. When the flaps are down, the wheels ride over them, putting so much pressure on the bumper it tears off.

The old 800-series trucks, reputed to be among the best inventions ever for the Army, weren't without problems after initial fielding either. In fact, there were four versions of that vehicle. And when the Humvee was first introduced, broken bolts were a common problem.

In early 2000 Army Acquisition Executive Paul J. Hoeper approved production of modified (A1) versions of the 2S-ton (M1087A1) and 5-ton (M1083A1) trucks after prototypes successfully completed 90,000 miles of testing at Aberdeen Proving Ground, Maryland. This will produce and field a truck with eight times the reliability, availability, and maintainability of the old `deuce-and-a-half' truck it replaces. The new M1087A1 and M1083A1 trucks have more powerful diesel engines, seven-speed automatic transmissions, improved brakes, added corrosion protection, computerized engine diagnostics, and heavy-duty drive-line engine-transmission-differential connections. The trucks also will have more durable seating material and cargo tarps, sturdier door hinges, and reinforced footholds to make it easier to enter the cargo section.

The A1's will be manufactured according to military specifications, but the family of medium tactical vehicles (FMTV) contractor, Stewart and Stevenson, Inc., of Houston, Texas, will use commercial components. This process will enable the Army to purchase more trucks at less cost. The new trucks have been engineered to make them easier to airlift, and some models will be designed specifically for airdrop. According to officials, the Army needs 85,000 new trucks to replace its aging fleet. Soldiers should start receiving the new A1's in March. FMTV trucks issued to Army units since January 1996 will be refitted with stronger U-joints and flywheel housings and larger diameter drive shafts.

The US Army commenced a competition to add a second supplier to build Family of Medium Tactical Vehicles in 1998. Oshkosh Truck Corp. received a $1.9 million contract in November 1998 to compete with one other truck manufacturer to qualify as a second source to produce three trucks for testing by the DoD under Phase I of its second source supplier qualification plan. The three Oshkosh FMTVs produced under this contract have

successfully completed Phase I testing. The fiscal year 2000 Defense Authorization Act cancelled the second source program; however, it directed the Army to go forward with a competition for 100% of the next procurement.

Initially, the FMTV competition was scheduled to begin in October 2000 with the issuance of a request for proposal ("RFP") to retrofit three trucks for testing, to be followed by a period of testing, another RFP for firm production pricing and then conclude with a contract award in March or April 2002. In late September 2000, the DoD delayed the competition to permit engine manufacturers more time to develop engines for the FMTV that will be compliant with U.S. Environmental Protection Agency regulations for diesel engines sold in 2004. The DoD's RFP issued in December 2000 requires retrofit of six trucks for testing. The period for follow-on testing and submission of production pricing was extended so that a contract award for production of approximately 14,000 FMTV trucks and trailers was planned by the DoD for the second quarter of fiscal 2003.

In April 2003 the United States Army awarded the Family of Medium Tactical Vehicles (FMTV) A1 Competitive Rebuy production contract to Stewart & Stevenson Tactical Vehicle Systems, LP (TVS), a division of Stewart & Stevenson Services, Inc. (NYSE: SVC). The contract, potentially worth more than $2 billion, was issued by the Army's Tank-automotive and Armament Command (TACOM) and includes production that could reach nearly 11,000 FMTV trucks and trailers over five years, with an option for 12,000 additional vehicles.

Every identified problem in the original A0 model will be fixed in the newer model Al. The manufacturer did a good job of going to the field and talking to soldiers to find out what needs to be done. Noted difficulties aside, the original A0-model FMTV demonstrated more than double the contract-specified reliability requirements for some variants. Those results prompted the Army to almost double the standards for the A1 model FMTVs. The contract required that the A1 operate for 5,500 miles without any hardware failure. During those tests, the vehicles recorded more than 13,000 failure-free miles.

The FMTV A1 series includes a 1999 Environmental Protection Agency-certified engine, upgraded transmission, electronic data bus, an anti-lock brake system and interactive electronic technical manuals. Developmental testing of the A1 model truck in FY98-99 uncovered several additional problem areas, and new performance, reliability, and safety issues have arisen: leaf spring breaks, electromagnetic interference from the new engine electronic control module, and frame integrity. Frame integrity is perhaps the most troubling since it may be the most difficult to fix.

According to the DOT&E, based on prior operational test and evaluation and current production testing, the FMTV trucks continue to be effective and suitable. The reliability for each of the variants has improved from the A0 to the re-buy trucks. The minor changes between the A1 truck and the re-buy trucks do not require additional operational testing. Residual concerns can be addressed in the planned production verification tests and the limited user tests of the expansible van, the load-handling system truck-with-trailer, and the 10-ton dump truck. The Test and Evaluation Master Plan will be updated to reflect this. The program intends to provide armor kits for use on trucks deployed to Iraq. The Test and Evaluation Master Plan will include plans to conduct survivability testing of trucks with these armor kits. Although safety issues related to failed drivelines have been addressed with modified driveshafts, the program office is investigating an improved driveshaft.

http://www.globalsecurity.org/military/systems/ground/fmtv.htm

Drive - 4 x 4 (full-time) with locking inter axle differential
Transmission - Allison, Fully automatic, electronically controlled
Full-time All-wheel Drive - Integral transfer case with locking inter axle differential
Axle – Rockwell

http://www.govplanet.com/for-sale/Trucks-MTV-1997-Stewart-%26-Stevenson-M1083-MTV-6x6-Cargo-Truck-Virginia/685565 - LMTV 1081

- **M1078 FMTV** Standard Cargo

- **M1079 FMTV** Van

- **M1081 FMTV LVAD** Standard Cargo LVAD
- 


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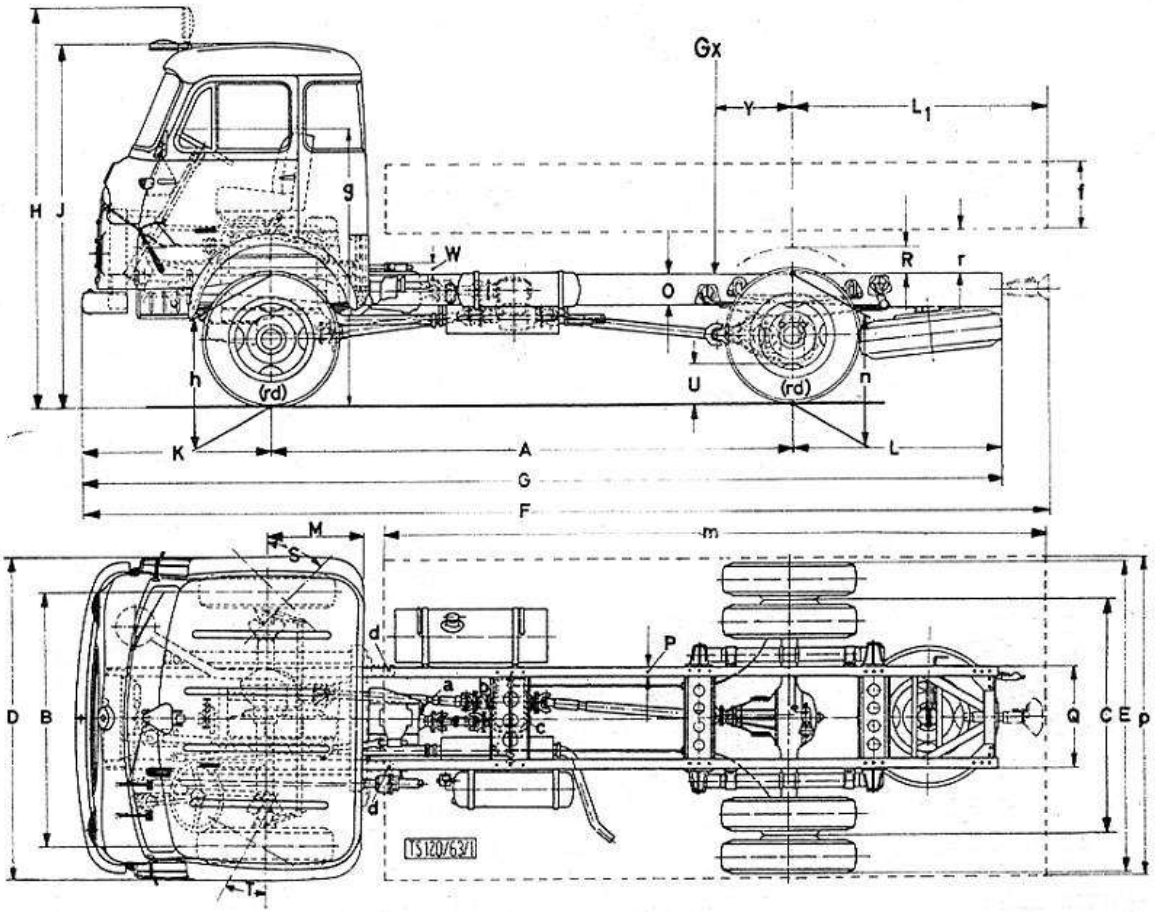
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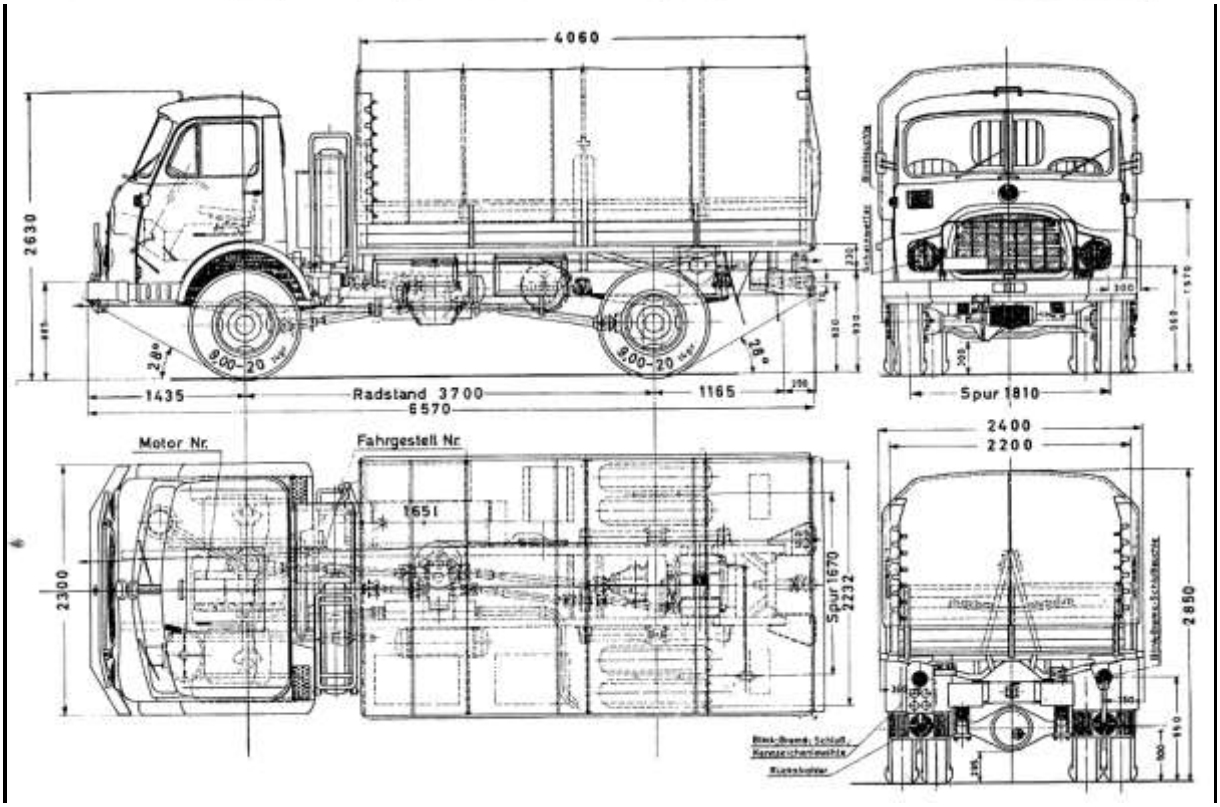
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6570
1165
Spur 1810
2400
2200
Motor Nr.
Fahrgestell Nr.
1651
2300
Spur 1670
2232
2850

Fahrgestelle der Typenreihe 680z Allrad

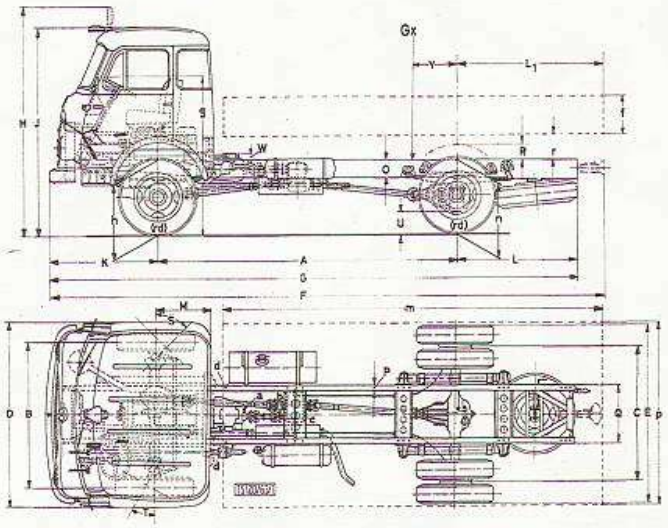
Richtlinien für die Ausführung von Aufbauten

	Typ	Art des Fahrgestelles
1	680z Allrad	Lastkraftwagen (aAz)
2	680zgk Allrad	Dreiseiten-Kipper (aAzgk

Nutzbare Rahmenlänge für Aufbauten:

680 z Allrad = 4500 mm

680 zgk Allrad = 3285 mm



Abmessungen in mm

Tab. 1

	Fahrgestell-Typ	A	B	C	D	E	F	f	G	g	H unbel.	h*) unbel.	h*) belastet	J unbel.	K	L	L1¹)	M	m	n*) unbel.	n*) belastet
1	680z Allrad	3700	1810	1670	2300	2235	6855	500	6535	—	2820	960	900	2600	1350	1485	1815	685	4690	1040	920
2	680zgk Allrad	3200	1810	1670	2300	2235	5660	500	5320	—	2820	960	900	2600	1350	770	1470	685	3640	1040	920

	O	P	p	Q	R	r	S	T	U	W	a	b	c (rd)	Wendekreis
1	220	70	2270	725	195	400	45°	35°	275	70	Nebenabtrieb v. Wechselgetriebe	Nebenabtrieb v. Zwischengetriebe	Nebenabtrieb v. Zwischengetriebe	15,7
2	220	70	2240	725	195	400	45°	35°	275	70			9,00-20 (12 pr)	15,0

*) Bei den Maßangaben h und n handelt es sich um ungefähre Maße, die zulässige Ausführungstoleranz beträgt ± 30 mm.

Die strichliert eingezeichnete Pritsche entspricht der Steyr-Ausführung.

Bei Steyr-Kipperfahrzeugen (Wirz-Anlage) beträgt der Kippwinkel der Kipperpritsche seitlich und rückwärts 50°.

Die Holzstärke der Bordwände = 30 mm.

1) Diese Maßangaben sind ohne Beschläge (mit Beschlägen bei Kippern um 30 mm, bei Normal-Pritschen um 50 mm mehr).

Zeichenerklärung:

A = Radstand
B = Spur vorne
C = Spur hinten
D = Größte Breite des Fahrerhauses
E = Größte Breite über Hinterrad-Reifen
F = Größte Länge des Fahrgestelles mit Anhängekupplung
f = Höhe der Ladepritsche (b. Steyr) Lichtmaß
G = Größte Länge des Fahrgestelles
g = Höhe Lenkrad-Oberkante
H = Größte Höhe mit Warndreieck
h = Höhe Rahmenoberkante bei Mitte Vorderachse
J = Größte Höhe ohne Warndreieck
K = Überhang vorne
L = Rahmen-Überhang hinten
L1 = Überhang-Pritsche (b. Steyr)
M = Abstand Vorderachse—Fahrerhaus-Rückwand
m = Länge d. Ladepritsche (b. Steyr) Lichtmaß
n = Höhe Rahmenoberkante bei Mitte Hinterachse
O = Rahmenträger-Höhe
P = Rahmengurt-Breite
p = Breite Ladepritsche (b. Steyr) Lichtmaß
Q = Rahmenbreite
R = Max. Raddurchfederung
r = Maß von Rahmenoberkante bis Ladeflächenoberkante
S = Radeinschlag innen
T = Radeinschlag außen
U = Bodenfreiheit
W = Schaltdom-Überstand
(rd) = Reifenabmessung

Gewichte: Ohne Fahrer, ohne Reserverad und ohne Ausrüstung, jedoch mit vollem Kraftstoffbehälter.

Tab. 2

Typ	680z Allrad	680zgk Allrad ¹)
Fahrgestell mit Fahrerhaus	3960	3930
Achslast vorne	2550	2540
Achslast hinten	1410	1390
Zulässige Achslast vorne	3700 ²)	3700 ²)
Zulässige Achslast hinten	8000 ²)	8000 ²)
Zulässiges Gesamt-Gewicht	11500	11500
Tragfähigkeit des Fahrgestelles	7540	5570
Zulässiges Lastzug-Gewicht	20000	20000

1) Bei Verwendung von 9,00—20 Super 14 pr Reifen und verstärkten Federn, zulässiges Gesamtgewicht 12.000 kg möglich.

2) Im Rahmen des zul. Gesamt-Gewichtes.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Drive - 6 x 6 (full-time) with locking inter axle differential

Full-time All-wheel Drive Integral transfer case with locking inter axle differential

Rockwell axles -Front, Ft-rear, and R-rear

http://www.govplanet.com/for-sale/Trucks-MTV-1997-Stewart-%26-Stevenson-M1083-MTV-6x6-Cargo-Truck-Virginia/685565 MTV 1084, 1086,1088A1 Tructor

- **M1083 MTV** Standard Cargo

- **M1084 MTV** Standard Cargo Truck with MHE
- **M1085 MTV LWB**
- **M1086 MTV LWB** with MHE
- **M1087 MTV** Expandable Van
- **M1088 MTV** Tractor
- **M1089 MTV** Wrecker
- **M1090 MTV** Dump
- **M1091 MTV** Fuel/Water Tanker
- **M1093 MTV LVAD** Standard Cargo
- **M1094 MTV LVAD** Dump

Stewart&Stevenson
M1096 A1R MTV Long-Wheelbase Chassis

Stewart & Stevenson M1088A1 MTV 6x6 Tractor Truck


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Stewart & Stevenson M1086 MTV 6x6 Cargo Truck w/Rear Mounted Crane

Transmission


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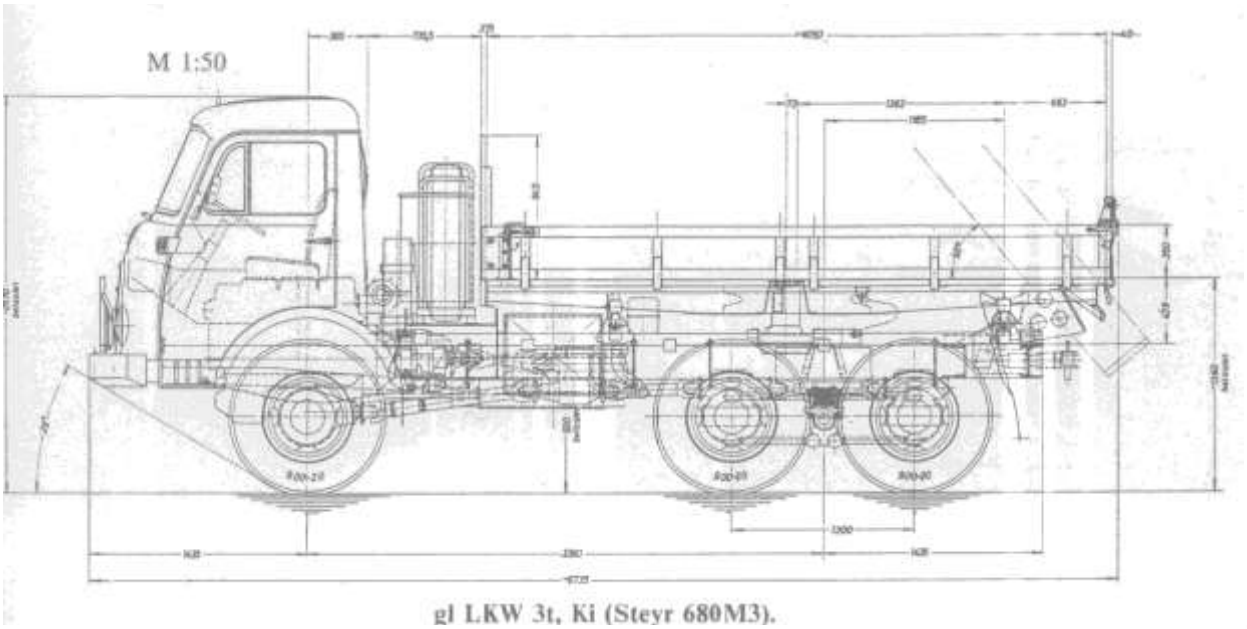
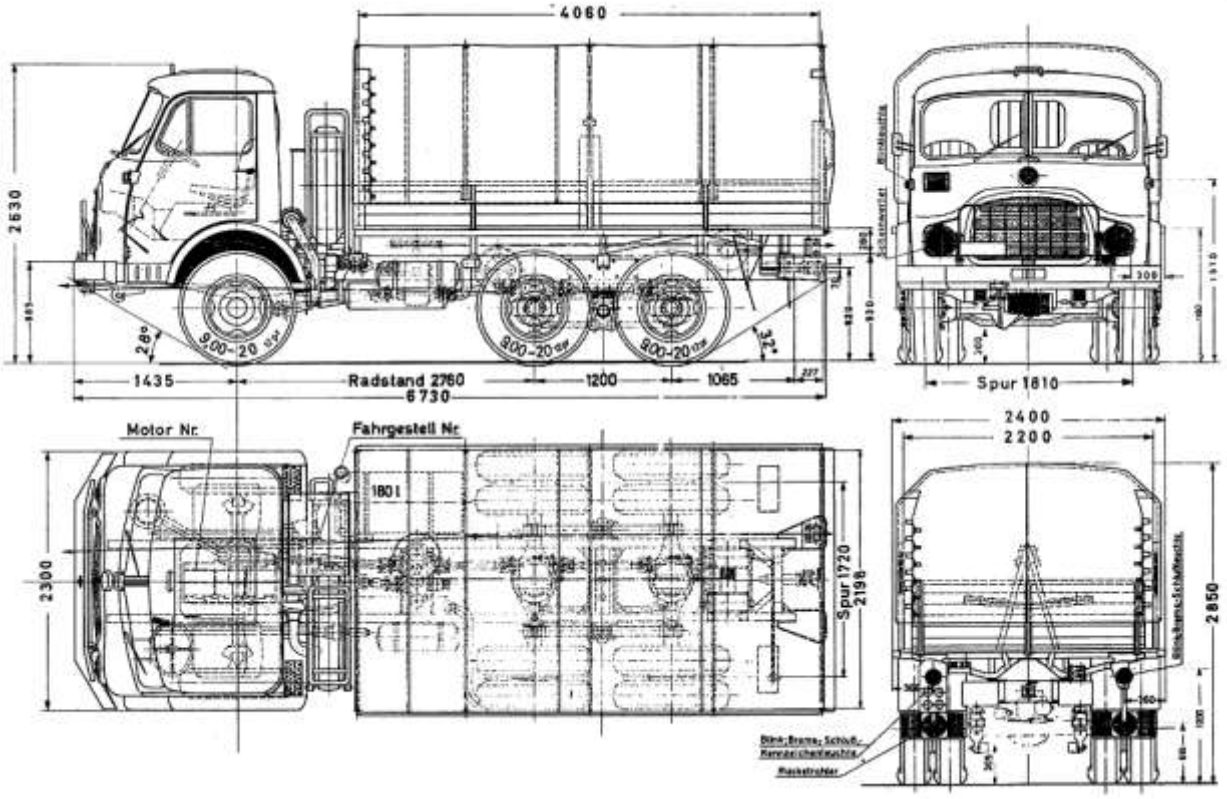
88V PLANET



gl LKW 3t, Ki (Steyr 680M3).



http://www.truckscout24.de/fahrzeugdetails/LKW-Steyr-Steyr-A-680-G-Werkstattwagen-mit-Ausstattung-Armee-Sonstiger-Sonderaufbau/16274331/1

https://www.aignertrucks.com/de/fahrzeuge/aktuell/260-3x-steyr-1491-10t-6x6

http://www.truckscout24.de/fahrzeugdetails/LKW-Steyr-12M18-4x4-Militär-Bundesheer-BW-Pritsche-Plane/15994409/1

Hersteller Steyer 680M

www.truckscout24.de/lkw/gebraucht/alle/**steyr**

meritor 14x drive axle

Profitably Managed Cyclicality

- Optimized capacity model
  - Invested to reduce premium and layered capacity costs
  - Managed customer volume expectations
- Increased base pricing and managed commodity cost recovery mechanisms
- Rationalized European manufacturing footprint
- Completed successful ramp up of FMTV
- Strategically positioned on HMMWV Recap and JLTV programs
- Launched LCV axle in India market (< 6 Ton)

Commercial Truck & Industrial	FY12
Sales	$3,612
Segment EBITDA	270
Percent of Sales	7.5%

Steyr 1291 4x4 truck

The name Steyr comes from the Austrian city Steyr, the home town of the large and former Steyr-Daimler-Puch company. Since the 1990's the Steyr's Truck division is part of the European truck manufacturer MAN. Currently the truck factory in Steyr - Austria produces MAN trucks and parts.

The Steyr 91 truck series is a successful continuation of the Steyr 90 truck line. The Steyr 1291 is a 14 ton truck based on the Steyr 1290 with a frontlenker / frontsteer cabin.

This particular truck has been used by the Österreichische Elektrizitätswirtschafts-AG (state electricity company in Austria) for infrastructure service in mountainous terrain.

The 4x4 version of the Steyr 1291 was also produced as the military version 91M from 1983 and was sold to Canada, Saudi Arabia and Greece. The Steyr 91 series is still produced by the CNHTC factory in China together with the popular WD 615 engine since 1984.

The Steyr WD615 diesel engine is currently produced by the Weichai Factory in China in various power ranges and euro emission norms.

The 6 cylinder WD 615 Turbo line engine in the Steyr 1291 produces 190 Kw / 260 Hp. For a 14 ton 4x4 truck the engine provides sufficient power and torque in many circumstances.

For off-road use it has differential locks on the front and rear axle with a 6 gear splitter gear box. Thru the transferbox both 4x4 and 4x2 can be selected, if 4x2 is selected the front axle is disconnected for better fuel economy

http://expedition-trucks.com/brokers/steyr-1291-4x4-truck-history-and-background

https://de.wikipedia.org/wiki/Steyr_91

STEYR-PUCH, (1291.310.43) 4x4 diesel Truck, 1986

Since the Austrian truck market was piece numerically very restricted, the structures of the European commercial vehicle manufacturers gradually changed in the 1960s (collaborations, acquisitions) and liberalization of markets (EEC) have emerged, began Steyr a to think about realignment of truck manufacturing. Exports to the EEC and EFTA countries were no longer cover its costs. Yields and quantities fell dramatically by mid-1960s. Cooperation negotiations

with other truck manufacturers, including MAN, Magirus-Deutz, Scania, Fiat and Daimler-Benz were the result, but failed.

It was decided to develop of a new series, which also cleanup of types of and a standardization of components should take place. The result was the very successful especially in Austria BR 90 series, the competition the European in terms of quality and cost effectiveness was equal. Also the Steyr was presented in 1969 590-690 series which produced cabin was equipped with a modified under license from Hanomag in Steyr and series and Steyr replaced the Steyr 380-480 580-586 series.

https://de.wikipedia.org/wiki/Steyr_90-Plus_Serie

From the all-wheel drive versions of the Steyr 1291, and 1491 were military vehicles (Steyr 91M) was developed and in 1983 presented.

https://en.wikipedia.org/wiki/Steyr_90_series

http://www.zuckerfabrik24.de/steyrpuch/steyr90_1.htm

Steyr 790 four-wheel drive (4x4)

from 1970

With a 3.2 m wheelbase of the four-wheel drive was offered in 2 variants: as a tipper 6.55 to payload and Chassis with 8.4-to-load capacity (incl. Building)

The 790 four-wheel drive was initially supplied only with the 132 HP suction motor.

From 1971, also available with 150 HP, from 1974, only with the charging engine.

- With introduction of the new Direct-injection engine was also the engine of the still-built military Truck types 680 M 680 M3 on the engine WD 610 changed.

As with the 790 fire fehrgestell in 1976 came about when 790 all-wheel-drive firefighting chassis already the more powerful engines WD 612, the follow-up series 91: There was a variant with a 3.2 m wheelbase and the 170 HP supercharger engine and two variants with a 3.6 m wheelbase and with either 170 HP or 190 HP (charge air cooled) performance.

Steyr 990 all-wheel drive (4x4)

from 1969

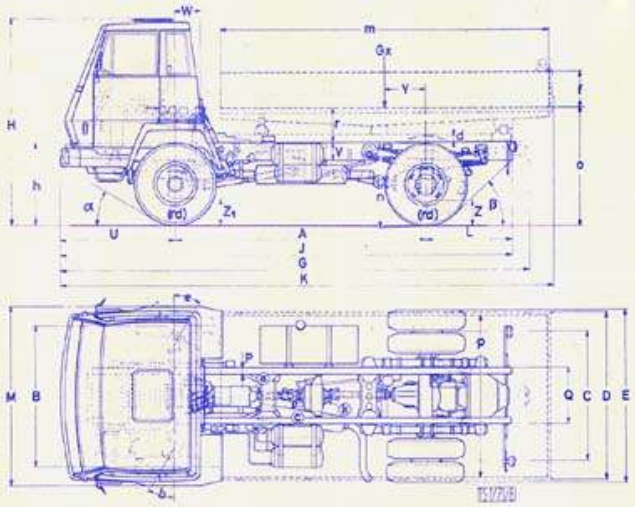
Without the predecessor of 1970, introduced in 990 four-wheel drive with 16-to-Perm ges.Wt.

As a four-wheel drive trucks with 8.1 to payload, and four-wheel drive chassis, both with a 3.5 m wheelbase.

In 1973, the offer was expanded with the Version of the 3.8 m wheelbase chassis and 3.8-m (short Chassis) for trucks.

RICHTLINIEN FÜR AUFBAUTEN FAHRGESTELLE DER TYPENREIHE 1290.4x4

T. 252/72	1290.230/K35/4x4 1290.230/K38/4x4	**230** PS (DIN) bei 2600 U/min.
2. AUSGABE		ZUL. GESAMTGEWICHT 16 - 19t



A-A1 = Radstand
B = Spur vorne
b = Radeinschlag außen
C-C1 = Spur hinten
D = Größte Breite der Steyr-Pritsche
d = Max. Raddurchfederung
E = Größte Breite über Hinterradreifen
e = Radeinschlag innen
f = Höhe der Steyr-Ladepritsche
G = Größte Länge des Fahrgestelles mit Anhängekupplung
H = Größte Höhe
Hb = Größte Höhe, belastet (±30)
Hu = Größte Höhe, unbelastet (±30)
h = Höhe Rahmenoberkante bei Mitte Vorderachse
hb = Höhe Rahmenoberkante bei Mitte Vorderachse, belastet(±30)
hu = Höhe Rahmenoberkante bei Mitte Vorderachse, unbelastet (±30)
J = Größte Länge des Fahrgestelles ohne Anhängekupplung
K = Gesamtlänge des Fahrzeuges mit Steyr-Pritsche
L = Überhang hinten
M = Größte Breite des Fahrerhauses
m = Länge der Steyr-Ladepritsche (Lichtmaß)
n = Höhe Rahmenoberkante bei Mitte Hinterachse
nb = Höhe Rahmenoberkante bei Mitte Hinterachse, belastet(±30)
nu = Höhe Rahmenoberkante bei Mitte Hinterachse, unbelastet (±30)
NR = Nutzbare Rahmenlänge
O = Höhe: Boden bis Ladefläche
Ob = Höhe: Boden bis Ladefläche belastet (±30)
Ou = Höhe: Boden bis Ladefläche unbelastet (±30)
P = Rahmengurtbreite
p = Breite der Steyr-Ladepritsche (Lichtmaß)
Q = Rahmenbreite
r = Maß von Rahmenoberkante zur Ladefläche (Steyr-Pritsche)
U = Überhang
V = Rahmenträger-Höhe
W = Abstand Vorderachse-Fahrerhausrückwand
Z+Z1 = Bodenfreiheit
NA = Nebenabtrieb
a = am Getriebe
c = am Zwischengetriebe (Verteilergetriebe) vorne
k = am Zwischengetriebe (Verteilergetriebe) hinten
αC = Überhangwinkel vorne
β = Überhangwinkel hinten
(rd) = Reifendimension
F = Reifendimension vorne
R = Reifendimension hinten

FAHRGESTELL-ABMESSUNGEN

Fahrgestell-Typ	A	B	b	C	D	d	E	e	f	G	Hb (Hx)	Hu	hb (hx)	hu	J	K	L	M	m
1290.230/K35/4x4	3500	1950	35°	1800	2400	119	2456	42°	500	6526	2843	2891	1103	1151	6276	6890	1200	2465	4500
1290.230/K38/4x4	3800	1950	35°	1800	-	119	2456	42°	-	6826	2843	2891	1103	1151	6576	-	1200	2465	-

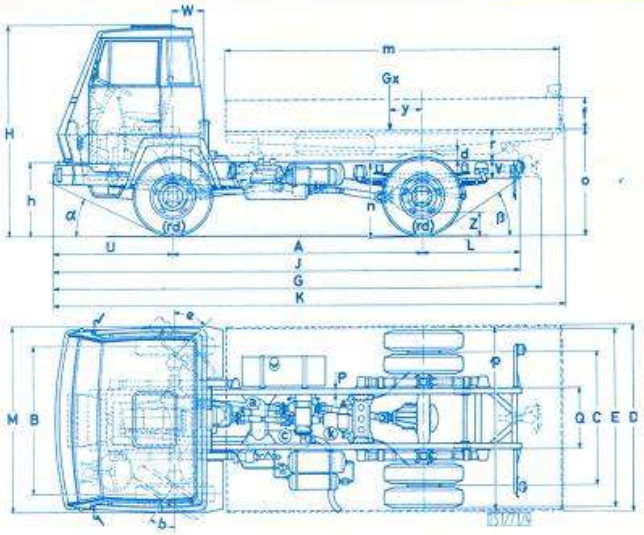
Fahrgestell-Typ	nb (nx)	nu	ob (ox)	ou	P	p	Q	r	U	V	W	Z	Z1	NA a	NA c	NA k	β	F (rd)	R	NR
1290.230/K35/4x4	1110	1206	1572	1668	80	2250	780	462	1576	243	360	320	345	ja	ja	ja	30°	42° 12,00-20	12,00-20	4340
1290.230/K38/4x4	1110	1206	-	-	80	-	780	-	1576	243	360	320	345	ja	ja	ja	30°	42° 16pr	18pr	4640

FAHRGESTELL-GEWICHTE-UND ACHSLASTEN

FAHRGESTELL-TYP	1290.230/K35/4x4	1290.230/K38/4x4	
Fahrgestell mit Fahrerhaus	6680	6730	
Achslast vorne	4300	4320	
Achslast hinten	2380	2410	
Zul. Achslast vorne xx)	6500	6500	x) ± 30
Zul. Achslast hinten xx)	10000-13000	10000-13000	xx) Im Rahmen des zul. Gesamtgewichtes
Zul. Gesamtgewicht	16000-19000	16000-19000	Gewicht des Reserverades: ca. 159 kg
Tragfähigkeit des Fahrgestelles	9320-12320	9270-12270	
Zul. Gesamtzuggewicht	38000	38000	

RICHTLINIEN FÜR AUFBAUTEN FAHRGESTELLE DER TYPENREIHE 790.4x4

TS 256/71	790.132/K32/4x4 790.150/K32/4x4	132 PS (DIN) bei 2800 U/min. 150 PS (DIN) bei 2800 U/min.
2. Ausgabe (Dezember 1971)		ZUL. GESAMTGEWICHT 13 000 kp



A+A1 = Radstand
B = Spur vorne
b = Radeinschlag außen
C+C1 = Spur hinten
D = Größte Breite der Steyr-Pritsche
d = Max. Raddurchfederung
E = Größte Breite über Hinterradreifen
e = Radeinschlag innen
f = Höhe der Steyr-Ladepritsche
G = Größte Länge des Fahrgestelles mit Anhängekupplung
H = Größte Höhe
Hb = Größte Höhe, belastet (±30)
Hu = Größte Höhe, unbelastet (±30)
h = Höhe Rahmenoberkante bei Mitte Vorderachse
hb = Höhe Rahmenoberkante bei Mitte Vorderachse, belastet (±30)
hu = Höhe Rahmenoberkante bei Mitte Vorderachse, unbelastet (±30)
J = Größte Länge des Fahrgestelles ohne Anhängekupplung
K = Gesamtlänge des Fahrzeuges mit Steyr-Pritsche
L = Überhang hinten
M = Größte Breite des Fahrerhauses
m = Länge der Steyr-Ladepritsche (Lichtmaß)
n = Höhe Rahmenoberkante bei Mitte Hinterachse
nb = Höhe Rahmenoberkante bei Mitte Hinterachse, belastet (±30)
nu = Höhe Rahmenoberkante bei Mitte Hinterachse, unbelastet (±30)
NR = Nutzbare Rahmenlänge
O = Höhe: Boden bis Ladefläche
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P = Rahmengurtbreite
p = Breite der Steyr-Ladepritsche (Lichtmaß)
Q = Rahmenbreite
r = Maß von Rahmenoberkante zur Ladefläche (Steyr-Pritsche)
U = Überhang
V = Rahmenträger-Höhe
W = Abstand Vorderachse-Fahrerhausrückwand
Z+Z1 = Bodenfreiheit
NA = Nebenabtrieb
a = am Getriebe
c = am Zwischengetriebe (Verteilergetriebe) vorne
k = am Zwischengetriebe (Verteilergetriebe) hinten
α = Überhangwinkel vorne
β = Überhangwinkel hinten
(rd) = Reifendimension
F = Reifendimension vorne
R = Reifendimension hinten

FAHRGESTELL-ABMESSUNGEN - CHASSIS DIMENSIONS (mm)

Chassis - Chasis	A	B	b	C	D	d	E	e	f	G	Hb(H+)	Hu	hb(h+)	hu	J	K	L	M
790.132(150)K32/4x4	3200	1875	34°	1720	2400	170	2280	40°	400	6226	2682	2747	922	987	5975	6565	1250	2365
Chassis - Chasis	m	nb(n+)	nu	Ob(O+)	Ou	P	p	Q	r	U	V	W	Z	a NA c k	α	β	(rd)		NR
790.132(150)K32/4x4	4200	935	1020	1320	1405	70	2250	780	385	1525	220	470	272	x) x) x)	24°	34°	9,00-20 14pr		3980

FAHRGESTELL-GEWICHTE UND ACHSLASTEN (kp)

Fahrgestelltyp - Chassis	790.132/K32/4x4	790.150/K32/4x4
Fahrgestell mit Fahrerhaus	4610	4660
Achslast vorne	3170	3220
Achslast hinten	1440	1440
Zul. Achslast vorne ++)	4450	4450
Zul. Achslast hinten ++)	9000	9000
Zul. Gesamtgewicht	13000	13000
Tragfähigkeit des Fahrgestelles	8390	8340
Zul. Gesamtzuggewicht	22000	25000

+) ±30
++) im Rahmen des zulässigen Gesamtgewichtes
x) möglich

Gewicht des Reserverades: ca. 110 kg

Steyr 12S27 4x4

STEYR 19S32 4x4 Fahrgestell LKW

Steyr 12S23 4x4

STEYR 19S31/4x4

Steyr 1491 10t 6x6