



Daimler AG · Technical Information and Workshop Equipment (GSP/OR) · D-70546 Stuttgart

Introduction of the New Truck Generation The New Atego (Model 967)

Introduction into Service Manual



Mercedes-Benz

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Dear Reader,

This Introduction into Service Manual presents the new Atego (model 967).

This brochure is intended for the use of technical personnel familiar with the service and maintenance of Mercedes-Benz trucks. It is assumed here that the reader is already familiar with the Mercedes-Benz model series currently on the market.

In terms of the contents, the emphasis in this Introduction into Service Manual is on presenting new and modified components and systems.

All of the data in this brochure correspond to the technical status as of the copy deadline in February 2013 and may therefore differ from the current production configuration.

We will publish modifications and new features in the relevant WIS documents only. Individual details in this brochure may therefore differ from more up-to-date versions published in WIS.

Daimler AG

Wörth plant (GSP/TTH)
February 2013

Note

All of the displays and messages of the multifunction display are shown in German because the corresponding versions in other languages were not available at the copy deadline.

Note

Information about the vehicles and about operating the vehicle functions can also be found in the interactive owner's manual on the Internet.

This Introduction into Service manual is also available in digital form as a PDF in SDmedia.

New features/modifications

General

With the introduction of the new Atego (model 967) in May 2013, the new generation of trucks in the area of light commercial vehicles of up to 18 t in the segments of distribution haulage, code V1D (Atego distribution haulage, new) and construction vehicles, code V1G (Atego construction vehicle, new) is complete.

The new light model series benefits from the modular system of the Actros/Antos (model 963) and the Arocs (model 964). It has the following advantages:

- Uniform electronic architecture
- Same cab configuration for all model series
- Uniform drive configuration
- Uniform range of special equipment (SA)

The model designation logic for the new Atego is also the same as for the model series 963/964. The wheelbase is not part of the model designation any more, but represented in a code.

Wheelbases can be selected in 300-mm increments, as was the case until now. For more than 12 t, the wheelbases are shorter by 60 mm due to larger tires; the front axle is shifted toward the rear by 60 mm.

The range of models of the new Atego comprises 42 different model designations, e.g.

- Dumper vehicle
- Platform vehicle
- Semitrailer tractor
- Fire-fighting vehicle
- Municipal vehicle



The new Atego (model 967)

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Innovations

- New engines OM 934 (4-cylinder) and OM 936 (6-cylinder) as standard with Euro VI in seven output stages from 115 to 220 kW
- Nine different transmissions that are optimized for the intended application
- Shift-by-wire with power-assisted gear shifting
- Automated gearshift, Mercedes PowerShift 3 with the transmission functions crawling mode and EcoRoll, and transmission modes that can be individually selected
- Permanent magnet retarder
- New model designation (967.603) for fire-fighting vehicles 9.8 t, steel suspension, in two wheelbases
- Separate model designation for municipal vehicles (use of sweeper body)
- Short/extended/long cab and crew cabin, available in two roof variants ClassicSpace and BigSpace
- New 4-point cab suspension (mechanical/hydraulic)
- Electronic air-processing unit as on Actros/Antos/Arocs
- Driver seat and front passenger seat with armrests (SA), with flat-weave fabric (standard) and in velour (SA)
- Electronic Stability Program (ESP®) as standard (not available for all-wheel drive vehicles)
- Modified rear axle guide
- New steering for better vehicle dynamics
- Multifunction steering wheel
- Instrument cluster in two variants with FleetBoard® Eco Support
- Broader range of light alloy rims from Daewoo and Alcoa
- Headlamps in new design with halogen or LED daytime running lamps, stone impact protection, folding (SA for construction vehicles)
- New transfer case (VG 1000)
- Permanent or shift-on-the-fly four wheel drive
- Wide selection of engine power take-offs at front, for example, for the operation of Frigo alternator



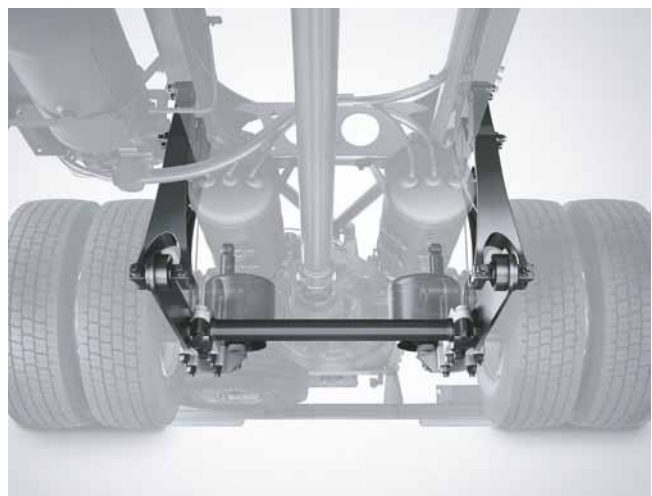
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Multifunction steering wheel



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Shift-by-wire switching unit



W35.10-1063-00

Rear axle guide

Distribution haulage/ Construction vehicle

Overview of model designations

Model designation	Vehicle type	Wheel configuration	Permissible gross vehicle weight (max. GVW)	Suspension
967.000	Platform vehicle	4 x 2	6, 5 t	Steel
967.001	Platform vehicle	4 x 2	7,49 t	Steel
967.002	Platform vehicle	4 x 2	7,99 t	Steel
967.003	Platform vehicle	4 x 2	9,5 t	Steel
967.004	Platform vehicle	4 x 2	10,5 t	Steel
967.005	Platform vehicle	4 x 2	11,99 t	Steel
967.006	Platform vehicle	4 x 2	13,5 t	Steel
967.007	Platform vehicle	4 x 2	15,0 t	Steel
967.008	Platform vehicle	4 x 2	11,99 t	Steel
967.020	Platform vehicle	4 x 2	6,5 t	Air
967.021	Platform vehicle	4 x 2	7,49 t	Air
967.023	Platform vehicle	4 x 2	9,5 t	Air
967.024	Platform vehicle	4 x 2	10,5 t	Air
967.025	Platform vehicle	4 x 2	11,99 t	Air
967.026	Platform vehicle	4 x 2	13,5 t	Air
967.027	Platform vehicle	4 x 2	15,0 t	Air
967.028	Platform vehicle	4 x 2	11,99 t	Air
967.034	Platform vehicle	4 x 4	10,5 t	Steel
967.036	Platform vehicle	4 x 4	13,5 t	Steel
967.037	Platform vehicle	4 x 4	15,0 t	Steel
967.201	Dumper vehicle	4 x 2	7,49 t	Steel
967.202	Dumper vehicle	4 x 2	7,99 t	Steel
967.203	Dumper vehicle	4 x 2	9,5 t	Steel
967.204	Dumper vehicle	4 x 2	10,5 t	Steel
967.205	Dumper vehicle	4 x 2	11,99 t	Steel
967.206	Dumper vehicle	4 x 2	13,5 t	Steel
967.207	Dumper vehicle	4 x 2	15,0 t	Steel
967.234	Dumper vehicle	4 x 4	10,5 t	Steel
967.236	Dumper vehicle	4 x 4	13,5 t	Steel
967.237	Kipper	4 x 4	15,0 t	Stahl

Overview of model designations

Model designation	Vehicle type	Wheel configuration	Permissible gross vehicle weight (max. GVW)	Suspension
967.426	Semitrailer tractor	4 x 2	13,5 t	Air
967.504	Municipal vehicle	4 x 2	10,5 t	Steel
967.526	Municipal vehicle	4 x 2	13,5 t	Air
967.603	Fire-fighting vehicle	4 x 2	9,8 t	Steel
967.605	Fire-fighting vehicle	4 x 2	11,99 t	Steel
967.606	Fire-fighting vehicle	4 x 2	13,5 t	Steel
967.607	Fire-fighting vehicle	4 x 2	15,0 t	Steel
967.633	Fire-fighting vehicle	4 x 4	9,5 t	Steel
967.635	Fire-fighting vehicle	4 x 4	11,99 t	Steel
967.636	Fire-fighting vehicle	4 x 4	13,5 t	Steel
967.637	Fire-fighting vehicle	4 x 4	15,0 t	Steel



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Atego distribution haulage, new (V1D)

Equipment

Equipment packages

In addition to the basic equipment and the various standard equipment packages installed according to the vehicle model/intended use, a number of additional safety and comfort features are also available. These are bundled in packages that are coded at the factory, such as:

- Cold Climate Pack Basic (Z0U)
- Cold Climate Pack Classic (Z0V)
- Cargo liftgate package (P0L)
- LED light package in the front, with turn signal glasses, white (L1Y)



W68.20-1032-00

Stowage box/tray above windshield, 2 compartments (D7M)



W68.20-1031-00

Stowage box/tray, high, on engine tunnel (D7Q)



W00.01-1036-00

Engine version Euro VI (M5Z)

Cockpit

The cockpit is available in three variants depending on the requirements based on the application:

- Classic cockpit (D4B), standard
- Standard cockpit (D4A), special equipment, standard for center seat, with seat belt (D1Z)
- Comfort cockpit (D4C), special equipment



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Multifunction steering wheel for comfort cockpit (D4C)



W68.10-1107-00

Classic cockpit (D4B)

Engines

In terms of design, the 4-cylinder engine OM 934 builds on the 6-cylinder engine OM 936.

Features of engine OM 934:

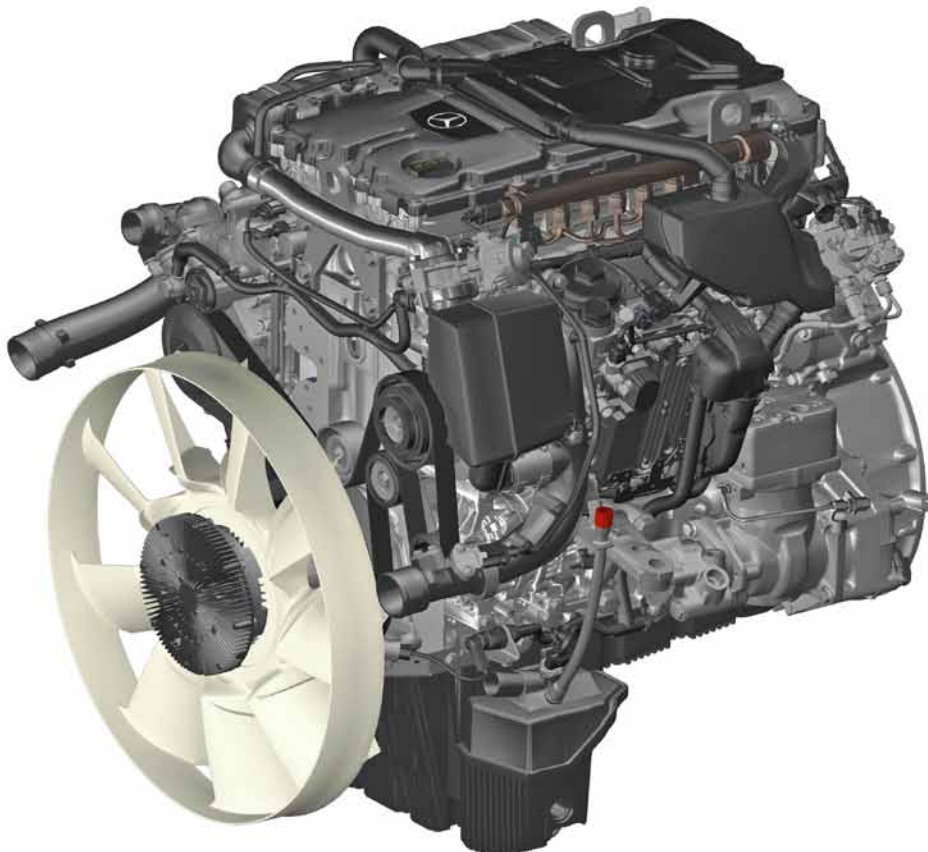
- Common rail injection system
- One-stage charging (115 kW and 130 kW engine)
- Two-stage charging (155 kW and 170 kW engine)
- Newly developed engine braking system (decompression brake) with higher braking power
- Sturdy construction for high output
- Compliance with Euro VI emissions standard with Selective Catalytic Reduction (SCR), cooled and regulated exhaust gas recirculation (EGR) and diesel particulate filters
- Electrically controlled viscous coupling

The engines are available in the following output categories:

- OM 934, R4, 5,1 l, 115 kW (156 PS), 650 Nm (M1H)
- OM 934, R4, 5,1 l, 130 kW (177 PS), 750 Nm (M1I)
- OM 934, R4, 5,1 l, 155 kW (211 PS), 850 Nm (M1J)
- OM 934, R4, 5,1 l, 170 kW (231 PS), 900 Nm (M1K)
- OM 936, R6, 7,7 l, 175 kW (238 PS), 1000 Nm (M2A)
- OM 936, R6, 7,7 l, 200 kW (272 PS), 1100 Nm (M2C)
- OM 936, R6, 7,7 l, 220 kW (299 PS), 1200 Nm (M2D)

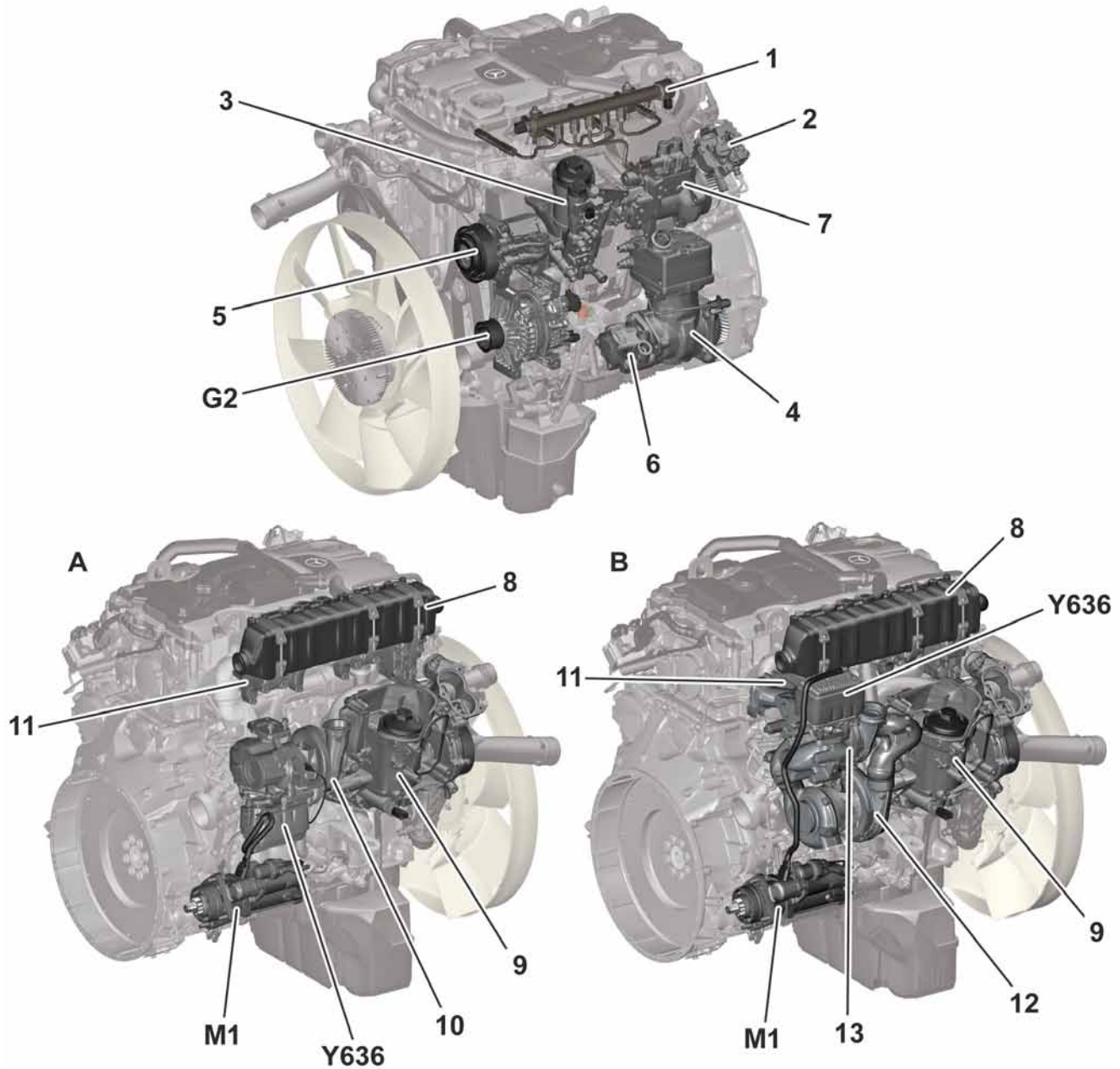
i Note

The Introduction into Service Manual for the engine OM 936 is available in digital form in SDmedia.



Engine OM 934

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Overview of engine OM 934

W01.10-1172-00

- | | |
|---|--------------------------------------|
| 1 Rail | 10 Turbocharger |
| 2 Diesel fuel metering unit (for regeneration of diesel particulate filter) | 11 Coolant manifold |
| 3 Fuel filter module | 12 Low-pressure stage turbocharger |
| 4 Compressor | 13 High-pressure stage turbocharger |
| 5 Refrigerant compressor | G2 Alternator |
| 6 Power steering pump | M1 Starter |
| 7 Fuel system high pressure pump | Y636 boost pressure regulator |
| 8 Exhaust gas recirculation cooler | A OM 934.911 with one-stage charging |
| 9 Oil/coolant module | B OM 934.913 with two-stage charging |

Engines

Technical data

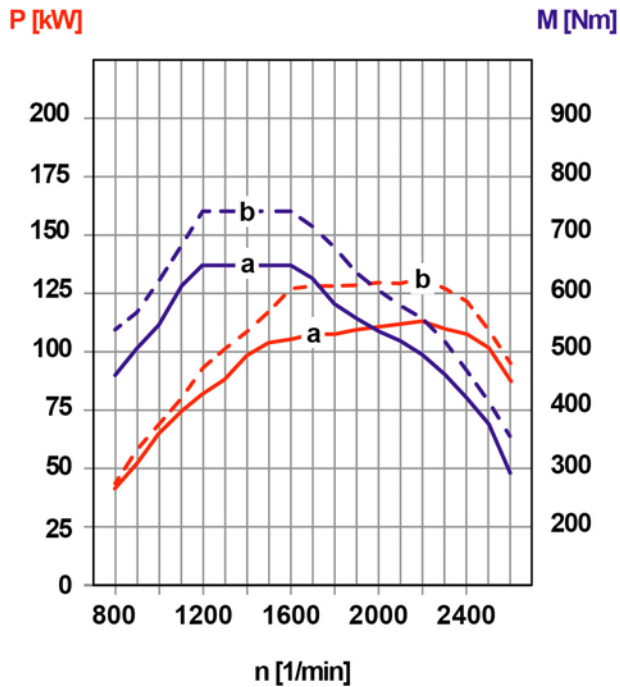
	Unit	OM 934	OM 936
Displacement	cm ³	5132	7698
Cylinder number/arrangement		4/inline	6/inline
Valve timing		DOHC	DOHC
Number of valves per cylinder inlet/outlet		2/2	2/2
Idle speed	1/min	600	600
Output	kW	115 (M1H) 130 (M1I) 155 (M1J) 170 (M1K)	175 (M2A) 200 (M2C) 220 (M2D)
Torque	Nm	650 (M1H) 750 (M1I) 850 (M1J) 900 (M1K)	1000 (M2A) 1100 (M2C) 1200 (M2D)
Compression ratio ϵ		17,0	17,0
Stroke	mm	135	135
Cylinder bore	mm	110	110
Total piston height	mm	110	110
Connecting rod length	mm	215	215
Cylinder spacing	mm	128	128
Rail pressure (max.)	bar	2400	2400
Braking power			
Engine brake, standard system (M5U)	kW	120	233
Engine brake, high-performance system (M5V)	kW	160	302
Weight (DIN-GZ)	kg	510 ¹	651 ¹

¹ at maximum output

i Note

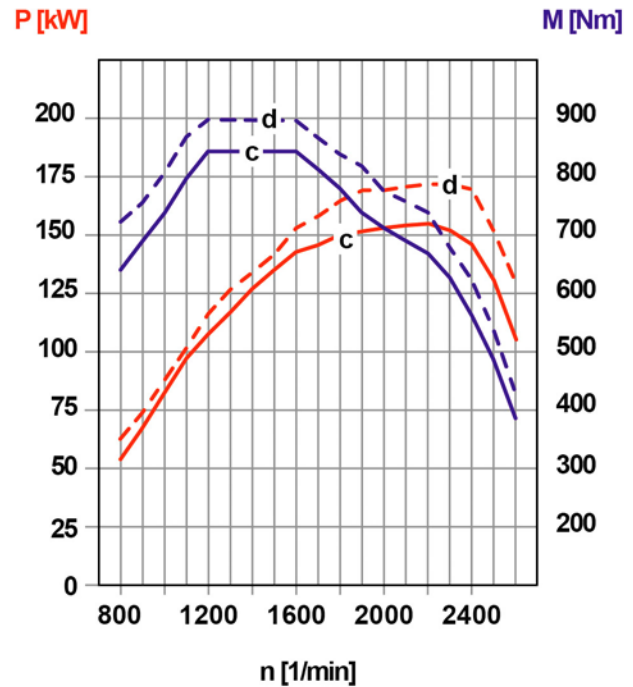
It is mandatory that the engine brake for high-performance system (M5V) is installed on vehicles carrying dangerous goods (ADR code E5T, E5U, E5V, E5W, E5X, E9E) with OM 934.

Performance graphs



- a OM 934, 115 kW/650 Nm (M1H)
b OM 934, 130 kW/750 Nm (M1I)

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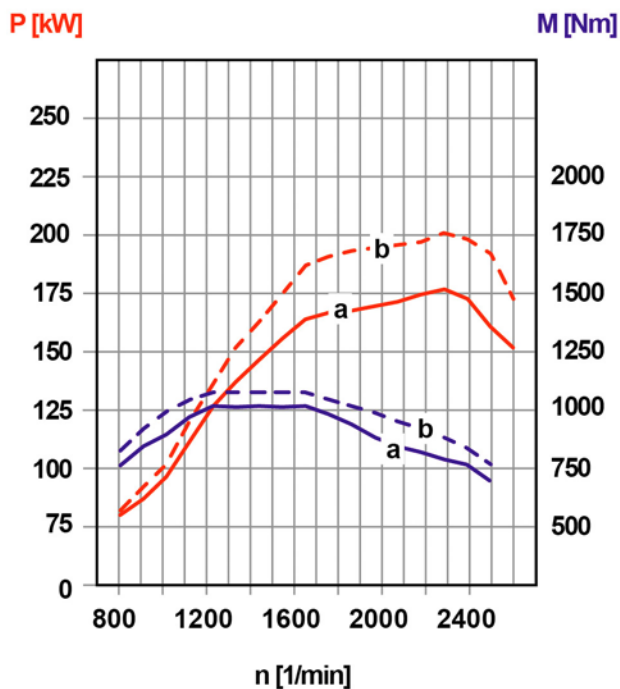
- c OM 934, 155 kW/850 Nm (M1J)
d OM 934, 170 kW/900 Nm (M1K)

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M Torque [Nm]
P Output [kW]
n Engine speed [rpm]

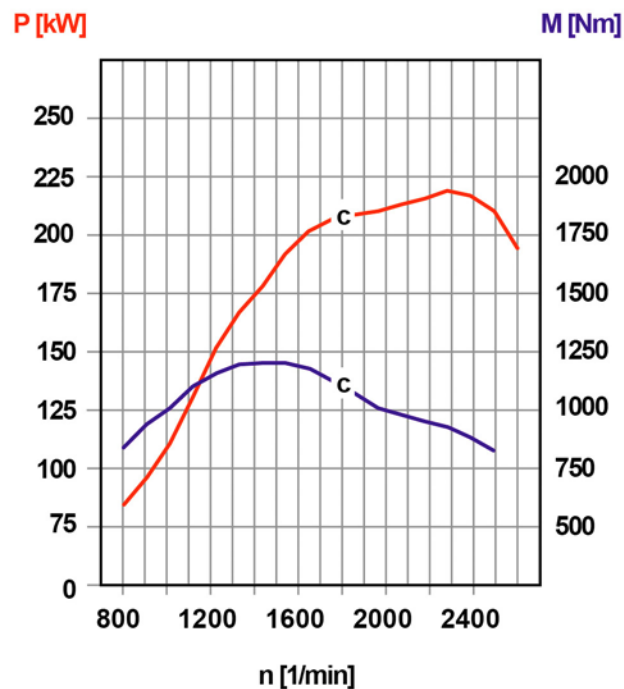
Engines

Performance graphs



- a OM 936, 175 kW/1000 Nm (M2A)
 b OM 936, 200 kW/1100 Nm (M2C)

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- c OM 936, 220 kW/1200 Nm (M2D)

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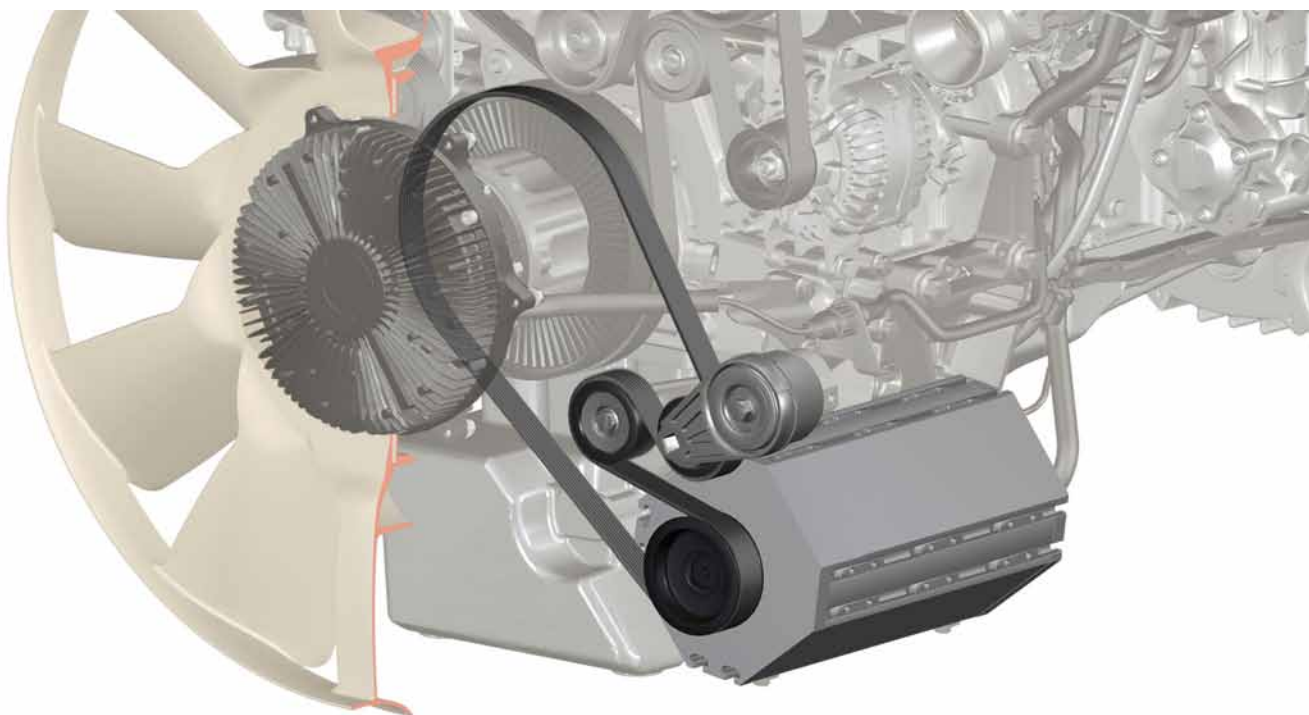
M Torque [Nm]
 P Output [kW]
 n Engine speed [rpm]

Front engine power take-off

Code	Name
N7C	Front engine power take-off, oil pan changed
N7E	Front engine power take-off, with tandem pump
N7F	Front engine power take-off, Frigo alternator preinstallation AW 15
N7G	Front engine power take-off, Frigo alternator preinstallation AW 22.5
N7H	Front engine power take-off, Frigo alternator preinstallation AW 30
N7V	Front engine power take-off, tandem pump preinstallation
N7W	Front engine power take-off, TK 315 preinstallation

Rear engine power take-off

Code	Name
N7K	Rear engine power take-off, c, hydraulic pump SAE A
N7M	Rear engine power take-off, c, hydraulic pump ISO 7653D
N7N	Rear engine power take-off, c, hydraulic pump SAE B, 200 Nm
N7P	Rear engine power take-off, b, flange, 600 Nm



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Engine power take-off, Frigo alternator AW 22,5

Exhaust system

Overview of exhaust systems

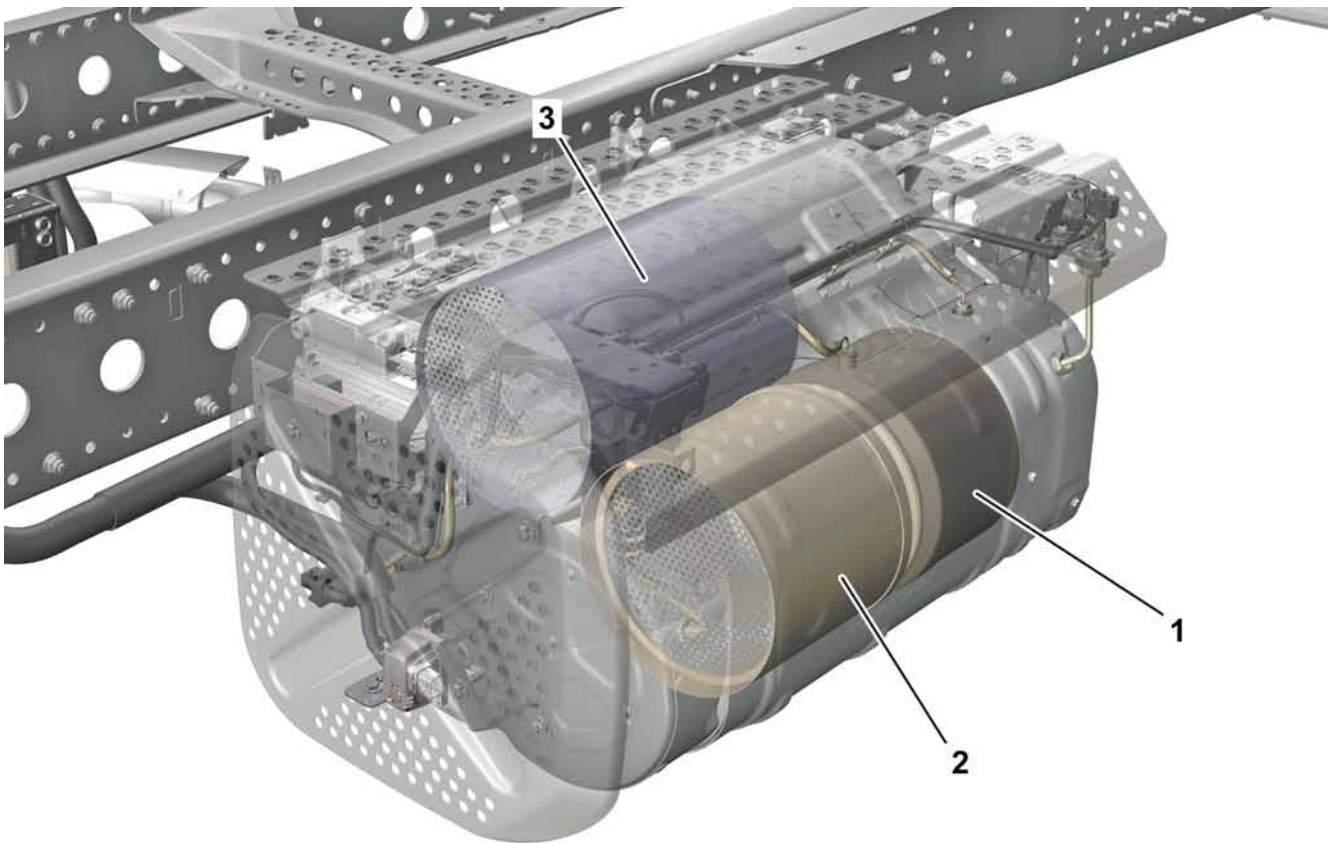
Code	Name
K7A	Exhaust system, end pipe upwards
K7H	Exhaust system, fire brigade
K7I	Exhaust system, on the frame at right, end pipe inward
K7K	Exhaust system, positioned horizontally behind cab
K7L	Exhaust system, end pipe toward center of traveled way

Exhaust aftertreatment

In order to achieve the applicable exhaust limits, an exhaust aftertreatment unit is installed in addition to the EGR inside the engine. It consists of a diesel oxidation catalytic converter, a diesel particulate filter (DPF) and an SCR catalytic converter (Selective Catalytic Reduction). All the components are in the exhaust aftertreatment unit (EATU).

Diesel particulate filter regeneration

Normally, the active regeneration runs automatically approx. every 8000 km. The exact point of time is determined by the exhaust aftertreatment control module (ACM). Furthermore, manual activation of regeneration by the driver is possible as soon as the message that regeneration is required is shown on the multifunction display.



Exhaust aftertreatment unit, engine OM 934

- 1 Diesel oxidation catalytic converter
- 2 Diesel Particulate Filter

- 3 SCR catalytic converter

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Fuel tank

The fuel tanks are made of LMDPE (Linear Medium Density Polyethylene). The capacity of the standard tank has been increased to 120 liters. A fuel tank (K0I) with a capacity of 80 liters has been newly introduced in order to maximize the payload of the vehicle.

AdBlue® tank

The AdBlue® tank has a capacity of 25 liters; however, a 35-liter tank can be ordered as special equipment.

On municipal vehicles, an AdBlue® tank with a capacity of 8 liters (K3R) is installed in the equipment bridge behind the cab. On fire-fighting vehicles, the AdBlue® tank is located behind the EATU on the right side of the frame.

Overview

Code	Designation	Allocation
K0I	Plastic tank 80 l, left	Special equipment for platform vehicle
K0E	Plastic tank 120 l, left	Standard on platform vehicle, dumper vehicle, semitrailer tractor
K0G	Plastic tank 180 l, left	Special equipment for platform vehicle and dumper vehicle
K0P	Additional plastic tank 100 l, left	Special equipment for platform vehicle with K0G
K0Q	Additional plastic tanks 2 x 100 l, left	Special equipment for platform vehicle with K0G
K0F	Plastic tank 130 l, fire-fighting vehicle	Special equipment for fire-fighting vehicle
K0H	Plastic tank 125 l, at frame end	Standard on municipal vehicle
K5V	Shunt tank 20 l, tank system from body manufacturer	Special equipment for all, standard on fire-fighting vehicle



W47.10-1056-00

Plastic tank 180 l, left (K0G)

Clutch

Clutch plate

In order to allow greater mileages with the same contact force of the clutch, clutch plates with thicker linings and pressure plates with integrated automatic self adjustment are installed.

The self adjustment mechanism of the clutch pressure plate compensates for the wear travel of the clutch linings and keeps the contact force constant during 90% of the clutch service life.

The self adjustment mechanism continuously registers the decrease in clutch lining thickness and compensates for the gap by turning an adjusting ring.

Clutch operating system

With manual transmission, the clutch is operated by pressing it using a clutch release fork and clutch booster.

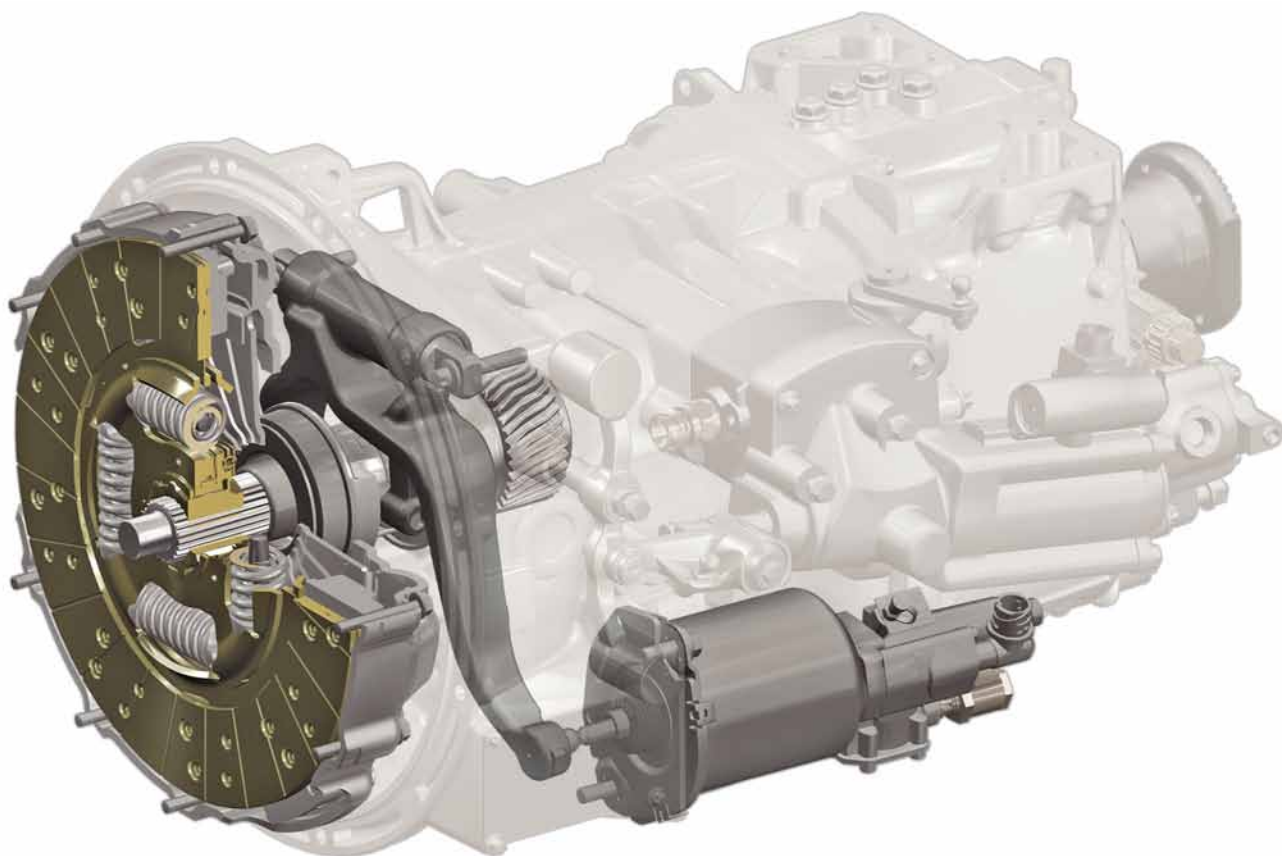
In case of automated gearshift Mercedes PowerShift 3 (G5G), the clutch is pressed using the central clutch operator, as is the case in heavy vehicles.

The central clutch release bearing is located on the transmission input shaft of the manual transmission and is rigidly bolted to the front of the transmission housing.

Actuation of the pneumatic central clutch release bearing is carried out by the transmission control unit (TCM) and via the solenoid valves integrated in the transmission positioner.

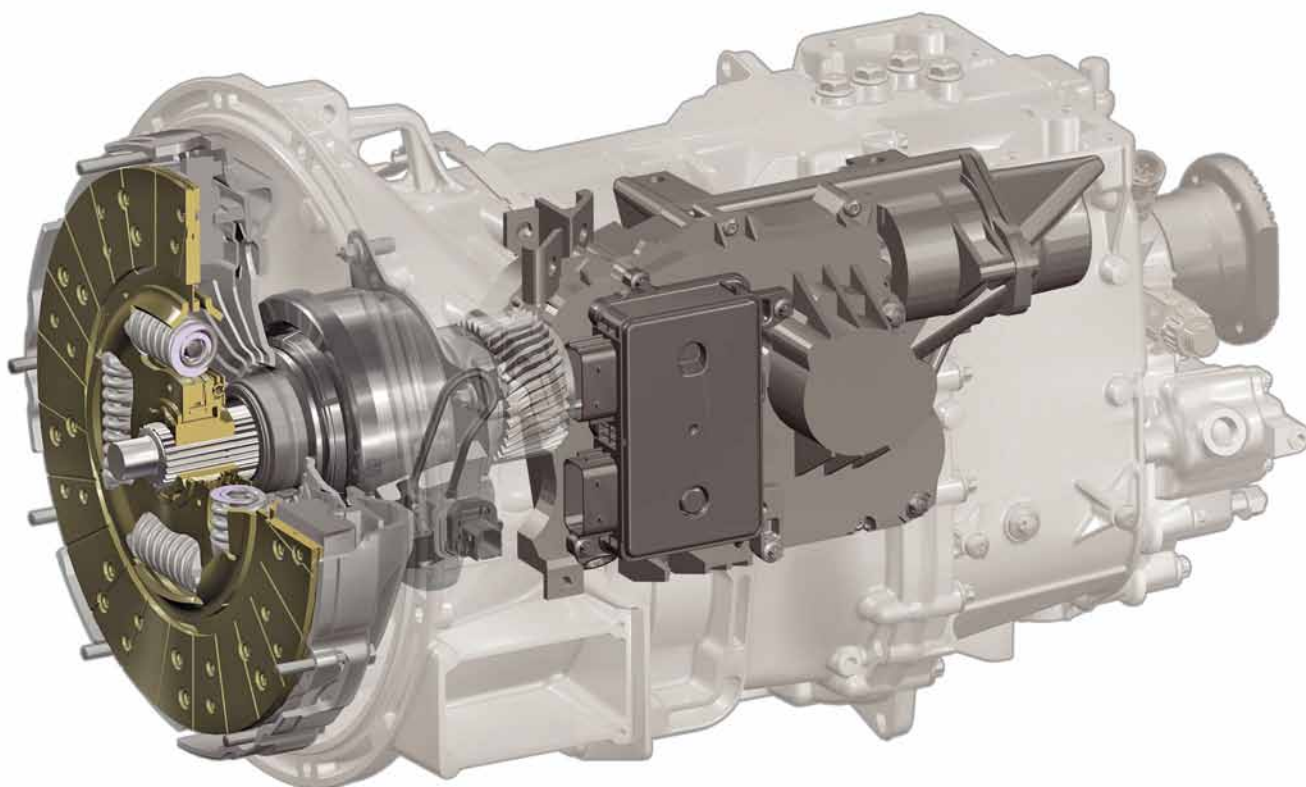
Note

The adjustment mechanism cannot be manually reset. In case of repair, the clutch pressure plate must always be replaced along with the clutch plate.



Clutch for manual gearshift (G5H)

W25.10-1088-00



Clutch for Mercedes PowerShift 3 (G5G)

W25.10-1089-00

Clutch

Assignment clutch - transmission - engine

Clutch	Flange	Transmission	Engine	P/M	Remarks
Ø 362 mm	SAE 3	G 70-6 G 71-6 G 90-6	OM 934	115 kW / 650 Nm	
				130 kW / 750 Nm	
				155 kW / 850 Nm	
Ø 395 mm	SAE 2		OM 936	175 kW / 1.000 Nm	
				200 kW / 1.100 Nm	Only on fire-fighting vehicles
				220 kW / 1.200 Nm	
Ø 395 mm	SAE 2	G 140-8 G 141-9	OM 936	175 kW / 1.000 Nm	
				200 kW / 1.100 Nm	
				220 kW / 1.200 Nm	
Torque converter TC 418 iW= 1,98	SAE 2	Allison 3000P 3000PR 3500P	OM 934	130 kW / 750 Nm	Oil cooler: oil/air
				155 kW / 850 Nm	
				170 kW / 900 Nm	
			OM 936	175 kW / 1.000 Nm	Oil cooler: oil/water Except for 967.526: oil/air
				200 kW / 1.100 Nm	
				220 kW / 1.200 Nm	
Ø 395 mm	SAE 2	9S-1115 TD ZF-ECOMID	OM 934	130 kW / 750 Nm	
				155 kW / 850 Nm	
				170 kW / 900 Nm	
			OM 936	175 kW / 1.000 Nm	

P = Output [kW]

M =Torque [Nm]

The following manual and automated transmissions are used in the new Atego:

- Transmission G 70-6/5,94-0,74 (G1B)
- Transmission G 71-6/9,20-1,0 (G1C)
- Transmission G 90-6/6,70-0,73 (G1D)
- Transmission G 140-8/9,30-0,79 (G1E)
- Transmission G 141-9/14,57-1,0 (G1F)
- Transmission 9S-1115 TD/12,73-1, ZF-ECOMID (G1Z)

All the transmissions, except G 141-9 and 9S-1115 TD, are available with automated gearshift Mercedes PowerShift 3 (G5G) or manual gearshift (G5H), a shift-by-wire with pneumatic power-assisted gear shifting.

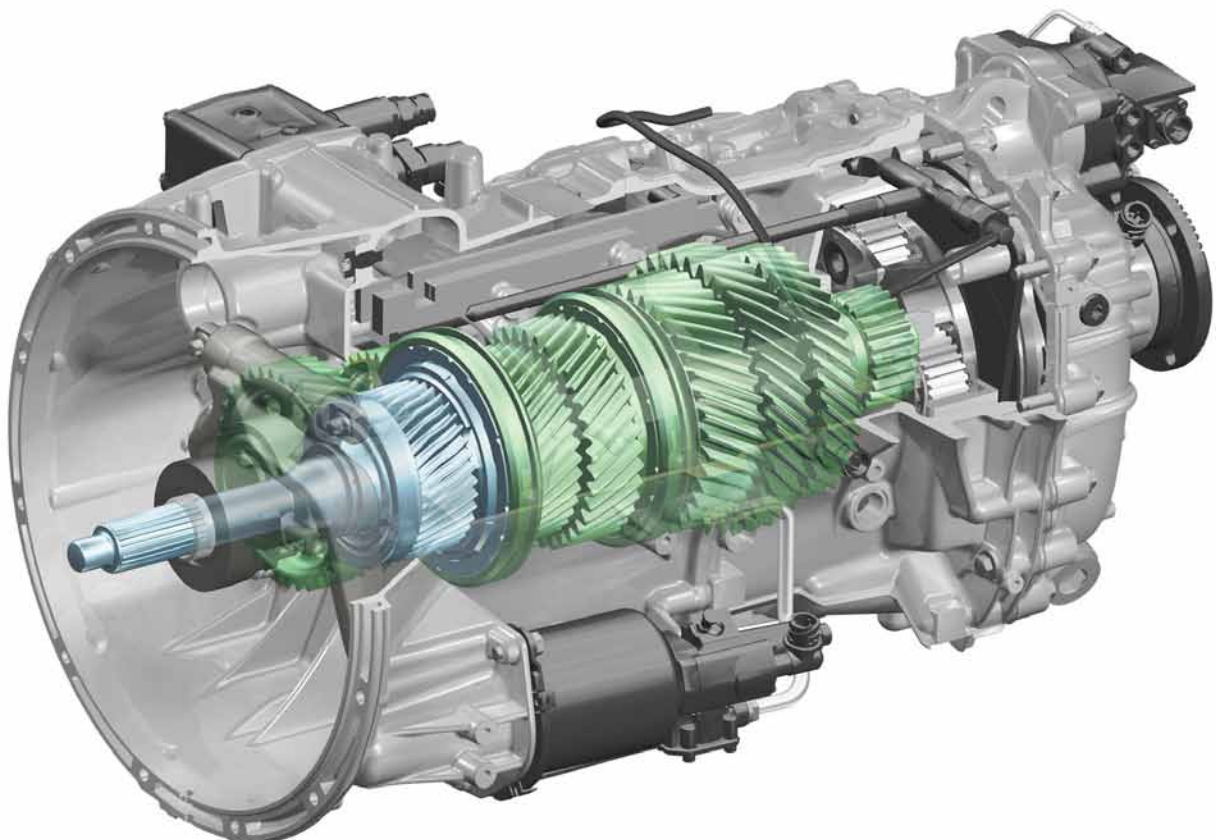
The transmissions G 141-9 and 9S-1115 TD are only available with manual gearshift (G5H).

The 6-speed transmissions (G 70-6, G 71-6, G 90-6) are synchromesh transmissions without splitter group or range group.

The constant-mesh transmission G 140-8 is engaged automatically. It consists of a combination of a synchronized splitter group and a constant-mesh main transmission. The 8 forward gears and two reverse gears are formed from just 6 gear sets.

The transmission G 141-9 is a 4-speed synchromesh transmission with synchronized range group and crawler (crawler gear).

The transmission 9S-1115 TD, ZF-ECOMID with crawler (crawler gear) is used in municipal vehicles as standard. The transmission is only available with SAE2 connection, due to which a clutch with diameter of 395 mm is also installed for 4-cylinder engines OM 934.



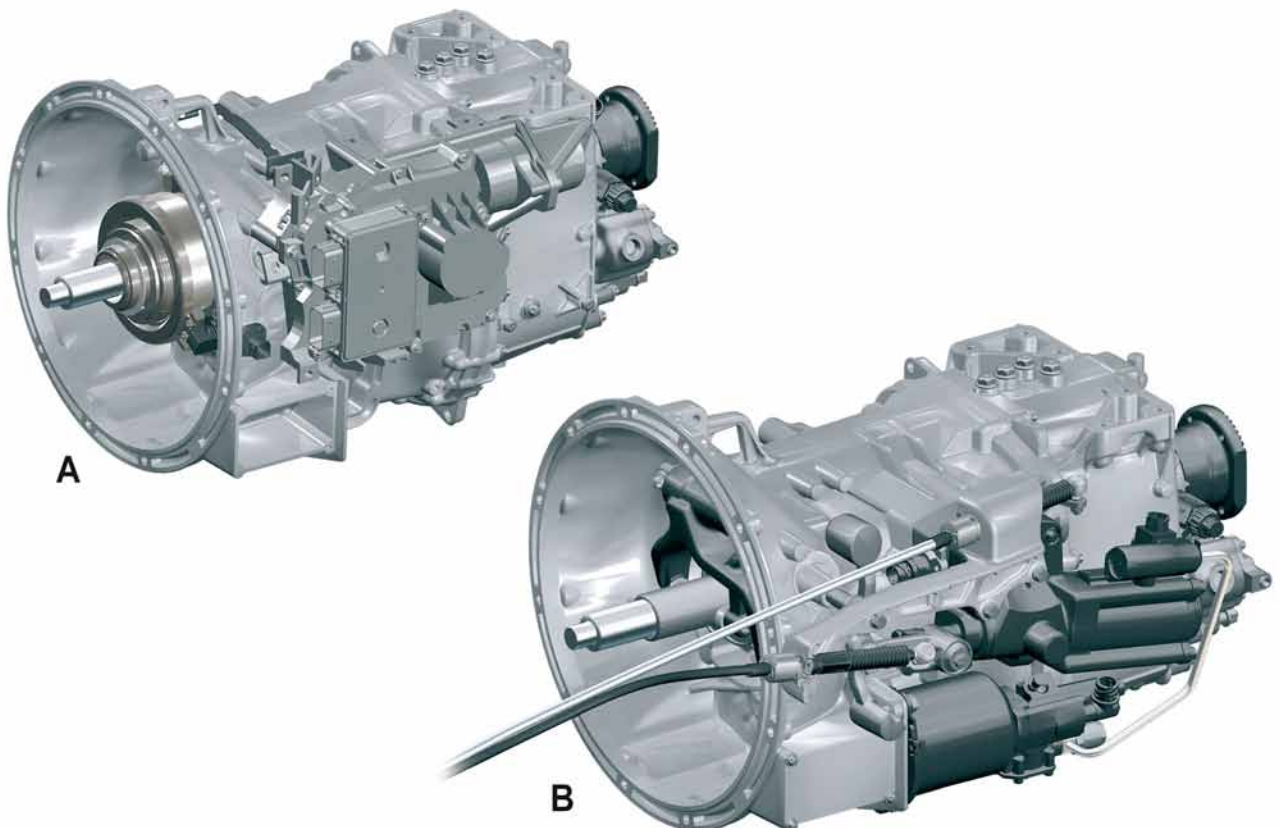
Transmission G 141-9/14,57-1,0 (G1F)

W26.10-1166-00

Manual and automated transmission

Transmission ratio

Transmission	G 70-6	G 71-6	G 90-6
Code	G1B	G1C	G1D
Model designation	712.614	715.058	715.066
i_{GES} (gear ratio spread)	8,0	9,201	9,198
1st gear	5,940	9,201	6,7
2nd gear	3,281	5,230	3,806
3rd gear	1,978	3,143	2,287
4th gear	1,310	2,034	1,48
5th gear	1,0	1,374	1,0
6th gear	0,742	1,0	0,73
1st reverse gear	5,423	8,649	6,294



Transmission G 70-6/5,94-0,74 (G1B)

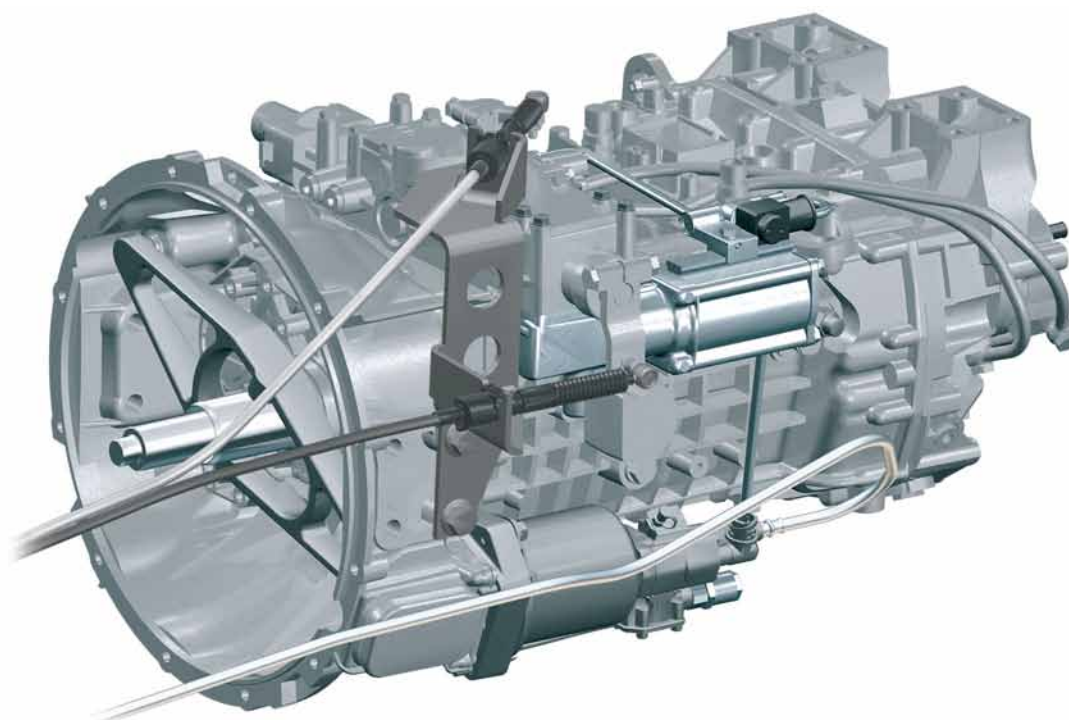
A with Mercedes PowerShift 3 (G5G)

B with manual gearshift (G5H)

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Transmission ratio

Transmission	G 140-8	G 141-9	9 S-1115 TD, ZF ECOMID
Code	G1E	G1F	G1Z
Model designation	715.310	715.571	710.581 710.582
i_{GES} (gear ratio spread)	11,82	14,57	12,73
Crawler (crawler gear)	—	14,57	12,73
1st gear	9,3	9,478	8,83
2nd gear	5,837	6,635	6,28
3rd gear	3,673	4,821	4,64
4th gear	2,306	3,667	3,48
5th gear	1,593	2,585	2,54
6th gear	1,252	1,81	1,81
7th gear	1,0	1,315	1,34
8th gear	0,79	1,0	1,0
1st reverse gear	8,538	13,862	12,04
2nd reverse gear	5,361	—	—



Transmission 9 S-1115 TD/12,73-1, ZF-ECOMID (G1Z)

W26.10-1168-00

Transmission modes

Depending on the vehicle equipment, various transmission modes can be selected ex factory with the automated transmission. All transmission modes have an effect on the shift point, the starting behavior and the gearshift dynamics.

Shift mode		Transmission mode				
	X	X	X	—	—	—
	X	X	—	X	—	—
	X	X	—	—	X	—
	X	X	—	—	—	X
Code	Standard	Standard	G0U	G0V	G0W	G0X
	Manuall	Automatic	economy	power	offroad	fire-service
Display on the multifunction display	M	A	Aeconomy	Apower	Aoffroad	Afire
EcoRoll mode not available	EcoRoll mode can be deactivated	When the ignition is switched on, the most recently selected transmission mode is activated	The transmission mode is not activated when the ignition is switched on	When the ignition is switched on, the most recently selected transmission mode is activated	When the ignition is switched on, the fire-service transmission mode is always activated	
Kickdown function not available	Kickdown function available	EcoRoll mode cannot be deactivated	The effect of the kickdown function is limited	The transmission mode is exited if there is no engine torque request	Crawler mode automatically switched off	Observes acceleration specifications for fire-fighting vehicles as per DIN 1846-2
Remarks	Maximum speed limited to approx. 85 km/h		The transmission modes are exited time-controlled			
Note The transmission functions of crawling mode and EcoRoll mode can be activated and deactivated via the instrument cluster depending on the transmission mode. On all-wheel drive vehicles, the crawling mode is generally switched off.						

Automatic transmission

As it has been so far, automatic transmissions from Allison are available for Atego for special applications. The automatic transmission automatically switches all 5 or 6 forward gears and has the transmission modes “economy” and “power”.

When the engine is switched on, the standard transmission mode “economy” is engaged; however, on fire-fighting vehicles, the transmission mode “power” is engaged when the engine is switched on.

The automatic transmission is equipped with a touch-key gearshift. The touch-key gearshift is located next to the driver's seat on the engine tunnel. The gears are automatically engaged depending on the following factors:

- Shift range
- Speed
- Accelerator pedal position
- Transmission mode
- Engine brake and/or retarder

Transmission ratio

Transmission	Allison 3000P	Allison 3000PR	Allison 3500P
Code	G3A	G3B	G3E
Model designation	723.677 723.678 723.693	723.694 723.695	723.668 723.669
1st gear	3,49	3,49	4,59
2nd gear	1,86	1,86	2,25
3rd gear	1,41	1,41	1,54
4th gear	1,0	1,0	1,0
5th gear	0,75	0,75	0,75
6th gear	—	—	0,65
Reverse gear	5,03	5,03	5,0

Power take-off

An extensive range of transmission-driven power take-offs is offered for the new Atego.

Power take-offs

Code	Name	Transmission
N0A	NA MB 56-2b, left, flange, i = 1,04	G 70-6
N0B	NA MB 56-2b, right, flange, i = 1,04	G 70-6
N0C	NA MB 56-1c, pump, i = 0,60	G 70-6
N0D	NA MB 56-2c, left, pump, i = 1,04	G 70-6
N0E	NA MB 56-2c, right, pump, i = 1,04	G 70-6
N0I	NA MB 60-1c, pump	G 71-6/G 90-6
N0M	NA MB 60-2b, flange, deep, N speed	G 71-6/G 90-6
N0N	NA MB 60-2b, flange, deep, M speed	G 71-6/G 90-6
N0S	NA MB 60-2c, MPA, deep, N speed	G 71-6/G 90-6
N0X	NA MB 61-10b, flange, N speed	G 71-6/G 90-6
N0Y	NA MB 61-10b, flange, M speed	G 90-6
N0Z	NA MB 61-10b, flange, H speed	G 71-6/G 90-6
N1A	NA MB 61-10b, flange, SH speed	G 71-6/G 90-6
N1T	NA MB 125-10b, flange, N speed	G 140-8/G 141-9
N1U	NA MB 125-10b, flange, M speed	G 140-8/G 141-9
N1V	NA MB 125-10b, Flansch, flange, H speed	G 140-8/G 141-9
N2E	NA MB 131-2c, pump	G 141-9
N2F	NA MB 121-1b, flange	G 140-8/G 141-9
N2I	NA MB 121-2c, pump	G 140-8
N2R	NA ZF, 1b, flange	9 S-1115 TD
N2S	NA ZF, 1c, pump	9 S-1115 TD

Power take-offs

Code	Name	Transmission
N3A	DNA MB 60-11 b/b, 2 x flange, N speed	G 71-6/G 90-6
N3B	DNA MB 60-11 b/b, 2 x flange, M speed	G 71-6/G 90-6
N3C	DNA MB 60-11 b/c, flange + MPA, N speed	G 71-6/G 90-6
N3D	DNA MB 60-11 c/c, N speed	G 71-6/G 90-6
N3E	DNA MB 61-11 b/c, N speed	G 71-6/G 90-6
N3F	DNA MB 61-11 b/c, M speed	G 71-6/G 90-6
N3G	DNA MB 61-11 b/c, H speed	G 71-6/G 90-6
N5X	NA CS40-b/1,4, upper shelf, flange	Allison 3000 P
N5Y	NA CS40-b/1,7, upper shelf, flange	Allison 3000 P
N5Z	NA CS40-b/2,0, upper shelf, flange	Allison 3000 P
N6I	DNA transmission lock, NA 2 inner side, on countershaft	
N6J	DNA transmission lock, NA 1 offset outward, to countershaft	
N6K	Transmission lock for power take-off	
N6R	NA actuation with range selector lock, automatic	
N6U	Discontinuation of dumper drive	
N6Z	Transmission cooling*	

*) Transmission cooling (N6Z) for applications in continuous operation of power take-off (PTO [NA])

Meiller hydraulic pumps

Code	Name	Delivery rate at 1000/min
N8C	Meiller pump, 5-piston, model 254/1	29 l
N8D	Meiller pump, 5-piston, model 255/1	43 l
N8H	Meiller pump, 6-piston, model 265	52 l
N8I	Meiller pump, 7-piston, model 270/45	45 l
N8J	Meiller pump, 7-piston, model 270/63	63 l

Power take-off



W26.45-1361-00

Power take-off NA MB 131-2c, pump (N2E) on transmission G 141-9

Designations of power take-off

Example:	NA	121	- 2	c
	NA			Transmission-driven power take-off
		121		PTO (NA) version (model)
			2	1 = PTO directly via countershaft 2 = PTO axial-offset to countershaft 10 = Single PTO axial-offset 11 = Dual PTO
				c = Direct connection for pump b = Version with output flange for drive shaft

Transfer case

As an option, the new Atego can be equipped with permanent all-wheel drive or shift-on-the-fly four wheel drive:

- Transfer case VG 1000-3W/1.61-0.98 permanent (G4H), 750.010
- Transfer case VG 1000-3W/1.61-0.98 engageable (G4I), 750.011

Instead of the transfer cases VG 550 and VG 900 that were used until now, a new transfer case VG 1000 is used. The advantages are low weight, thanks to the aluminum housing, and the availability of engageable front axle.

Transfer case VG 1000-3W permanent

All the wheels on the vehicle are driven.

For the purpose of speed differentiation a spur gear differential is installed between the front and rear axles.

If necessary, this differential can be blocked pneumatically so that the output shafts at the front and rear axles are rigidly connected to each other.

Transfer case VG 1000-3W engageable

The front axle output shaft can be activated or deactivated pneumatically.

When the front axle output shaft is activated, the output shafts at the front and rear axles are rigidly connected to each other.

In order to improve the traction on slippery road surface or off-road, for example, differential locks are available for all all-wheel drive vehicles.

Instrument panel switch module 1

On vehicles with transfer case, the buttons for interaxle differential lock, rear axle and front axle interwheel differential locks and off-road gear are on the instrument panel switch module 1 (A44).



Instrument cluster display

W54.32-1037-00

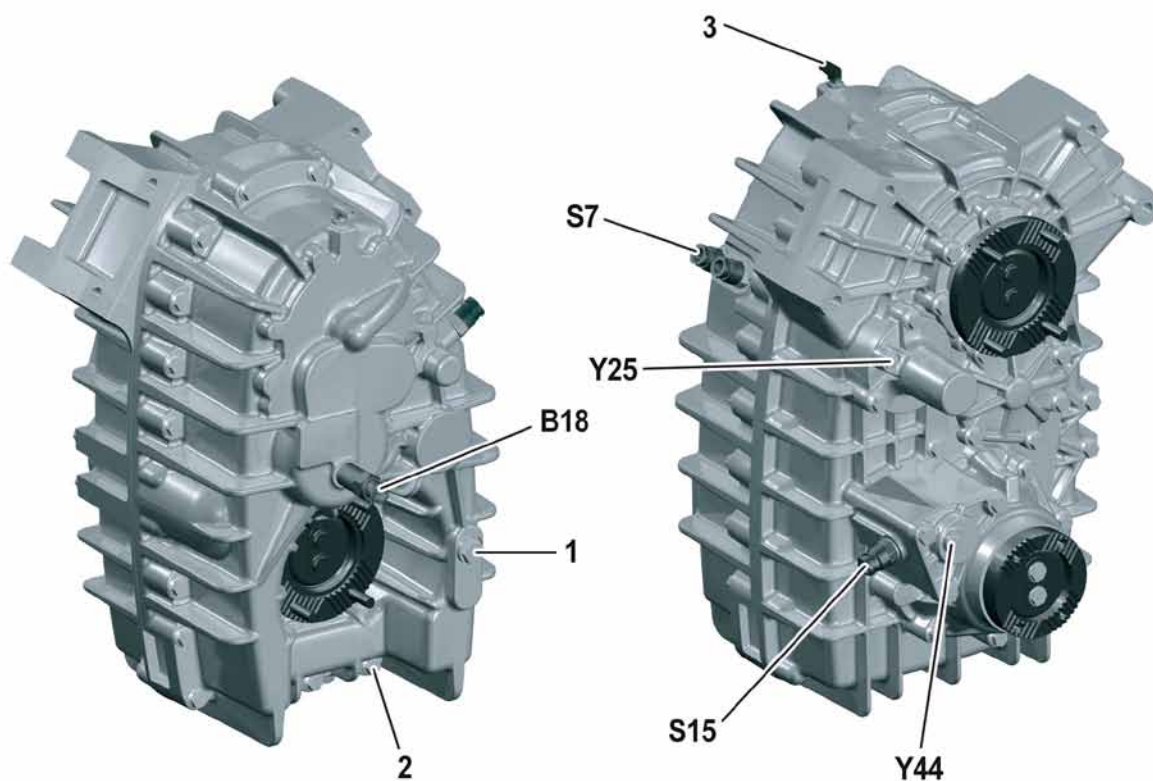


Instrument panel switch module 1 (A44)

W54.25-1216-00

Transfer case

Transfer case VG1000/3W



W28.10-1082-00

- 1 Oil replenishment and oil level
- 2 Drain screw
- 3 Ventilation

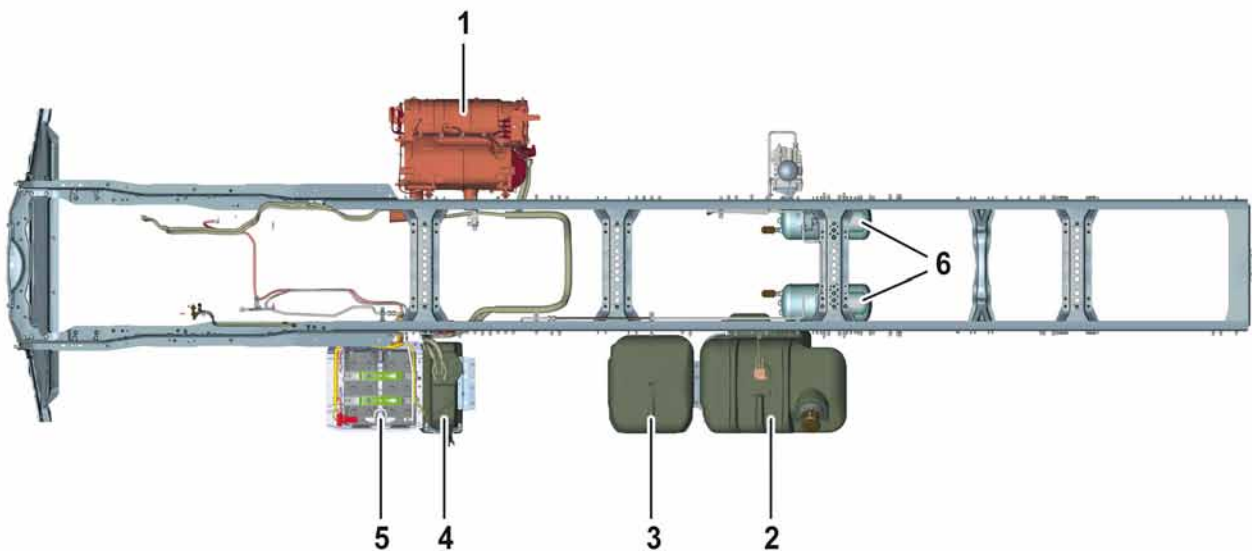
- B18 Travel and speed sensor
- S7 Off-road gear indicator switch
- S15 Interaxle differential lock indicator switch (front axle cut-in)
- Y25 Off-road gear solenoid valve
- Y44 Interaxle differential lock solenoid valve (front axle cut-in)

General

On platform vehicles, dumper vehicles and semitrailer tractors, the fuel tank and the AdBlue® tank have been moved to the left side and the location of the compressed air reservoirs has been changed due to the large EATU Euro VI on the right side of the vehicle.

End crossmember

Code	Name
Q8L	Crossmember, for trailer hitch G135
Q8T	Crossmember, for trailer hitch G145
Q8Y	Crossmember, retrofitted AHK G135 ZAA
Q8Z	Crossmember, retrofitted AHK G145 ZAA



Frame based on the example of Atego platform vehicle 4x2, 7.99 t (967.002)

W31.00-1096-00

- 1 Exhaust aftertreatment unit
- 2 Fuel tank
- 3 Additional reservoir
- 4 AdBlue® tank
- 5 Batteries
- 6 Compressed air reservoir

Frame

Frame versions

Code	Name
C5I	Attaching parts, for platform vehicles
C5J	Attaching parts, for dumper vehicles
C5S	Axle components/chassis parts, narrow vehicle
C5T	Frame reinforcement
C5V	Front end of frame, reinforced, for special implements
C7Y	Frame, disassembled, stage I (CKD)
C7Z	Frame, disassembled, stage II (CKD)
C9K	Frame overhang, retrofitted 3rd axle
C9L	Frame overhang, extended, 200 mm
C9M	Frame overhang, extended, 400 mm, 2-axle vehicle
C9P	Frame overhang, extended, 600 mm
C9Q	Preinstallation, overall width 2300 mm
C9T	Preinstallation for frame, for shackle mounting



W31.20-1001-00

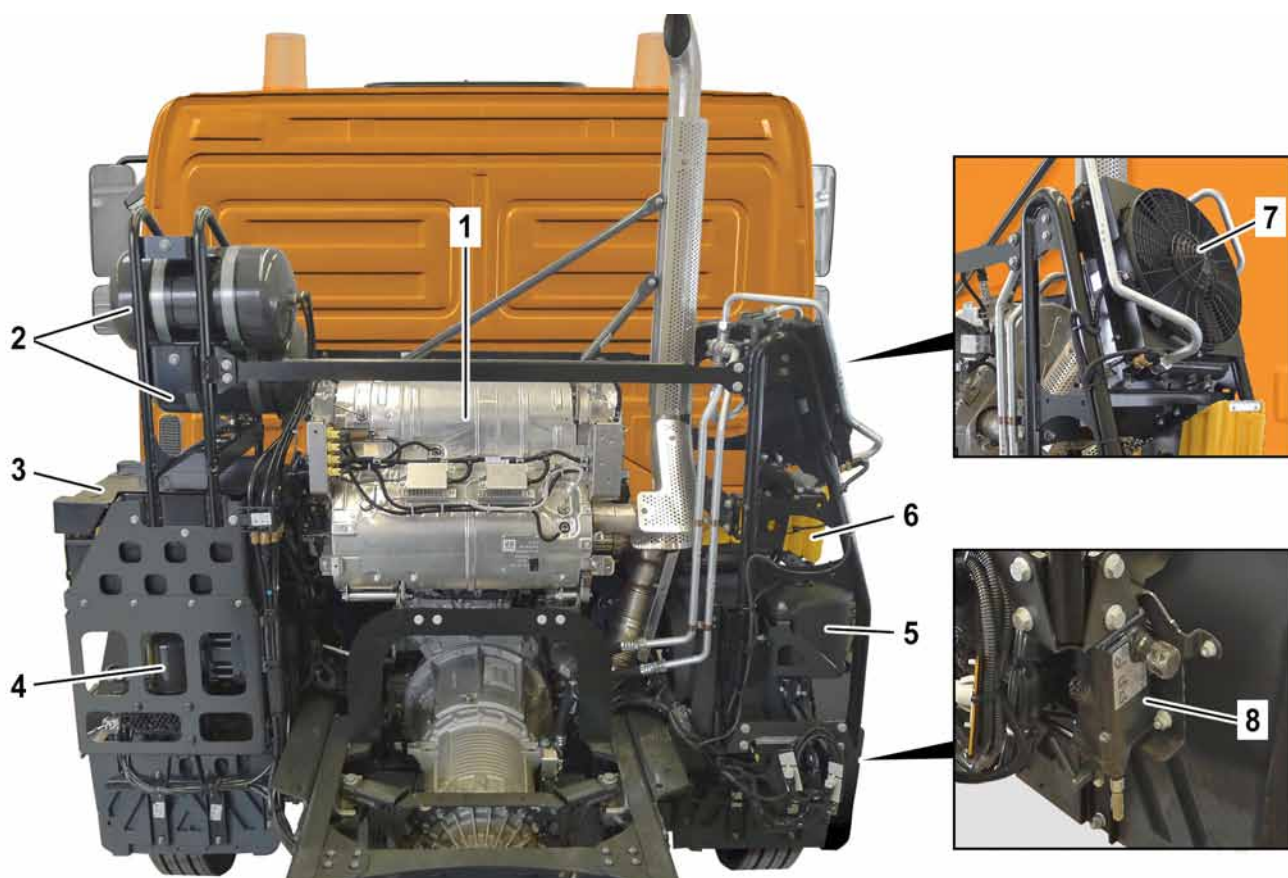
Attaching parts, for dumper vehicles (C5J)

Municipal vehicles

Two new model designations for municipal vehicles (use of sweeper body) are available especially for the Atego. To make it easy to disassemble them, components that normally rest on the frame are positioned behind the cab. These components are:

- Exhaust aftertreatment unit
- Compressed air reservoir
- Batteries
- Electronic Air Processing Unit (EAPU)
- AdBlue® tank
- Wheel chock
- Transmission cooler, oil/air
- Tipping pump
- Vehicle jack

The wheelbase for municipal vehicles (10.5 – 13.5 t) was therefore extended by 300 mm.



Municipal vehicle equipment bracket (967.526)

- | | |
|-------------------------------|--------------------------------|
| 1 Exhaust aftertreatment unit | 5 AdBlue® tank |
| 2 Compressed air reservoir | 6 Wheel chock |
| 3 Batteries | 7 Transmission cooler, oil/air |
| 4 EAPU | 8 Tipping pump |

W00.01-1034-00

Axles

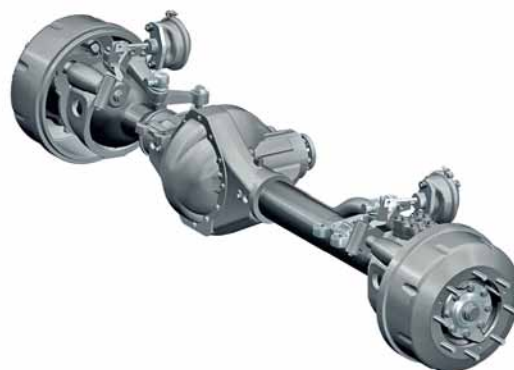
Front axle

The front axle and the steering were modified with a view to increased steering precision, improved straight-ahead running and high directional stability when braking.



W33.10-1026-00

Front axle, 5,3 t (730.076)



W33.10-1027-00

Front axle, 6,0 t (731.721)

Rear axle

Vehicles with steel springs and up to 10.5 t are equipped with a new rear axle guide. The optimized location of the anchorage points on the rear springs reduces the roll understeer and contributes to improved road performance.



W35.10-1061-00

Rear axle, ring gear 410, hypoid, 10,8 t (771.003)



W35.10-1062-00

Rear axle guide

Front axles

Code	Name	Model designation	Designation
A1J	Front axle, 4,4 t	730.722	F-4.4/C17.5
A1K	Front axle, 5,3 t	730.076 730.077 ¹	F-5.3/C19.5
A1L	Front axle, 6,1 t	730.078	F-6.1/C19.5
A1M	Front axle, 4,1 t	730.721	F-4.1/C17.5

Driven front axle

A1O	Front axle, 6,0 t	731.721	FD360-6.0/W19.5
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¹ Narrow design

Rear axles

Code	Name	Model designation	Designation
A2A	Rear axle, ring gear 325, hypoid, 7,0 t	742.516	R325-7.0/C17.5
A2B	Rear axle, ring gear 325, hypoid, 6,2 t	742.512 742.515	R325-6.2/C17.5 R325-6.2A/C17.5
A2C	Rear axle, ring gear 325, hypoid, 8,1 t	742.513	R325-8.1A /C17.5
A2Q	Rear axle, ring gear 325, hypoid, 8,3 t	742.517	R325-8.3/C17.5
A2K	Rear axle, ring gear 410, hypoid, 10,8 t	771.003	R410-10.8/C19.5
A2L	Rear axle, ring gear 390, hypoid, 11,0 t	771.111 771.112	R390-11/C19.5 R390-11/W19.5
A2M	Rear axle, ring gear 368, hypoid, 7,7 t	770.004	R368-7.7/W19.5
A2P	Rear axle, ring gear 390, hypoid, 9,2 t	771.118	R390-9.2/W19.5
A2Y	Rear axle, narrow design ²	771.118	R390-9.2/W19.5

² When the rear axle, narrow design (code A2Y) or axle components/chassis parts, narrow vehicle (code C5S) is selected as special equipment, the rear axle, ring gear 390, hypoid, 9.2 t (A2P) is installed.

Suspension

Steel suspension

The steel springs are the same as on the predecessor model. The front spring, 3.6 t, parabolic (Q1J), and the rear spring, 5.0 t, parabolic, 1-leaf (Q2N), which are designed as 1-leaf springs for reasons of weight, are a new feature.

Partial and full air suspension with level control system

Air-sprung vehicles have a new adjustable air suspension at the rear axle.

The level control system (CLCS) is responsible for lowering or raising the frame height on air-sprung vehicles by actuating the solenoid valves, or for maintaining the height that is set.

The frame height of the vehicle can be adjusted in the following ways:

- Using the operating unit or the steering wheel buttons (vehicle speed <30 km/h)
- The level control control unit (CLCS) (A26) automatically sets the height to a previously stored value (except when loading or unloading function is activated) when the ignition is switched ON



Front spring, 3.4 t, parabolic (Q1C)



Front spring, 3.6 t, parabolic (Q1J)



Air-sprung front axle (A1A)



Rear spring, 5.0 t, parabolic, 1-leaf (Q2N)

Electronic brake control (EBS)

The electronic brake control (EBS) system is an electronic control system with ABS and ASR which acts on the pneumatic brake system and is standard equipment on all vehicles. The system has already been described with the introduction of Actros.

Disk brakes and drum brakes

On 4x2 vehicles, disk brakes are fitted on the front and rear axles as standard. The 4x4 vehicles have drum brakes on the front and rear axles as standard.

Disk brakes can be fitted in the front and drum brakes can be fitted in the rear as special equipment on 4x2 vehicles in combination with electronic air-processing unit, medium (B1D). Semi-trailer tractors and municipal vehicles are exceptions.



Front axle with disk brake

W42.10-1413-00



Rear axle with drum brake

W42.10-1414-00

Suspension

Electronic Air Processing Unit (EAPU)

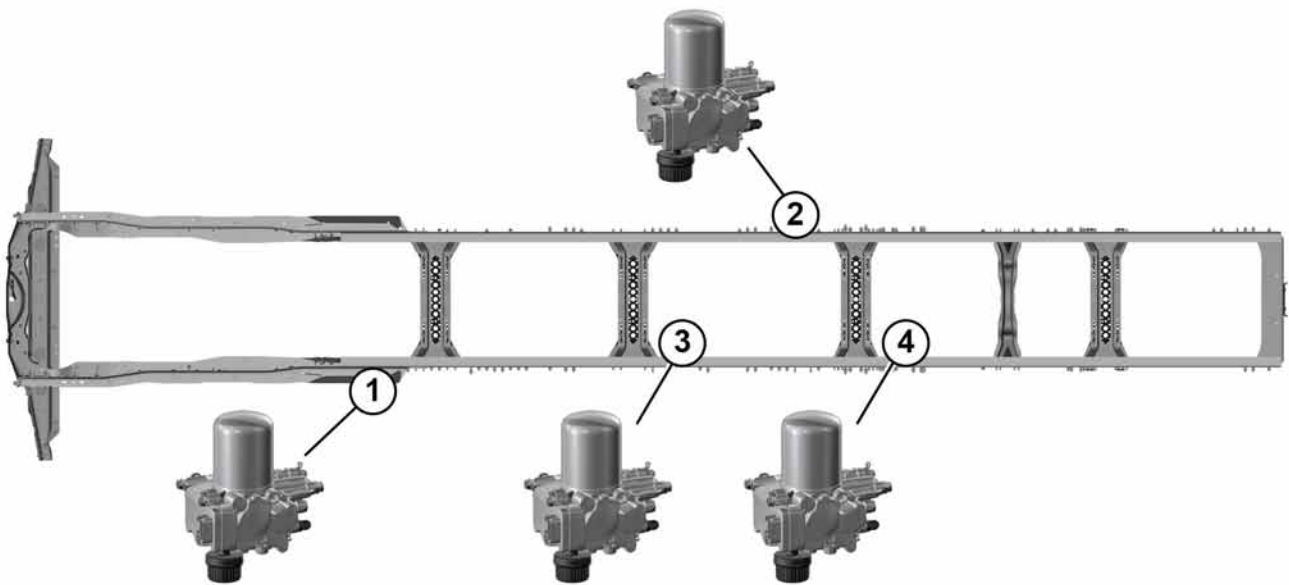
The EAPU already known from the new Actros is also used in the new Atego. The EAPU combines the compressed air drier, multi-circuit protection valve and pressure sensor in one unit.

There are 2 variants of the EAPU that are used:

- Electronic air-processing unit, low (B1C), only vehicles without trailer brake, 2-line (B5B)
- Electronic air-processing unit, medium mittel (B1D)

Both versions can also be ordered with heater, electronic air-processing unit.

4x2 platform vehicles and dumper vehicles with steel springs, without automated transmission and without trailer hitch have the GAPU (Global Air Processing Unit). It corresponds to the conventional APU with 2 pressure levels, i.e. the so-called pressure regulator.



W42.60-1256-00

Installation positions of EAPU

- 1 Municipal vehicles
- 2 Dumper vehicles and platform vehicles 4x2
- 3 Dumper vehicles and platform vehicles 4x4, semitrailer tractors
- 4 Fire-fighting vehicles

The permanent magnet retarder (B3G) is the lightest retarder in its class and is fitted ex factory only on Atego. Using the eddy current principle it generates a braking torque of 650 Nm and is completely free of wear and maintenance. Thanks to integrated permanent magnets, it does not require power supply either.

The retarder is operated using the multifunction control lever on the right side on the steering column. As the retarder is integrated in the service brake, it can also be activated via the service brake. The wear on the brake lining is thus reduced by up to 60%, which in turn reduces maintenance costs.

The permanent magnet retarder is available with the transmissions G 71-6 and G 90-6 for the following model designations:

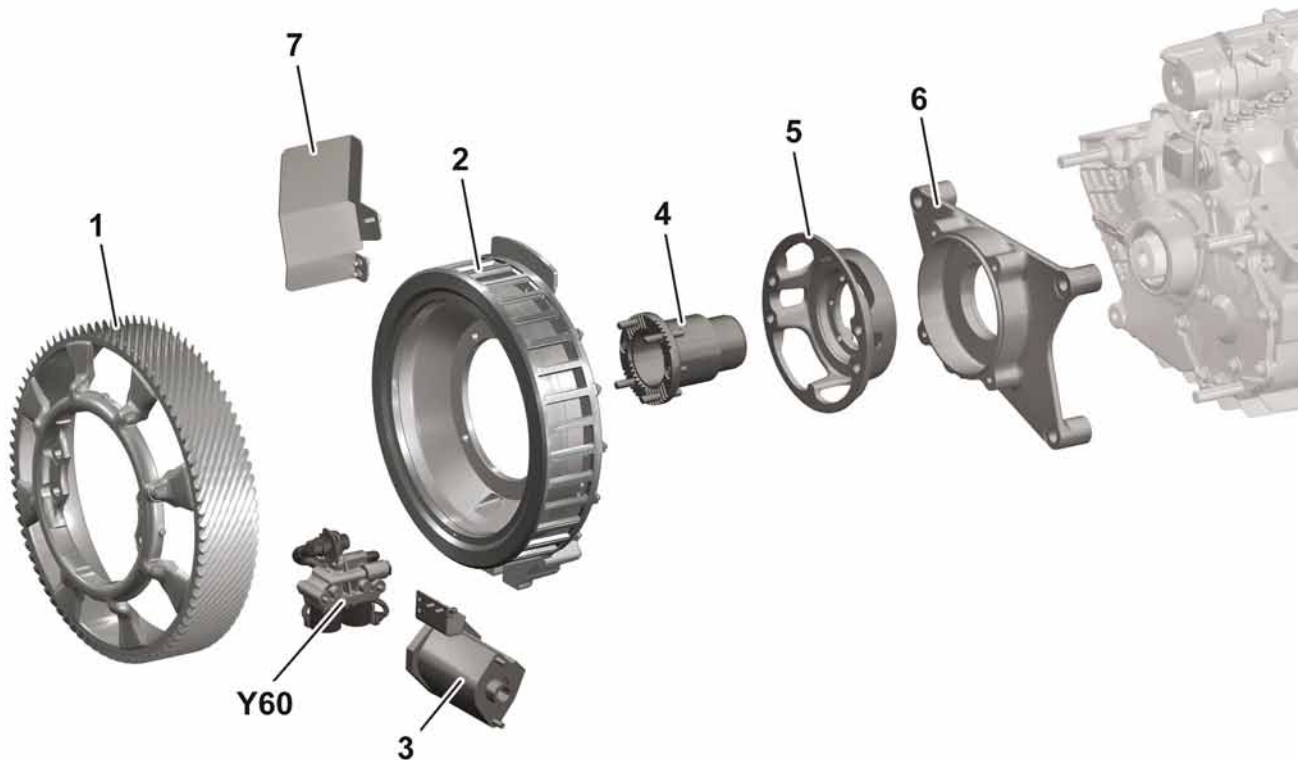
- 967.000 – 967.008 Platform vehicle with steel suspension
- 967.020 – 967.028 Platform vehicle with air suspension
- 967.426 Semitrailer tractor

Manual gearshift (G5H) or the automated Mercedes PowerShift 3 gearshift (G5G) can be selected for the transmission.

Due to the bulk volume, installation of transmission power take-off unit is not possible in combination with the permanent magnet retarder.

Note

The safety information in the WIS document AS43.40-Z-0001-01A must be observed when handling permanent magnet retarders.



Permanent magnet retarder (B3G) on transmission G 90-6

- | | | | |
|---|------------------|-----|---------------------|
| 1 | Rotor | 5 | Intermediate flange |
| 2 | Stator | 6 | Adapter plate |
| 3 | Actuator | 7 | Shield |
| 4 | Connector flange | Y60 | Solenoid valve |

W43.40-1120-00

Wheels and tires

Aluminum rims from Daewoo and Alcoa are available in a comprehensive range in 17.5 inch and 19.5 inch as special equipment for the new Atego. The difference in weight as compared to steel rims is 50 – 80 kg.

Under the designation Alcoa DuraBright, Alcoa offers wheel rims that do not corrode and are easy to clean.

The same wheels as on the predecessor model will generally be available. The rim 10.00-V20 for single tires, which is not available any more, is replaced by the flat base rim 10.00 W-20, 365/85 for single tires (R4P). In future, the weight variant 13.1 t (5.45/7.7) (T2B) will include the 10.00 W-20 (8-hole) rim and 365/85 R 20 tires.

Spare wheel

Depending on the vehicle version, one of the following variants of the spare wheel is installed:

- Spare wheel jack, on the side (R8A)
- Spare wheel jack, under the frame end (R8B)
- Spare wheel mounting, for dumper vehicles (R8C)
- Spare wheel jack, behind the rear axle (R8D)
- Spare wheel holder, on the side (R8H)



W40.10-1028-00

Spare wheel jack, on the side (R8A)



W40.10-1029-00

Spare wheel jack, behind the rear axle (R8D)

General

As on the predecessor model the cabs in the new Atego are available in 3 lengths and 2 heights:

- S-cab ClassicSpace
- S-cab ClassicSpace, extended
- L-cab ClassicSpace
- L-cab BigSpace

The crew cabin (crewcab) is a new feature and is available ex factory. Apart from the driver, there is room for 5 other passengers in the crewcab. Main areas of application are fire-fighting vehicles, municipal vehicles and construction vehicles as well as vehicles for the building materials industry and towing service.

All the cabs have a width of 2300 mm. The bodyshell is very uniformly designed up to the roof frame. The different cab heights ClassicSpace and BigSpace are achieved by means of corresponding side roof carriers and panels above the roof frame.

The outer longitudinal members have clearly been reinforced in comparison with the cabs on the predecessor model. The cabs fulfill the Swedish test and versions 02 and 03 of the standard ECE R29, which comes into force as of 2014.

Compared to the predecessor model, the body floor height (ASH) with the 4-cylinder engine is 105 mm higher and the attachment height with the 6-cylinder engine is 60 mm higher.

The one-step cab entry (F7W) is a standard feature on vehicles with a permissible gross vehicle weight of up to 8 t. The two-step cab entry (F7V) can be selected as special equipment.

Vehicles with a permissible gross vehicle weight of 9.5 t or more and all-wheel drive vehicles always have a two-step cab entry (F7V).



W00.00-1081-00

S-cab ClassicSpace



W00.00-1083-00

L-cab BigSpace



W00.00-1082-00

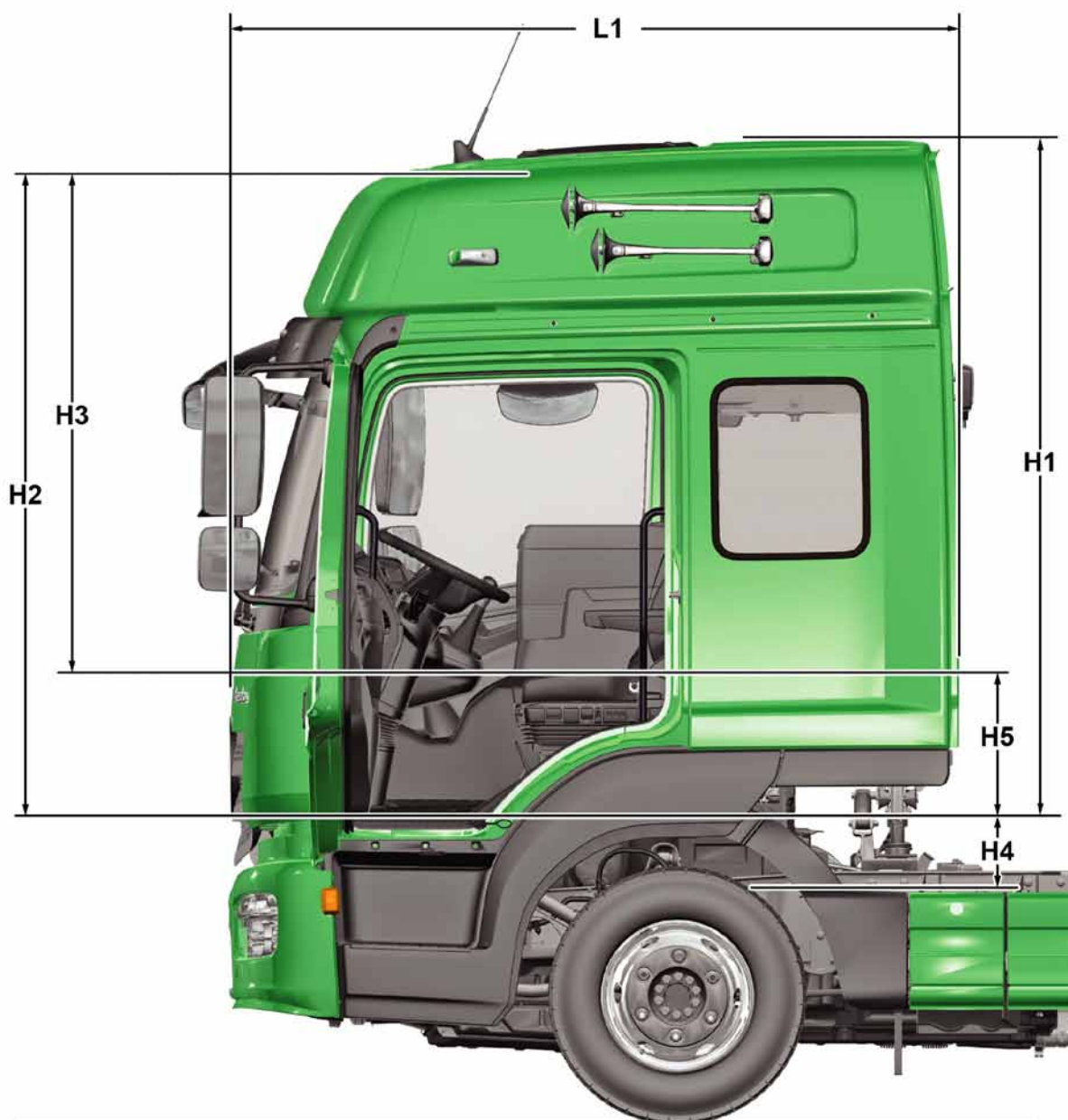
S-cab ClassicSpace, extended (distribution haulage)



W00.00-1085-00

S-cab ClassicSpace, extended (construction)

Cab



Cab dimensions based on the example of platform vehicle with L-cab, engine tunnel 460 mm, ASH 140

W00.01-1035-00

L1 Length

H1 Height

H2 Floor-to-ceiling height in front of seat

H3 Floor-to-ceiling height on engine tunnel

H4 Body floor height (ASH)

H5 Engine tunnel height

i Note

The body floor height (ASH) designates the distance from the lower edge of the floor panel to the uppermost row of holes in the longitudinal frame member.

Overview of available cabs

		S-cab ClassicSpace, 2,30 m, tunnel	S-cab ClassicSpace, extended, 2,30 m, tunnel	L-cab ClassicSpace, 2,30 m, tunnel	L-cab BigSpace, 2,30 m, tunnel
Code		F1X	F1Y	F1Z	F1U
Length	L1	1700	2000	2300	2300
Width		2300/2500 ¹	2300/2500 ¹	2300	2300
Height	H1	1750	1750	1750	2100
Floor-to-ceiling height in front of seat	H2	1600	1600	1600	1840
Floor-to-ceiling height on engine tunnel	H3	1290	1290	1290	1430
Body floor height	H4	140 ² /320 ³	140 ² /320 ³	140 ² /320 ³	140 ² /320 ³
Height of engine tunnel	H5	140 ² /320 ³	140 ² /320 ³	140 ² /320 ³	140 ² /320 ³

¹ Construction vehicles with all-wheel drive² with engine OM 934³ with engine OM 936

All dimensions in mm

Cab

Cab entry step

Two variants of cab entry are available for the new Atego:

- one-step or two-step entry can be selected for vehicles up to 8.6 t
- only two-step entry for vehicles of 8.6 t or more

Construction vehicles with all-wheel drive are equipped with a movable two-step entry.



W60.80-1182-00

Cab entry, one-step (F7W), distribution haulage



W60.80-1183-00

Cab entry, two-step (F7V), distribution haulage



W60.80-1184-00

Cab entry, two-step (F7V), construction vehicle

Seats

The seats are made of velour and flat-weave fabric with a new design and a vertically adjustable 3-point seat belt. On vehicles with automated gearshift, armrests on both sides for driver's seat (D2V) and armrests on both sides for front passenger seat (D2W) can be ordered as special equipment. The special equipment driver suspension seat, climate (D1D)/ front passenger suspension seat, climate (D1Q) includes armrests on both sides.

Center seat, with seat belt (D1Z)

An additional center seat is available as special equipment for the S-cab ClassicSpace, 2.30m, tunnel (F1X). The center seat is mounted on the engine tunnel. It features backrest adjustment with a folding backrest, a vertically adjustable head restraint and a 3-point seat belt.

Beds

Three beds are available for selection:

- Upper deluxe bed, wide, level-adjustable (D3A)
- Lower deluxe bed (D3B)
- Lower bed (D3C)



W91.10-1414-00

Driver suspension seat, climate (D1D)



W91.75-1006-00

Lower deluxe bed (D3B)

Cab



W68.10-1109-00

Instrument panel for manual gearshift (G5H)



W68.00-1031-00

Interior

Instrument cluster (ICUC) control unit

The instrument cluster in the new Atego has a large 10.4-cm display. The instrument cluster, 12.7 cm with video function (J1C), in combination with the reversing camera is a new feature and available as special equipment.

It can be operated using the button group on the left or right of the multifunction steering wheel, as the case may be.

If preinstallation for reversing camera is ordered via code J9J, the power for the camera is supplied by the single signal acquisition and actuation module (SSAM) control unit (fused with F38).

The reversing camera supplies the video signal directly to the video input (A1V1 pin 1) of the instrument cluster control unit (ICUC).



Instrument cluster 12.7 cm, with video function (J1C)

W54.32-1036-00

Cab

Truck Control Center (TCC)

The new Atego features a new CD radio with AUX connector and mini-USB connector. Not only audio CDs, but MP3 and WMA CDs can also be played.

The following variants are available:

- CD radio (J2A)
- CD radio, Bluetooth® (J2B) with additional Bluetooth® interface for hands-free systems and media players
- CD radio, Bluetooth®, comfort (J2C) with additional Bluetooth® interface for hands-free systems and media players, and charging tray for charging rechargeable batteries of mobile phones and for inductive coupling to roof antenna



W82.60-1113-00

CD radio, Bluetooth®, comfort (J2C)



W82.60-1114-00

Mobile phone charging tray

Preinstallation for mobile media applications

The preinstallation, universal, for use of multimedia (J9K) enables the use of commercially available multimedia devices such as smartphones or MP3 players in the vehicle.

Depending on the application to be used, the customer needs to purchase a suitable adapter for attachment to the 4-talon system at a retail store.

The scope of supply includes:

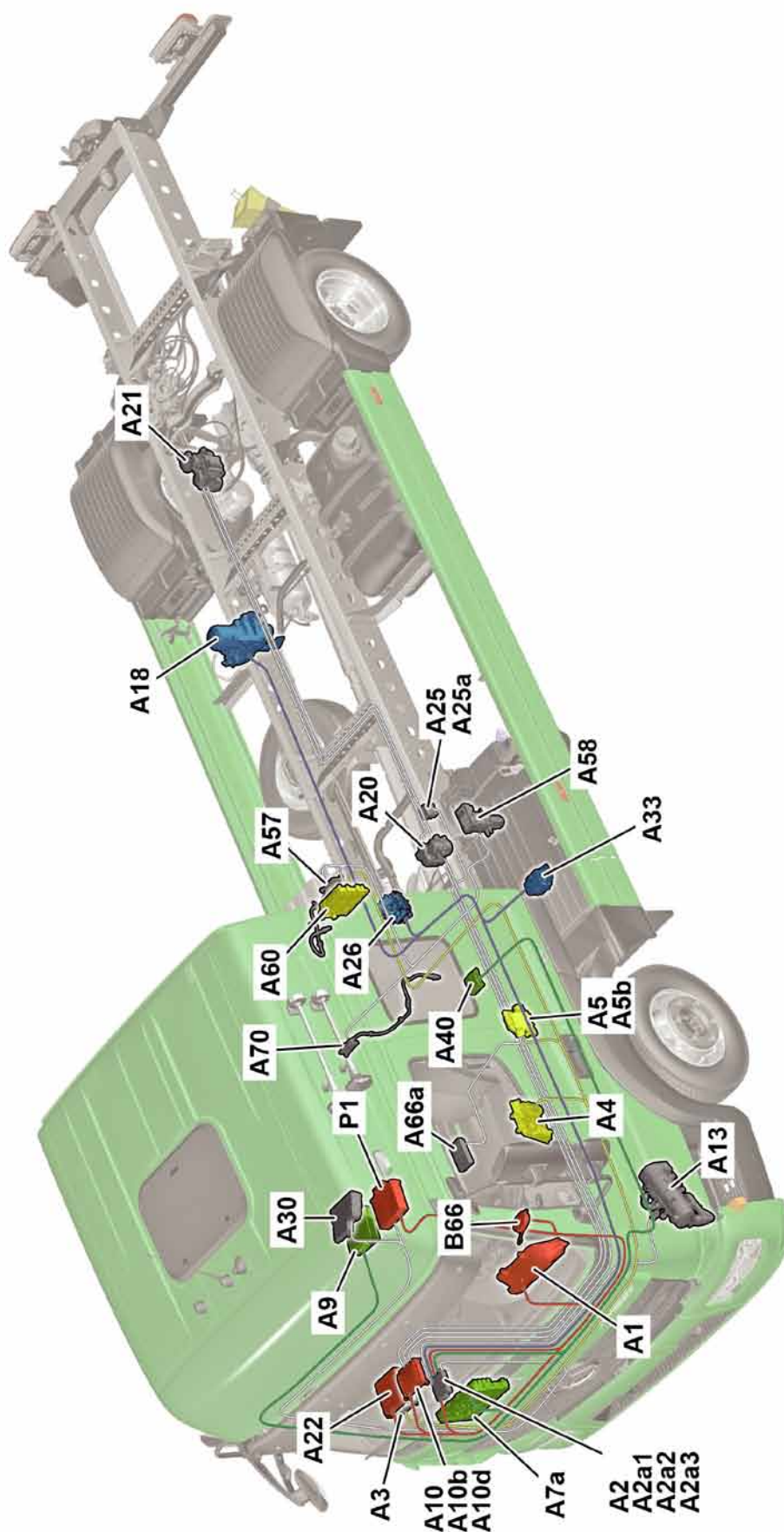
- Holder with 4-talon system as basic attachment for corresponding dock adapters
- Voltage converter with 24-V socket
- Connection for jack plug (radio mute and audio)



W82.60-1112-00

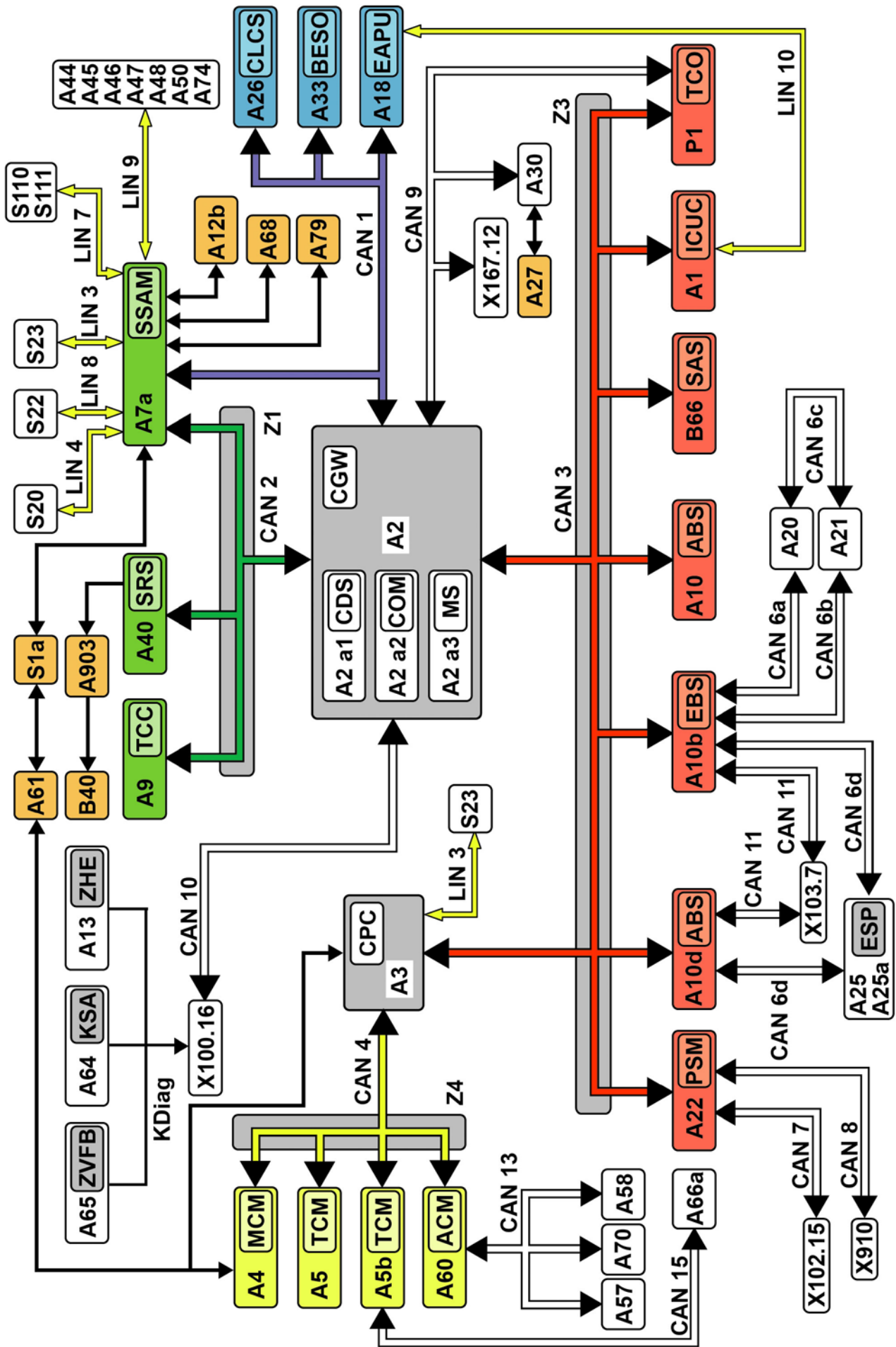
Preinstallation, universal, for use of multimedia (J9K)

W00.19-1101-00



Location of control units based on the example of Atego platform vehicle (967.002)

Overall network



W00.19-1100-00

Atego overall network (model 967)

A1	Instrument cluster control unit (ICUC)	A10	Anti-lock braking system control unit (ABS), 4-channel	A26	Level control control unit (CLCS)	A60	Exhaust aftertreatment control unit (ACM)
A2	Central gateway control unit (CGW)	A10b	Electronic Brake Control control unit (EBS)	A27	DispoPilot* control unit	A61	Immobilizer* control unit
A2a1	Central data memory (CDS)	A10d	Anti-lock braking system control unit (ABS) with ESP®	A30	FleetBoard® control unit	A64	Comfort locking system control unit (CLS)
A2a2	Communications interface control unit (COM)	A12b	Heater operating unit*	A33	Battery disconnect switch control unit (BESO)	A65	Central locking and radio remote control control unit (ZVFB)
A2a3	Maintenance system control unit (MS)	A13	Auxiliary heater control unit (ZHE)	A40	Supplemental restraint system control unit (SRS)	A68	CB radio* control unit
A3	Drive control control unit (CPC)	A18	Electronic Air Processing Unit control unit (EAPU)	A44	Instrument panel switch module 1	A66a	Automatic transmission button group
A4	Engine management control unit (MCM)	A20	Front axle axle modulator (Wabco)	A45	Instrument panel switch module 2	A70	NOx sensor control unit, exhaust aftertreatment unit inlet
A5	Transmission control control unit (TCM)	A21	Rear axle axle modulator (Wabco)	A46	Instrument panel switch module 3	A74	Instrument panel switch module 4
A5b	Automatic transmission control unit (TCM)	A22	Parameterizable special module control unit (PSM)	A47	Special equipment switch module	A79	Accessories plate, winter service operations*
A7a	Single signal acquisition and actuation module (SSAM) control unit	A25	Electronic Stability Program (ESP®) control unit (Wabco)	A48	Roof switch module	A903	Multifunction steering wheel* clock spring contact
A9	Truck Control Center (TCC)	A25a	Electronic Stability Program (ESP®) control unit (Knorr)	A50	Lower driver bunk switch module	B40	Airbag* squib
				A57	NOx sensor control unit, exhaust aftertreatment unit outlet	B66	Steering wheel angle sensor (SAS)
				A58	SCR control unit	P1	Tachograph (TCO)

Overall network

* Control units without CAN or LIN networking

KDiag	K line diagnosis
LIN 3	Right multifunction control lever LIN
LIN 4	Left multifunction control lever LIN
LIN 7	Button group LIN
LIN 8	Level control LIN
LIN 9	Switch panel LIN
LIN 10	EAPU LIN

Z1	CAN bus star point, cab instrument panel
Z3	CAN bus star point, frame
Z4	CAN bus star point, drive
CAN 1	Exterior CAN
CAN 2	Interior CAN
CAN 3	Frame CAN
CAN 4	Drive train CAN
CAN 6a	Front axle brakes CAN
CAN 6b	Rear axle brakes CAN
CAN 6c	Redundancy brakes CAN
CAN 6d	BESP® brakes CAN
CAN 7	Trailer CAN (PSM)
CAN 8	Body manufacturer CAN (PSM)
CAN 9	Telematics CAN
CAN 10	Diagnostic CAN
CAN 11	Trailer CAN (EBS)
CAN 13	NOx CAN
CAN 15	Automatic transmission CAN

S1a	Ignition lock*
S20	Left multifunction control lever
S22	Level control operating unit
S23	Right multifunction control lever
S110	Left multifunction steering wheel button group
S111	Right multifunction steering wheel button group
X100.16	Diagnostic socket
X102.15	Trailer socket, 15-pin
X103.7	ABS trailer socket, 7-pin
X167.12	Fleet management system electrical connector
X910	Electrical connector for body manufacturers

Single signal acquisition and actuation module (SSAM) control unit (A7a)

In combination with the central gateway control unit (CGW) (A2), the single signal acquisition and actuation module (SSAM) control unit (A7a) replaces the base module (A7) of the predecessor model. Like in case of the new Actros, the information is distributed over the bus systems by the central gateway (CGW) control unit (A2) on the Atego too.

There are 2 variants of the SSAM that are used:

- A 000 446 85 58 - SSAM Low
- A 000 446 86 58 - SSAM High

For example, vehicles with all-wheel drive, dumper and/or power take-off have the high version (SSAM High).

Note

As a replacement part, the single signal acquisition and actuation module (SSAM) control unit (A7a) is only available in the higher version (SSAM High).



Location of SSAM in the electronics compartment on the passenger side

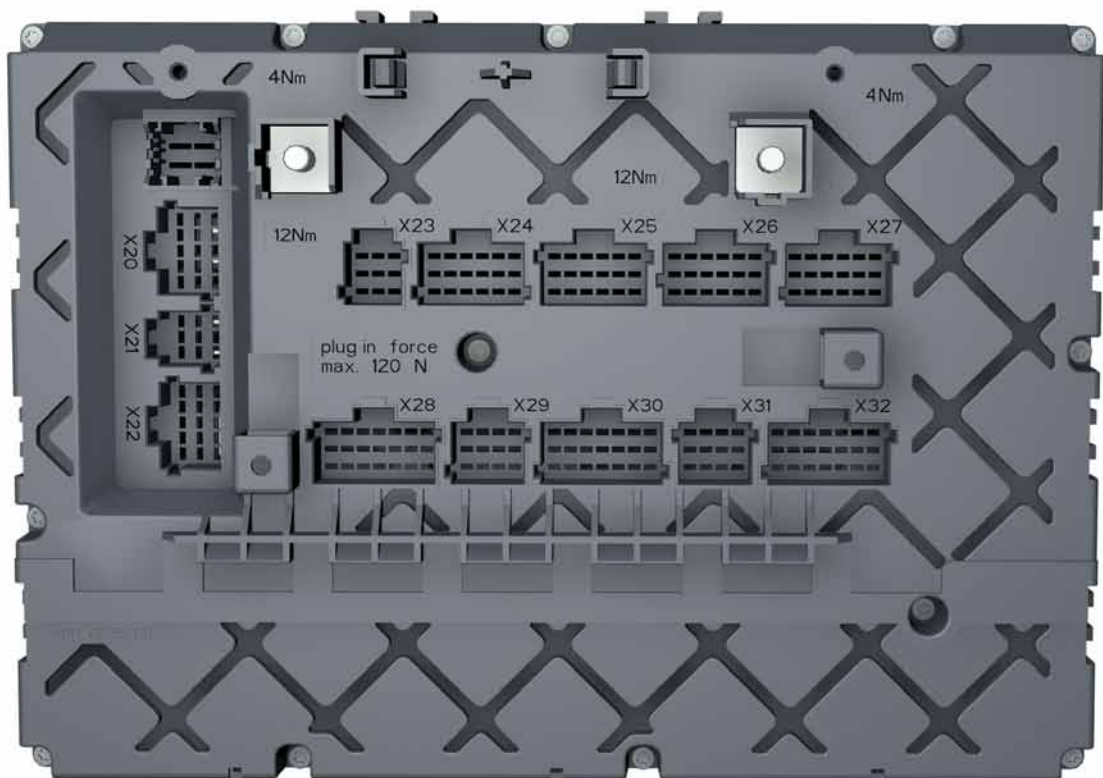
W54.21-1625-00

Overall network



View of front section of SSAM

W54.21-1626-00



View of rear section of SSAM

W54.21-1627-00

Connector assignment

X1	Power outlets circuit 31, connection pins to diodes 1-2
X2	Connection pins to diodes 3-5
X3	Power outlets, circuit 31
X4	Power outlets, circuit 30
X5	Power outlets, circuit 30
X6	Ignition lock shift input
X7	Winter service operations, headlamp switch
X8	Reading lamp switch outputs/inputs; Door status
X9	Locking system, with central locking
X10	Switch module connection
X11	LIN connections: CLCP, SSL, SWB
X12	Switch outputs/inputs for LDS, differential lock buttons
X13	Connection, interior CAN and exterior CAN: Power outlets, circuit 31
X14	Power outlets, circuit 15 and circuit 30
X15	Power outlets, circuit 15, circuit 30 and D+
X16	Power outlets, circuit 15 and circuit 30
X17	Power outlets, circuit 15 and circuit 30
X18	Power outlets, circuit 31
X19	Interior and exterior illumination, fused in power distributor (30 A fuse)

Overall network

Connector assignment

X20	Engine wiring harness: TCM and retarder
X21	Longitudinal member wiring harness
X22	Longitudinal member wiring harness: CLCS, BES0, EAPU, ACM
X23	Engine wiring harness: Alternator
X24	Front end wiring harness: Cab lock, headlamp cleaning system, clearance lamp, front turn signal lamps, washer fluid pump, wiper motor, washer fluid fill level
X25	Longitudinal member wiring harness: Maneuvering lights, electronic horn, brake wear sensors, transfer case, trailer socket
X26	Longitudinal member wiring harness: Differential locks, cab lock, rear fog lamps
X27	Longitudinal member wiring harness: APU pressure switch and sensors, ADS engine OFF
X28	Longitudinal member wiring harness: Brake wear sensors, transfer case
X29	Longitudinal member wiring harness: Outside temperature sensor, headlamps, daytime running lamps, marker lamps at front
X30	Longitudinal member wiring harness: Steering oil level switch, rear turn signal lamps for power take-off, parking brake switch, work lamp, fuel sensor
X31	Longitudinal member wiring harness: Headlamp range adjustment, front fog lamp
X32	Longitudinal member wiring harness: Side marker lamps, differential locks, transfer case

Parameterizable special module (PSM) control unit

The parameterizable special module (PSM) familiar from the model series 963 and 964 will also be available in the new Atego. The PSM is an electronic interface for connecting bodies, equipment, trailers and semitrailers via CAN interfaces.

The following versions are available:

- PSM, body and trailer CAN, ISO 11992 (E3Y)
- PSM, body CAN, ISO 11898 instead of 11992 (E3Z)

The PSM enables the direct exchange of information between the vehicle electronics and the bodies, attachments, equipment and trailer or semitrailer. The communication interfaces between the vehicle electronics and retrofitted systems are clearly defined and standardized.



W54.21-1628-00

Electronics compartment on passenger side

A22 Parameterizable special module (PSM) control unit

Note

Further information on the parameterizable special module (PSM) control unit can be found in the corresponding documents in WIS.

Exterior lights

General

Through the use of common electronic architecture, many functions available are the same as in model series 963/964, such as:

- Brief turn signals
- Hazard warning flashers with increased flashing frequency, triggered through the Electronic Brake Control (EBS) at a certain rate of deceleration
- Ambient illumination (Follow-Me-Home illumination)
- Dimming of interior illumination
- Night illumination for vehicles with high roof
- Parking brake warning signal
- Lights warning buzzer

Headlamps

The new Atego is equipped with halogen headlamps and daytime running lamps (L1B) as standard.

Available as special equipment:

- LED daytime running lamps (L1C)
- Front fog lamps, halogen (L1H)
- LED taillamps (L1P)
- Turn signal glasses, white (L1Z)
- Clearance lamps, top, yellow (L2J)
- Rotating beacon, yellow, front left and right (L2K)
- Rotating beacon, yellow (L2L)
- LED clearance lamp (L2P)
- Lower work lamps (L3A)
- 1 Work lamp, rear panel, top (L3E)
- Work lamp, maneuvering assistance (L3D)
- Stone impact protection, metal, for headlamps (L4Z)



W82.10-1158-00

Halogen headlamp with LED daytime running lamps (L1C)



W82.10-1159-00

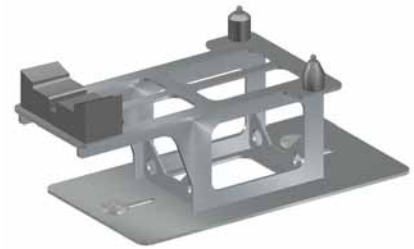
Stone impact protection, metal, for headlamps (L4Z)

Note

In addition to the corresponding Introduction into Service Manuals, the new special tools for the transmission and transfer case for model series 963 and 964 are also listed below.

Support plate

Use	For removing transmission with an inspection pit lift.
MB number	W 715 589 26 63 00
FG	26
Set	B
Category	Mercedes-Benz Truck - Basic Operation
Note	For all transmissions in model 963/964 (except transmission G 140-8 (715.310)).



W58.20-1137-00

Support plate

Use	For removing transmission with an inspection pit lift.
MB number	W 715 589 27 63 00
FG	26
Set	C
Category	Mercedes-Benz Truck - Basic Operation
Note	For transmission G 140-8 (715.310) in model 963/964.

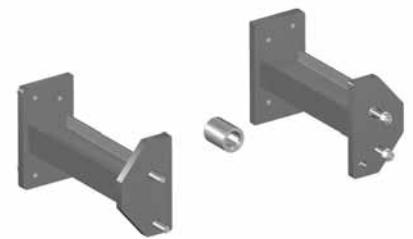


W58.20-1136-00

Transmission

Pull-out plate

Use	For pulling off the transmission housing front section
MB number	W 715 589 16 33 00
FG	26
Set	C
Category	Mercedes-Benz Truck - Special Operation
Note	For transmission G 280-16 (715.523/525) in combination with turbo retarder clutch or NMV power take-off (live power take-off) in model 963/964. In combination with the hydraulic cylinder W 715 589 15 34 00



W58.20-1138-00

Support plate

Use	For removing the power take-off.
MB number	W 715 589 30 63 00
FG	26
Set	B
Category	Mercedes-Benz Truck - Basic Operation
Note	-



W58.20-1139-00

Clamping plate

Use	For identifying the shim for drive shaft.
MB number	W 715 589 29 63 00
FG	26
Set	C
Category	Mercedes-Benz Truck - Special Operation
Note	For transmission G 280-16 (715.523/525) in combination with turbo retarder clutch or NMV power take-off (live power take-off) in model 963/964.



W58.20-1140-00

Additional part for puller

Use	For removing or installing shift piston of splitter group
MB number	W 715 589 04 07 00
FG	26
Set	C
Category	Mercedes-Benz Truck - Special Operation
Note	For transmission G 280-16 (715.523/525) in combination with turbo retarder clutch or NMV power take-off (live power take-off) in model 963/964. In combination with W 715 589 02 07 00.



W58.20-1141-00

Transfer case

Puller screws with centering ball (3 pieces)

Use The puller screws are required to pry off the two halves of the transfer case apart.

MB number W 750 589 01 33 00

FG 28

Set C

Category Mercedes-Benz Truck - Special Operation

Note For transfer case VG 2800-3W (750.854) and VG 3000-3W (750.855) in model 964.



W58.20-1142-00

Installation tool

Use For mounting the wheel hub on the suspension tube of the rear axle.

MB number W 748 589 01 63 00

FG 35

Set C

Category Mercedes-Benz Truck - Special Operation

Note

W58.20-1143-00

Thrust piece

Use For pressing in the kingpin bearing at front axle.

MB number W 739 589 06 15 00

FG 33

Set C

Category Mercedes-Benz Truck - Special Operation

Note

W58.20-1144-00

Abbreviations

ABS

Anti-lock Braking System

ACM

Aftertreatment Control Module

ADR

Accord européen relatif au transport international des marchandises Dangereuses par Route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

AGR

Exhaust gas recirculation

APU

Air Processing Unit

ASH

Body floor height

ASR

Acceleration skid contro

BESO

Battery Emergency Shutoff
(battery disconnect switch)

CAN

Controller Area Network

CDS

Central Data Storage
(central data memory)

CGW

Central gateway control unit

CLCP

Chassis Level Control Panel

CLCS

Chassis Level Control System

CLS

Comfort Locking System

COM

Communication Interface

CPC

Common Powertrain Controller

DNA

Dual power take-off

DOHC

Double Overhead Camshaft

DPF

Diesel Particulate Filter

EAPU

Electronic Air Processing Unit

EBS

Electronic Brake Control

ESP®

Electronic Stability Program

GAPU

Global Air Processing Unit

HA

Rear axle

ICUC

Instrument Cluster Unit Common

LED

Light Emitting Diode

LIN

Local Interconnect Network

LMDPE

Linear Medium Density Polyethylene

MCMMotor Control Module
(engine management control unit)**NA**

Power take-off (PTO)

NMV

Engine-driven power take-off

OM

Diesel engine

PSM

Parameterizable Special Module

SA

Special equipment

SAE

Society of Automotive Engineers

SAS

Steering wheel angle sensor

SCR

Selective Catalytic Reduction

SRS

Supplemental Restraint System

SSAM

Single signal acquisition and actuation module

TCC

Truck Control Center

TCM

Transmission Control Module

TCO

Tachograph

VA

Front axle

VG

Transfer case

ZHE

Auxiliary heater

zGG

Permissible gross vehicle weight

ZVFB

Central locking and radio remote control

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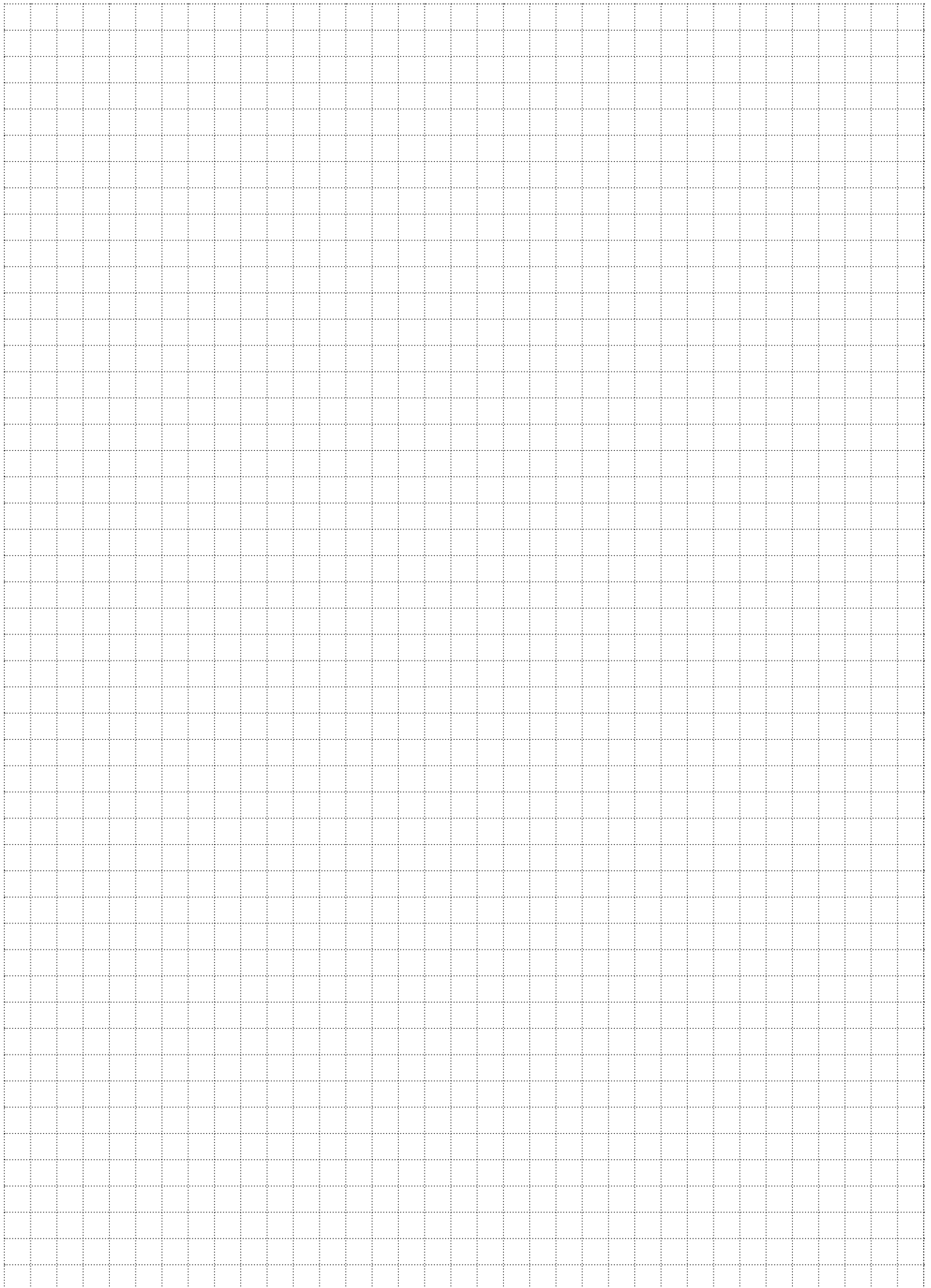
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Notes

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