# FIRE-FIGHTING MAN.

Emergency services vehicles in Euro 5 and Euro 6 versions.



Efficiency in fire management and disaster response means rescuing people faster, improving the way fires are extinguished, providing more effective protection and ensuring more reliable recovery operations.

MAN vehicles are always on hand when things start getting hot. The MAN TGL, MAN TGM and MAN TGS chassis are available ex works with optional special equipment for the fire service and form the dependable basis for both standard and special-purpose vehicles.

Ergonomic cabs, low-consumption common-rail engines, the optimised MAN TipMatic® EMERGENCY gearboxes with performance-oriented gearshift logic specifically for emergency services vehicles and innovative technologies such as MAN HydroDrive® combine exceptional reliability with exemplary environmental sustainability in accordance with the Euro 5 and Euro 6 emissions standards. That adds up to MAN efficiency you can rely on.

### www.truck.man





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Some of the equipment shown in this brochure is not included		

as standard.

Content 3



TGM 13.290 4x4 BL. HLF 20



TGM 18.340 4x4 BB. HLF 20



TGM 13.290 4x4 BL, HI F 20

# AN EFFICIENCY CLASS OF ITS OWN.

## MAN emergency services vehicles in Euro 6

Achieving the extremely low Euro 6 exhaust values means that top-level technical know-how is of the essence. MAN has been successfully implementing key technologies such as common-rail injection, exhaust-gas recirculation (EGR), selective catalytic reduction (SCR) and diesel particulate filters (DPF/CRT) for many years now. These sophisticated technologies have been combined for Euro 6 and optimally coordinated with one another. The result? MAN Euro 6 vehicles set the standard in consumption of both fuel and AdBlue®.

Like all MAN vehicles, Euro 6 versions also win fans through their great body friendliness. The compact exhaust silencer ensures sufficient space for comfortable entry variants for the crew cab. There is also enough space for the equipment room design.

## → Key features in Euro 6 variant:

- Efficient exhaust system with tested key technologies
- No increase in diesel consumption
- Reduced AdBlue® consumption
- Maximum operating safety and reliability
- High degree of body friendliness, even for crew cabs





TGM 13.290 4x4 BL, HLF 20

TGM 13.290 4x4 BL, HLF 20



TGL 8.180 4x2 BB, TSF-W



TLG 8.220 4x2 BB, MLF



# OUR SOLUTION WHEN THE HEAT IS ON.

# Medium fire-fighting truck and small fire-fighting tank trucks

Compact in size, expansive in action. With an integrated pump and rapid deployment device and/or portable pump, the trucks render valuable service in flexible and effective fire fighting. The MAN TGL comes with the right power and the right ruggedness. A particularly strong argument: its low dead weight for a high payload reserve. And when it comes to size: the MAN crew cab comfortably seats for up to seven persons, with ample space for stowing equipment.

TGM 18.220 4x2 BB,

TGL 8.180 4x2 BL, MLF







TGM 13.290 4x4 BL, HLF 20



TGM 13.290 4x4 BL, TLF-A2000



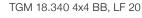
TGM 18.290 4x4 BB, LF 20

# Fire-fighting and rescue vehicles with crew compartment

When you see fire-engine red, it means help is on the way. The crew fire-fighting trucks in the 12- to 18-tonne weight class are vehicles that go through thick and thin. With 1000 to 3000 litres of extinguishing agent on board and a fixed centrifugal fire-fighting pump, the MAN TGL and TGM can also successfully tackle big fires.

Rescue unit crew fire-fighting trucks are proven all-rounders with extensive basic fire-fighting equipment, supplemented by loading sets for technical assistance or by equipment to meet the specific needs of the local fire service.

To make sure they get where they're intended to go, the MAN chassis also come in an all-wheel-drive version with single tyring – for excellent mobility.







TGM 13.290 4x4 BL, HLF 20



TGM 13.290 4x4 BL, LF 20



TGM 13.290 4x4 BL, HLF 10



TGM 13.290 4x4 BL, TLF 2000



TGS 26.480, TLF



TGM 13.290 4x4 BL, TLF 2500

10 Fire service trucks





# Fire-fighting tank trucks

When the staff of a fire-fighting tank truck hears "Water on!" it lets loose with all it's got. Fire-fighting tank trucks are designed to transport water, technically equipped for fighting fires and often carry special extinguishing agents such as foam, powder or carbon dioxide for specific risks. As versatile as their missions are the chassis of the MAN TGS, MAN TGM and MAN TGL series. Each comes with the right cab for its unit or crew.



TGS 33.480 6x6 BB, Tro SLF



TGS 32.400 6x6 BB, TLF 16.000

TGM 13.290 4x4 BL, TLF 3000

# BRANDWER MAN

TGL 12.250 4x2 BL, RW



TGM 18.340 4x4 BB, RW



TGM 18.340 4x4 BB,

# **EQUIPPED FOR EVERY NEED.**

# Rescue and equipment vehicles

When a situation starts getting precarious, it often has nothing to do with fire. For technical assistance in accidents involving vehicles, oil and dangerous goods, it's time for rescue and equipment vehicles to appear on the scene, to save lives and avert harm to the environment. Depending on the application, they are equipped with life-saving equipment such as hydraulic cutting apparatus and hydraulic spreader, recovery equipment and winch. The robust frame of MAN vehicles is perfectly suited to operation of winches and cranes. There are also equipment tenders, which mainly take on tasks related to logistics.





TGL 8.180 4x2 BL, GW-L1



TGM 18.340 4x4 BB, GW-L2



TGL 12.250 4x2 BL, GW-G

Rescue and equipment vehicles 13



# RESCUE WHERE THE NEED IS HIGHEST.

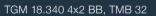
# Turntable ladders and telescopic rescue platforms

If all escape routes are cut off by fire and smoke, the turntable ladder or aerial rescue platform is the way to safety. Extending to a height of up to 112 metres, they reach to where no other help could be expected. The versatile MAN chassis are at hand in a flash when people need to be rescued from great heights or inaccessible buildings.

TGM 15.290 4x2 BL, DLK 23









TGM 15.290 4x2 BL, DLK 23

TGM 15.290 4x2 BL, DLK 23



TGS 26.400 6x2-4 BL, WLF crane



TGX 26.500 6x2-4 LL, WLF



TGS 41.480 8x6 BB, WLF

16 Swap-body trucks





# FLEXIBILITY CLINCHES IT.

# Swap-body trucks

These are the all-rounders in the vehicle pool of modern fire-fighters. Swap-body trucks offer maximum flexibility and are suitable for a whole variety of purposes. In no time at all the basic MAN vehicle can take on swap bodies of every kind – a command centre for controlling an operation, a tender for water or foam, equipment for breathing protective devices, a container for collecting oil, decontamination or environmental protection apparatus. These trucks only have one hitch – the one they need to pull on and roll off a container.



TGS 26.440 6x4H-2 BL, WLF



TGS 26.440 6x4H-2 BL, WLF

TGS 26.440 6x2-2 LL, WLF



TGM 18.330 4x4 BB, RW crane



TGL 12.290 4x2, SLF

# IF YOU NEED IT, MAN WILL ALMOST CERTAINLY HAVE IT.

# Special-purpose trucks

What is special about a special-purpose truck is the job facing it. Sometimes it's a matter of maximum payload and capacity, sometimes the emphasis is on off-road capability and speed, or it might be a mix of all of them.

Special bodies are often required for transporting special extinguishing agents or rescue equipment. Here, everything has to be tailored to match the individual circumstances in each location. Such requirements are on the rise, both inside and outside Germany.

MAN is also a system partner for extreme solutions such as twin-head trucks with two cabs for operation as a fire fighting and rescue vehicle in tunnels. And don't forget the MAN buses, which are used as command vehicles or medical ambulance buses.



TGS 26.440 6x4 BB DLK 55





TGS 33.540, FLF



TGS 41.480, GTLF



TGM 18.290 4x4 BB, MzKw



TGM 18.340 4x4 BB, GW-Dekon-P



TGM 15.290 4x2 BL, ELW2



TGM 10.220 4x2 BB, GW-San





# GETTING EMERGENCY SITUATIONS BACK UNDER CONTROL.

## Disaster-response and civil-defence vehicles

Disaster-response vehicles need to be ready for action when nothing else can cope. They are special-purpose vehicles used for fire protection, CBRN protection, medical services and personal assistance. They also have to meet civil-defence requirements whilst taking into account new dangers of national importance.

MAN offers a comprehensive product range for tackling such tasks. It offers a range of chassis options from two to four axles, corresponding all-wheel-drive concepts and a diverse range of cab designs, including crew cabs for nine staff.



TGM 13.250 4x4 BB, LF 20 KatS



TGS 26.400 6x2-4 BL, SLF



TGM 13.250 4x4 BL, LF 20 KatS

TGM 18.290 4x4 BB, GKW1

Optional centre seat with folding backrest

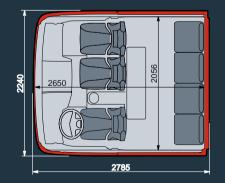
# READY, STEADY, GO FOR SEVEN.

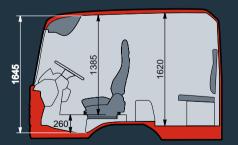
### The MAN crew cab

In all deployments that require space for a whole crew, it is in a size class of its own: the crew cabs for the MAN TGL and TGM ranges can be delivered ex works and open up top-class spatial dimensions for you. With a comfortable row of four seats in the rear plus the optional second co-driver's seat, it can hold up to seven people (1+6).

The entry to the crew compartment is well thought out, with wide, non-slip and – optionally – illuminated steps. The interior satisfies just about every wish. The well-organized, driver-oriented cockpit features clear, legible, non-dazzle displays and easily operated instruments. In its ergonomics, comfort and convenience the crew cab matches the high standards of the attractive C and L cabs.

An extension to the crew cab is optionally available to accommodate respiratory equipment in the direction of travel.





TGL 8.180 4x2 BB, MLF





Crew cab



Roof lowering C cab

# **ROOM FOR MORE.**

### The MAN crew cab

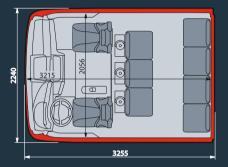
On deployments that require room for a powerful fire-fighting crew (1+8), the MAN crew cab for the MAN TGL and TGM has a lot to offer. It is manufactured by MAN Modification in two designs based on the C cab – as a standard version and as an extended version for a total of seven seats with integrated retaining devices for breathing apparatus.

The MAN crew cab is not only comfortable and spacious, but safe as well: it meets the crash test requirements in accordance with ECE R29 and the requirements for safety belt anchorages in accordance with ECE R14.

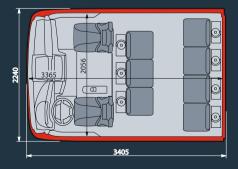
# Cab roof lowerings

To comply with the legal vehicle height, MAN Modification offers lowered roofs, for example for aerial rescue vehicles or emergency services vehicles with special heights. The lowering for the C cab is 130 mm and for the L and M cabs 190 mm. Corrosion is not an issue thanks to the use of GRP parts for the new roof.

### Crew cab



Crew cab with extension to to provide room for seven respiratory equipment seats in the back



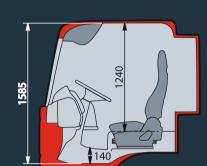
# MAN crew cab with extension

The 265-mm extension of the C cab by MAN Modification is a real space winner. It creates additional space for personal protective equipment as well as tools or respiratory equipment integrated in the co-driver's seat.

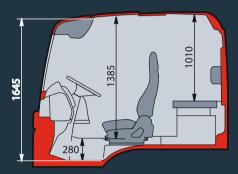
# Seating extension.

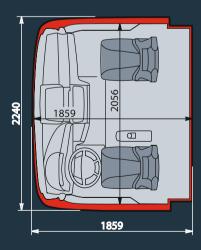
On request, the capacity of the L cab can be increased to six seats (1+5) by installation of a four-seater bench.

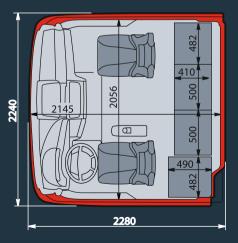
# Extension C cab



# L cab with four-seater bench











# GREAT VIEWS. ON EVERY DRIVE.

Starting in 2018, MAN vehicles can expect numerous new equipment highlights to make the interior even more driver-friendly and optimised for vehicle operation.

The warm sand and graphite tones of the interior panelling, grained plastic surfaces, satin-chromeplated door handles and the new seat covers have already been lending the cab a comfortable yet stylish atmosphere.

As of 2018, the optional darker "Urban Concrete" colour will be available for the cockpit. It is a resistant colour scheme for all surfaces that may come into contact with dirty hands or work clothing during vehicle deployments in dirty conditions. The look of the cab interior can also be customised with up to three optional variants for the all-round trim strips (brushed aluminium, Net-Black and wood).

The multi-function steering wheel forms the perfect interface between vehicle and driver: Various functions are integrated in the steering wheel in a clearly laid out and intuitive manner. Without taking your hands off the wheel you can call up vehicle information, receive telephone calls and adjust the radio settings. The driver can freely adjust the height and angle of the multi-function steering wheel, which is also available in leather.

A slimmer centre console and a coolbox/storage box (not available in the C cab), which can be completely stowed under the bed, create a more comfortable sitting and standing experience in the central area. And yet, the new coolbox offers more space. The cup holders are more flexible, and the bunk control panel in the longer cabs with beds is more convenient. The lighting in the living space provides a cosier atmosphere thanks to goose neck lights.

The new function-based switch layout and the colour display offer the driver a modern, ergonomic work place. In the MAN TGX, comfort and working conditions for the driver have been improved thanks to the reduction in interior noise by 1.5 dB compared to the previous series.

"Urban Concrete" colour





Enhanced colour display in the instrumentation



Neat switch layout



Rearranging the TipMatic switch and parking brake creates additional space

# EVERYTHING INSIDE, AND ALL AT A GLANCE!

It is the driver who turns efficiency into motion. His performance at the wheel is the key to reliable transport and to a safe, cost-effective driving style. So it's vital that the workplace is well equipped for this.

In the redesigned MAN cockpit, everything is in the right place. The displays are clear, while frequently used switches and switches requiring quick access are close to the driver. To ensure intuitive operation, interrelated functions are grouped into switch groups, which are always in the same position in all vehicles and series. Having this standardised layout simplifies operation for drivers when switching vehicles. The dial switch for the MAN TipMatic® automated gearbox is now in the driver's field of view. The main panel of controls now houses all switches vital to operation and driving, while relevant functions for add-ons can be assigned to a second, optional panel of switches at a later date. Placing the panel of buttons for essential functions, such as interior lighting, above the driver provides easy access even while driving.

The focus will be on the instrumentation with new LCD display in four colours. This four-inch, high-resolution colour display supports legibility and orientation, and highlights features such as activated assistance systems and warning messages to enable quicker recognition. A digital speed display complements the analogue display. In addition, menus and controls boast colours coordinated with the MAN Media Truck infotainment system. The air-conditioning panel features displays with a white background, making them considerably easier to read thanks to the better contrast.

# MAN infotainmentsystem

MAN offers some improved features with the new infotainment system. The standard MAN Media Truck variant includes a 5" TFT display with touch-screen and SD card slot. On request, it's also available with a hands-free system, Bluetooth audio streaming, USB/AUX inputs, and DAB+ digital radio. In addition, the MAN Media Truck Advanced version offers a larger 7" display, voice control, a hands-free system for a telephone, video display via USB & SD, traffic information via radio, and a maximum of two camera interfaces. MAN Media Truck Navigation includes a specialist truck navigation system. Also, the versions MAN Media Truck Advanced and Navigation offer the function of "Twin Pairing", which enables two mobile phones to be connected to the system in parallel. Both variants can also be provided with a hook-up for a rear-view camera.

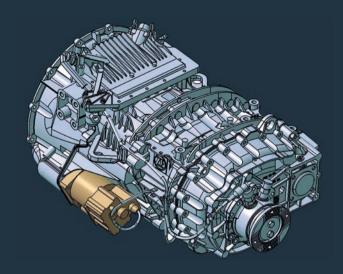
The new "Mirror Link" function transfers the user interface of mobile devices to the infotainment system, enabling safe operation via the multi-function steering wheel and the system itself (connection via USB cable). The navigation screen also continuously shows maximum speed limitations (depending on whether the map data includes the respective information). The digital radio (DAB/DAB+) is easy to access and use via voice control.



MAN Media Truck Navigation



Function "Mirror Link"



MAN TipMatic® gearbox



Allison automatic gearbox

# **FASTER THAN** THE FIRE BRIGADE.

# MAN TipMatic® EMERGENCY for the emergency services vehicles

High performance and maximum convenience: the MAN TipMatic® is a combination of both. The automated gearbox has been specially optimised to meet the requirements of emergency services vehicles and designed for fast acceleration and targeted downshifting during braking.

The driver can thus concentrate fully on steering and has everything under control without taking his or her hands off the steering wheel. The MAN TipMatic® is also available in a special version for off-road applications.

## Acceleration is key:



- MAN TipMatic® gearbox software with optimised gearshift strategy and function
- Shorter shift times
- Higher shifting rpm for better acceleration
- Optimal acceleration thanks to special downshifting logic

# Automatic gearbox with converter-clutch unit.

For special vehicles in the MAN TGM and TGS ranges, an automatic gearbox with converter-clutch unit is available in combination with a retarder.



TGM 18.340 4x4 BB. HLF 20



# **EFFICIENCY WITH FULL POWER.**

# MAN common-rail engines.

The highly efficient four- and six-cylinder engines with ratings of 118 kW (160 hp) to 471 kW (640 hp) present an inspiring picture with their outstanding power delivery even at low engine speeds. With their perfect synthesis of performance and efficiency, all MAN engines stand out from the pack. They set new standards for performance, reliability and economy.

The new generation of MAN D08 engines powers the MAN TGL and TGM with even greater force. And the new engine concept also enhances efficiency at the same time: Fuel consumption is reduced by up to 5%. The new, simplified exhaust gas cleaning without exhaust gas recirculation also makes the engine lighter and less complex.

The statutory provisions for compliance with the Euro 5 and Euro 6 emissions thresholds make certain technical measures necessary, such as reducing the engine torque when the emission control function is no longer guaranteed. MAN's engines for municipal/official deployment are configured to ensure each operation is a success. For longer rescue and recovery scenarios, this guarantees constant vehicle operation.

For many years now MAN engines have met the highest requirements for environmental compatibility. The MAN D08 engine series in the Euro 5 version has unique PURE DIESEL® technology that runs completely without AdBlue®. This makes it easier to maintain the vehicle as no additional service products need to be monitored or topped up. Regardless of the emissions standard that applies, MAN has the answer, offering a choice of Euro 5 or Euro 6 with its MAN D08, D20 and D26 engine series as well as Euro 2 to Euro 4 versions for applications worldwide.

Since 2017, MAN will approve the Euro 6 engines for use with paraffin fuels in accordance with EN15940. Fuels that comply with this standard include hydrogenated vegetable oils (HVO), coal to liquids (CTL), gas to liquids (GTL) and biomass to liquids (BTL).

# Engines Euro 6

	Model	Capacity	Rating	Max. torque
D0834	R4	4.61	118 kW (160 hp)	600 Nm
	R4	4.61	140 kW (190 hp)	750 Nm
	R4	4.61	162 kW (220 hp)	850 Nm
D0836	R6	6.91	184 kW (250 hp)	1 050 Nm
	 R6	6.91	213 kW (290 hp)	1 150 Nm
	 R6	6.91	235 kW (320 hp)	1 250 Nm
D2066	R6	10.5 l	235 kW (320 hp)	1 600 Nm
	 R6	10.5 l	265 kW (360 hp)	1 800 Nm
D2676	 R6	12.4	309 kW (420 hp)	2 100 Nm
	 R6	12.4	338 kW (460 hp)	2300 Nm
	 R6	12.4	368 kW (500 hp)	2 500 Nm
D3876	 R6	15.2 l	397 kW (540 hp)	2 700 Nm
	 R6	15.2 l	427 kW (580 hp)	2 900 Nm
	R6	15.2	471 kW (640 hp)	3 000 Nm

## **Engines Euro 5**

	Model	Capacity	Rating	Max. torque
D0834	R4	4.6	132 kW (180 hp)	700 Nm
D0834	R4	4.6	162 kW (220 hp)	850 Nm
D0836	R6	6.91	184 kW (250 hp)	1 000 Nm
D0836	R6	6.91	213 kW (290 hp)	1 150 Nm
D0836	R6	6.91	251 kW (341 hp)	1 250 Nm

# WHEN THE CHALLENGE IS MORE TRACTION.

# MAN HydroDrive® - more traction as required

MAN, the inventor of MAN HydroDrive®, has in the meantime expanded the range and now offers a unique variety of versions from two-axle to four-axle vehicles with leading or trailing axles.

MAN HydroDrive® means more traction and safety when driving into or out of construction sites and dirt roads, on slopes and slippery roads. The engageable hydrostatic frontwheel drive gives you the driving power you need in all these situations, forwards and in reverse.

When you're driving downhill and the MAN HydroDrive® is engaged, the continuous brake also acts on the front axle, thus stabilising the vehicle. MAN HydroDrive® can also be engaged while driving and under load by turning the rotary switch. As far as fuel consumption and wear and tear are concerned, it is comparable to a conventional rear-wheel drive and weighs only slightly more. The design height remains unchanged, which means: easy access, low overall height, low centre of gravity and thus optimal driving stability.

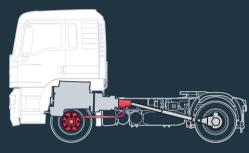
The MAN HydroDrive® is also available in combination with the automated manually operated MAN TipMatic® gearbox.

# All-wheel drive for everyone

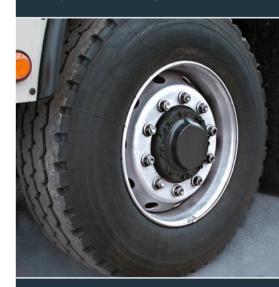
Wherever maximum traction is needed, that's where MAN vehicles with permanent or engageable all-wheel drive go into action. They're available as 4x4, 6x6, 8x6 and 8x8 versions. The power is distributed by two-speed MAN transfer cases with on-road and off-road ratios. Planetary axles with greater ground clearance, differential locks, drum brakes and stabilisers are also fitted in the all-wheel-drive vehicles. A new feature on the MAN TGM is the optional electronic transfer case and lock management. This helps the driver to operate the vehicle on- and off-road as the conditions in terms of traction require and takes some of the load off the driveline. In the MAN TGX and TGS too, the engaging and disengaging of differential locks is electronically monitored.



TGM 18.340 4x4 BB, TLF 4000

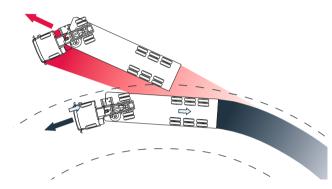


MAN HydroDrive® operating principle

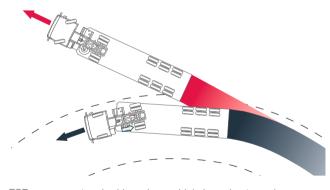


Front axle with hydrostatic wheel hub motors

# MAN DRIVER ASSISTANCE **EQUIPMENT.**



ESP compensatory braking when vehicle is oversteered.



ESP compensatory braking when vehicle is understeered.

# Electronic stability program (ESP)

ESP protects you from unpleasant surprises. ESP sensors constantly monitor the driving dynamics. If there is a risk of imminent skidding or tipping over, the separate wheels are braked accordingly and, where necessary, the engine torque is reduced. In this way ESP stabilises the vehicle and keeps it safely in the lane. MAN offers the electronic stability program for vehicles with leading or trailing axles and even for four-axle vehicles or articulated road trains. ESP offers a particular advantage when the all-wheel drive is engaged. Thus you have all the benefits of ESP when driving on the road - a special gain for fire brigades during an alarm situation.

### MAN BrakeMatic® brake system with ABS and ASR

The most important distance is the braking distance. To prevent any nasty surprises, the electronic brake system (EBS), including ABS and ASR, ensures reduced braking distances.

# Continuous braking

EVBec®: As a further development of the MAN EVB engine brake (Exhaust Valve Brake), the EVBec® has many advantages, e.g. an improved braking effect by controlling the exhaust gas back pressure, significantly increased brake output especially in the lower engine speed range. overheating protection during long braking operations and constant brake output whether the engine speed is rising or falling. Three brake output stages are available. The retarder is a hydrodynamic continuous brake integrated into the gearbox housing. Its brake output depends on the driving speed, with the best performance achieved in the medium to high speed range. The brake output level does not depend on gearshifts or clutch operation. This increases driving safety during long descents by relieving the load on the service brake system.

### Brake assistant

The brake assistant registers speed and pressure when the brake pedal is operated and optimises the applied brake pressure through to full brake force. It recognises an emergency stop when it is initiated and immediately develops the largest possible brake pressure.

# Emergency Brake Assist (EBA)

As even a brief moment of distraction can lead to an accident, MAN has developed the anticipatory Emergency Brake Assist (EBA). It gives drivers an advance warning of impending collisions, providing them with valuable time to react. The system automatically initiates braking in an emergency. The optimised Emergency Brake Assist (EBA) features a more advanced traffic monitoring system by using two independent sensor systems (radar and video) to detect a potential collision more quickly and to issue a warning signal earlier. EBA complies with the more stringent legal requirements for emergency braking systems starting in 2016/2018.

## MAN EasyStart

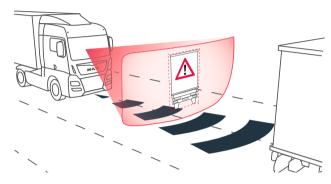
With MAN EasyStart on the MAN TipMatic®, difficulties with hill starts become a thing of the past. The moving-off aid for slopes makes things easy for the driver. When the brake pedal is released, the brake pressure is maintained for one second so that the driver can change to the accelerator and the vehicle can move off without jolting, with low wear and without rolling back.

# Hill-climbing brake

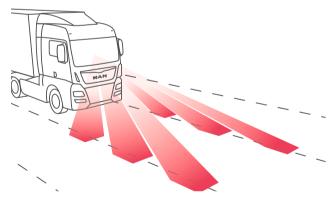
The hill-climbing brake for MAN all-wheel-drive vehicles acts pneumatically on all wheels, holding the truck reliably when stopping and moving off and is controlled by the driver by means of a switch on hills. As opposed to systems that use spring reservoirs to brake only the rear axle, an MAN all-wheel-drive truck equipped with the hill-climbing brake can't slip.

## Off-road logic for ABS

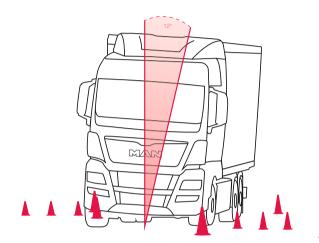
The terrain logic for ABS (ABS for off-road operation) partially prevents undesired ABS control behaviour at low speeds (15 km/h to 40 km/h) on loose or slippery ground (e. g. gravel, sand, snow). The loose ground is pushed together as a chock in front of the wheel and thus reduces - in comparison to the ABS function for on-road operation - the braking distance.



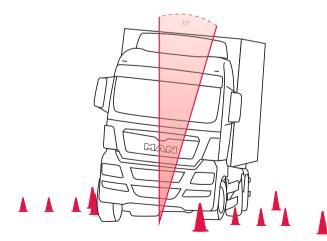
Functional principle EBA: advanced traffic monitoring by using two independent sensor systems (radar and video)



LGS for staying in the lane



Vehicle behaviour with CDC



Vehicle behaviour without CDC

# Active roll stabilisation CDC and high-load roll stabilisation

With active roll stabilisation, dampers are automatically regulated by the CDC (Continuous Damping Control). This prevents the development of rolling or pitching movements, and thus makes driving safer. For vehicles with high centres of gravity, high-load roll stabilisation with an additional X control arm is ideal. This ensures that sideways tilting is effectively reduced.

## **Emergency Stopping Signal (ESS)**

Instead of the brake lights simply coming on, the Emergency Stopping Signal (ESS) warns traffic behind of emergency braking using the hazard lights. These flash faster to alert traffic behind to the emergency. Once the vehicle is stationary, the hazard lights are automatically activated to prevent rear-end collisions. The ESS therefore helps to enhance road safety.

# Xenon light for better vision

The combination of Xenon light and free-form reflectors casts a whole new light on the road. The luminance of the long-lasting Xenon lamps results in a wide stretch of road being illuminated. Illumination in this area is bright and homogeneous without dazzling oncoming traffic.

# Automatic low-beam headlights and automatic wiper system with sensors

The automatic low-beam headlights with light sensors activate and deactivate the front, side and rear lights as needed. Dawn and dusk, tunnels and bridges are also detected and the lighting is regulated accordingly. The automatic wipers with rain sensor are activated as soon as visibility is affected by water or dirt. The optimum wiper speed is then set automatically depending on the situation. The control system can detect all kinds of visibility conditions such as rain, splashes, streaks or dirt.

# Cornering light

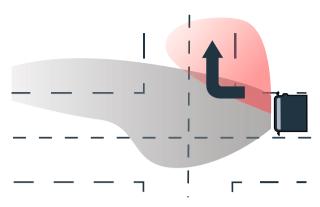
The cornering light supplements the normal low-beam headlights at speeds of up to 40 km/h. It is activated when the driver operates the indicator or – on vehicles fitted with ESP – when the steering wheel is turned far enough. This improves visibility in the dark and in foggy conditions as well as providing additional lighting on the side of the vehicle to prevent injuring persons or causing damage when cornering.

# LED daytime driving lights

Twin headlights with integrated LED daytime driving lights (in compliance with the requirements of Directive ECE R-87) make the MAN TGS and TGX easier to see during the day compared with daytime driving lights with H7 lamps, thereby improving active safety. The lights are turned on and off automatically with the ignition and are dimmed to the maximum permitted luminance if other lights such as the low-beam headlights or indicators are switched on – not however if only the headlight flasher is actuated. The high level of light intensity of the long-lasting LED daytime driving lights gives the vehicle a modern look.

# New LED rear lights

With tail lights in an LED design, burnt-out lightbulbs and the associated compromised safety and maintenance costs can be avoided. LED lights have a longer service life with lower energy consumption than conventional lightbulbs.



Cornering light for a better visibility



LED daytime driving lights



LED rear lights

# THE LATEST FROM THE MAN RANGE.

# Small fire-fighting trucks

Model	Max. gross weight (kg)	Wheelbase (mm)
TGL 8.150 - 220 4x2 BB, BL	7 4901)	3300/3600

# Crew fire-fighting trucks and rescue unit crew fire-fighting trucks

Model	Max. gross weight (kg)	Wheelbase (mm)
TGL 8.150 - 220 4x2 BB, BL	7 4901)	3300/3600/3900
TGL 10.180 - 250 4x2 BB, BL	10 000	3600/3900
TGL 12.180 - 250 4x2 BB, BL	11 990	3600/3900
TGM 13.250 - 290 4x4 BL	13 0002)	3650/3950/4250
TGM 15.250 - 340 4x2 BL	15 000 <sup>3)</sup>	3525/3825/4125/4425
TGM 18.250 - 340 4x2 BB, BL	18000	3875 / 4125 / 4425
TGM 18.250 - 340 4x4 BB	180007)	3600/3900/4200/4500
TGS 18.320 - 500 4x2 BB, BL	18000	3900/4200/4500
TGS 18.320 - 500 4x4 BB, BL	18000	3900/4500

# Rescue and fire-fighting trucks

Model	Max. gross weight (kg)	Wheelbase (mm)
TGM 13.250 - 290 4x4 BL	13 000 <sup>2)</sup>	3650/3950/4250
TGM 15.250 - 340 4x2 BB, BL	15 000 <sup>2), 3)</sup>	3525 / 3825 / 4125 / 4425
TGM 18.250 - 340 4x2 BB, BL	18000	3875 / 4125 / 4425
TGM 18.250 - 340 4x4 BB	18 000 <sup>7)</sup>	3600/3900/4200/4500
TGS 18.320 - 500 4x2 BB, BL	18000	3900/4200/4500
TGS 18.320 - 500 4x4 BB, BL	18000	3900/4500

### Rescue trucks

Model	Max. gross weight (kg)	Wheelbase (mm)
TGM 13.250 - 290 4x4 BL	130002)	3650/3950/4250
TGM 18.250 - 340 4x4 BB	18 0007)	3600/3900/4200/4500

# Fire-fighting equipment trucks

Model	Max. gross weight (kg)	Wheelbase (mm)
TGL 8.150 - 220 4x2 BB, BL	7 4901)	3300/3600/3900
TGL 10.180 - 250 4x2 BB, BL	10 000	3600/3900/4200/4500
TGL 12.180 - 250 4x2 BB, BL	11 990	3600/3900/4200/4500
TGM 13.250 - 290 4x4 BL	13 000 <sup>2)</sup>	3650/3950/4250
TGM 15.250 - 340 4x2 BB, BL	15 000 <sup>3)</sup>	3650/3825/4125/4425
TGM 18.250 - 340 4x2 BB, BL	18000	3875 / 4125 / 4425
TGM 18.250 - 340 4x4 BB	18 000 <sup>7)</sup>	3600/3900/4200/4500
TGS 18.320 - 500 4x2 BB, BL	18000	3600/3900/4200/4500

### Turntable ladders

Model	Max. gross weight (kg)	Wheelbase (mm)
TGM 15.250 - 340 4x2 BB, BL	15 0003),4)	4 125 / 4 4258)

# Telescopic rescue platform

Model	Max. gross weight (kg)	Wheelbase (mm)
TGM 15.250 - 340 4x2 BB, BL	15 000 <sup>4)</sup>	4 425 / 4 725 / 5 1255)
TGM 18.250 - 340 4x2 BB, BL	18000	4425 / 4725
TGS 18.320 - 500 4x2 BB, BL	18000	4500/4800/5100
TGS 26.320 - 500 6x2-2 BL	26 000	4200 / 4500 / 4800 + 1350
TGS 28.320 - 440 6x2-4 BL <sup>6)</sup>	28 000*	4200 / 4500 + 1350
TGS 26.320 - 500 6x4 BB, BL	26000	4500 / 5100 + 1400
TGS 35.400 - 500 8x4-4 BL	35 000*	3 900 / 4 200 + 1 350 + 1 450

# Swap body trucks

Model	Max. gross weight (kg)	Wheelbase (mm)
TGL 8.150 - 220 4x2 BB	7 4901)	3300/3600/3900
TGM 18.250 - 340 4x2 BB, BL	18000	4 425 / 4 725
TGM 18.250 - 340 4x4 BB	180007)	4 500
TGS 18.320 - 480 4x2 BB, BL	18000	4500 / 4800
TGS 26.320 - 480 6x2-2 BL	26000	4200 / 4500 + 1350
TGS 28.320 - 440 6x2-4 BL <sup>6)</sup>	28000*	4200 / 4500 + 1350
TGS 26.320 - 480 6x4 BB, BL	26000	4200 / 4500 + 1400
TGS 33.320 - 440 8x6 BB	33 000	2980 / 3200 + 1400
TGS 41.500 8x6 BB	41 000	2980 / 3200 + 1400

- 1) Also available in load variants 5990 8800 kg
- 2) Also available in load variants 10000 16000 kg
- 3) Also available as load variant 11.99 t

- 4) Available as turntable ladder or telescopic rescue platform 16 t
- 5) Only available with leaf/air suspension
- 6) With steered trailing axle 9 t

# Airport fire fighting trucks

Model	Max. gross weight (kg)	Wheelbase (mm)
TGM 18.290 - 340 4x4 BB	18000 <sup>7)</sup>	3900 / 4200 / 4500 + 1400
TGS 18.320 - 500 4x4 BB, BL	18000	3600/3900/4200/4500
TGS 26.320 - 500 6x4 BB, BL	26 000	3600 / 3900 / 4200 / 4500 + 1400
TGS 26.320 - 500 6x6 BB	26 000	3600 / 3900 / 4200 / 4500 + 1400
TGS 33.320 - 500 6x4 BB, BL	33 000*	3600 / 3900 / 4200 / 4500 + 1400
TGS 33.320 - 500 6x6 BB	33 000*	3600 / 3900 / 4200 / 4500 + 1400

- 7) Can be loaded up to 18600 kg for fire-fighting use
- 8) In special cases wheelbase up to 5125 mm
- \*Max. gross weight

# MAN Truck & Bus AG

Dachauer Straße 667 80995 München www.truck.man

D111.3560/E · bv 08171 · Printed in Germany
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