Volvo Trucks. Driving Progress

VOLVO FMX

PRODUCT GUIDE

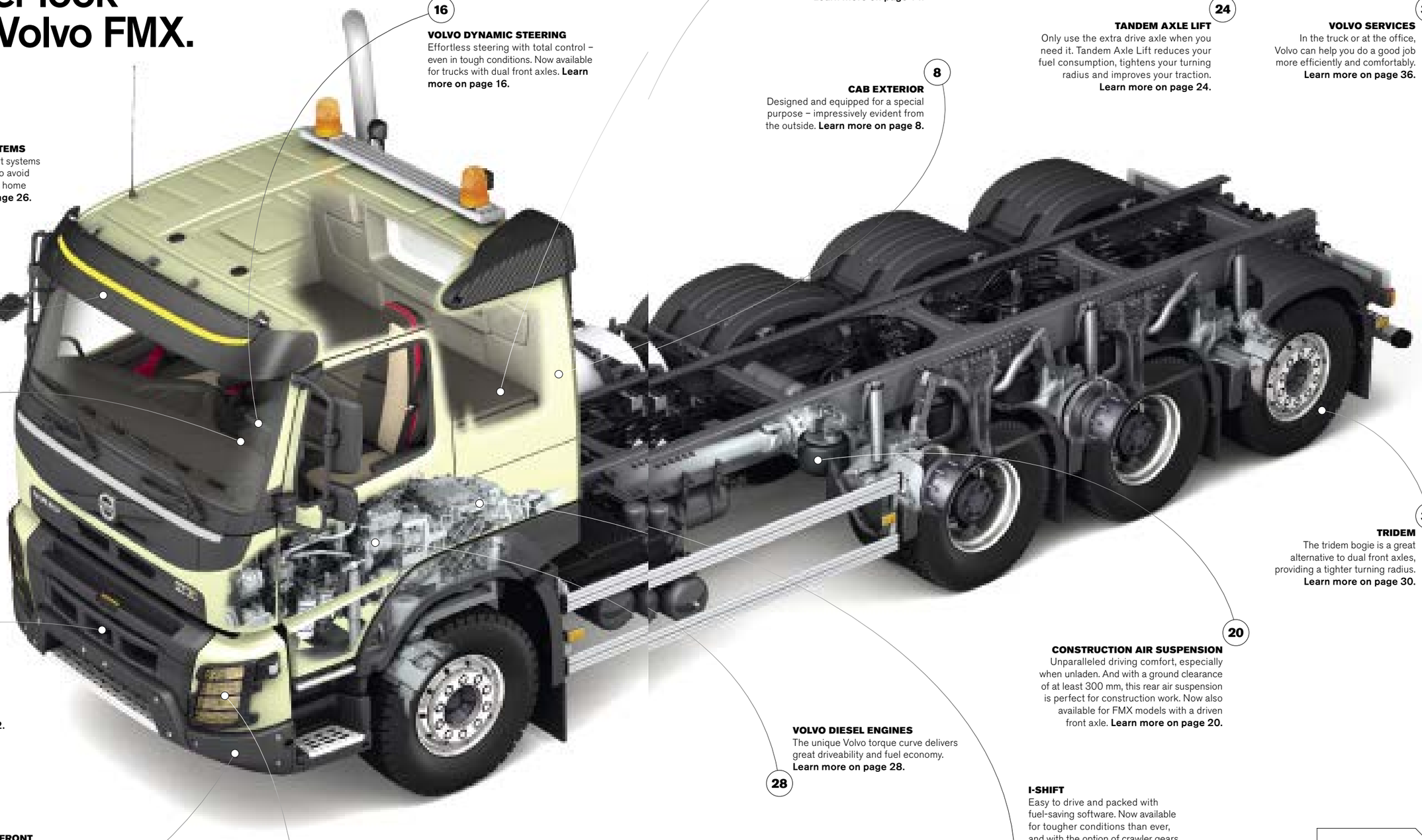
A new standard in construction

Come heavy loads, come challenging terrain – the new Volvo FMX has been designed to handle tougher conditions than ever.

But rugged strength only takes you so far. That's why it is also available with a host of intelligent features that allow you to get the job done quicker, safer, more comfortably and with better operating economy. And it comes in more configurations than ever, so you can always be sure to find one that perfectly matches your needs.

Discover how the Volvo FMX can set a new standard for your business.

A closer look at the Volvo FMX.



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VIEW THE COMPLETE SPECS, FROM CHASSIS TO EXTRA EQUIPMENT, ON PAGES 40–57.

All the traction you need.

For driven front axle models.

Lower fuel consumption, less wear and better manoeuvrability – automatically. Every driven front axle Volvo FMX now comes with the revolutionary Automatic Traction Control (ATC) as standard.

Let it roll.
And save up to 2% fuel.
You'd be surprised to learn how seldom you actually need the driven front axle to be engaged, even in the toughest of terrains. A test carried out in a desert (and that's about as sandy as road conditions get), showed that the front-wheel drive could be disengaged more than a staggering 95% of the time. ATC takes advantage of this. By automatically disengaging the front axle when it's not needed, it can reduce your fuel consumption by up to 2% (based on a regional haul driving cycle).

Don't worry. It's all well protected.
The Volvo FMX chassis has been designed to protect all vital parts from damage. The parallel and link rods are all placed in line with the axle, inside the axle-casing envelope. The brake chambers and fuel tanks are also well protected. Furthermore, the driven front axle has the same position as the non-driven axle, which provides an approach angle of up to 28°, a benefit when climbing steep gradients. The driven front axle is now also available on models with rear air suspension, providing a ground clearance of 300 mm.

No compromise on driving.
No compromise on steering.
Without a driven front axle, you may risk getting stuck. But when it's engaged, it inevitably impairs the manoeuvrability of the truck. This is where ATC, unlike permanent systems, offers the best of both worlds. When the driven front axle is engaged, you have all the traction you need, and when it's disengaged (which it is most of the time), the grip of the front tyres can be dedicated to steering, greatly improving the manoeuvrability of your truck.

Maximum traction.
Without delay.
The system is very fast and reliable. If the sensors in the wheels detect any loss of traction, the dog clutch to the front axle engages automatically in half a second. It then stays engaged until you release the accelerator and have sufficient traction again. ATC requires no driver interaction – it just works. However, a dashboard switch provides the possibility to manually engage the front axle, or, when the driving conditions get extremely rough, engage all the diff locks.

How to recognise a true construction truck.

The robust design of Volvo FMX is clearly different from all other trucks. Here are the details that make it stand out. Details that make a great difference for the drivers' daily work.

Entry step.
A low, foldable step makes it easier to enter trucks with an X-high chassis. All three steps have an anti-slip design. The extra light in the door aids safe entry.

Mirrors.
Robust rear-view mirrors with sturdy mountings, that withstand rough treatment. Slim mirror arms for good forward and lateral vision.

High air intake.
High air throughput protected from dust.

Volvo iron mark.
Moved up, closer to the driver. High and mighty, just like the truck. Be proud of driving a Volvo.

Footstep in front.
The whole sturdy lower front can work as a step. Just climb up on it. For even better access when cleaning the windscreen, there's the option of an extra step on the front bumper.

Forget the gearbox. Just drive.

Eases your mind and your left foot.
Driving I-Shift is a real pleasure. Without the clutch pedal, you can safely sit back and concentrate on the road. I-Shift uses its built-in intelligence to quickly and automatically choose the right gear at all times. And the software provides shifting skills that are almost impossible for even the best of drivers to match. Still, if you want to get more involved, you can. The lever on the shift selector allows you to step in and change gear manually, if needed.

Let I-Shift save you fuel. The money will roll right in.
I-Shift is designed to save fuel. First of all, the internal losses are low – actually lower than on manual gearboxes. But it's the electronics that really make the difference. When driving in Economy mode, every gear change is timed precisely, to let the engine work at its most efficient rev range. And then there's the option of I-Roll. It's a feature used when driving downhill, automatically disengaging the engine to make use of the truck's momentum instead of fuel.

The reinforced I-Shift. For severe duty applications.
If you drive in extremely tough conditions, you will appreciate the reinforced I-Shift. It has been designed exclusively for environments where you frequently climb or descend gradients of above 10%, or drive in extremely rough terrain. Previously only a manual gearbox or the automatic Powertronic were available for these assignments but now the I-shift is available and more than up for the task.

How would you like your I-Shift?
Software packages make it possible to tailor I-Shift to your driving conditions. Choose from four add-on packages – Construction, Distribution, Long Haul or Heavy Duty. In addition, several options are available on Long Haul applications such as I-See, crawler gears and additional power take-off functionality. For a complete overview, see **page 48.** ■

How it works.
It may seem strange. Beneath the surface of I-Shift, the hallmark of modern transmissions hides an old-school unsynchronised manual gearbox. (Hence the compact design and low internal losses). But of course there's more to I-Shift than that. The secret lies in the intelligent electronic control unit. It's responsible for controlling the pneumatic system that handles the clutch and shifts. By constantly receiving information about vehicle speed, acceleration, weight, road grade, torque demand and more, it can carry out every shift with extreme precision. It also communicates closely with the engine, which in turn adjusts revs and engine brake effect for fast and comfortable shifting and engine braking.

NOW SLOWER THAN EVER. TURN THE PAGE TO LEARN MORE.

■ **Also available as an accessory.**

The fastest way to productivity?

Slow down.

I-Shift just got even more versatile and easy to drive. The automated gearbox is now available with the choice of one or two crawler gears, plus the additional option of extra reverse gears.

Start wherever you want.
If you transport heavy loads, you know that starting from a standstill can sometimes be difficult, especially on hilly terrain or in poor road conditions. Equip your FMX with crawler gears and this will be a worry of the past. Your startability is dramatically improved, and the strain on the clutch is reduced by up to 75%, saving you from unnecessary repairs.

SLIM GEARS
The crawler gear module only adds 120 mm to the length and 48 kg to the weight of I-Shift.

Crawl slow, run lean.
Can crawler gears really help boost your fuel economy? Sure. Because previously, you often had to be willing to sacrifice fuel economy for startability. But thanks to the crawler gears, we may be able to specify your truck with a faster rear axle ratio, allowing you to stay on cruising speed at much lower revs when you're driving on road and further reduce your fuel consumption.

Perfect control in any direction.
Low-speed manoeuvring is one of the most challenging aspects of the job. Thanks to a transmission ratio of up to 32:1 (and up to 37:1 in reverse), the crawler gears let you drive slower than ever – half the speed compared to a regular I-Shift. You always have total control with a lower maneuvering speed, making it easy to park with precision.

Say yes to more jobs.
Crawler gears add to the versatility of the truck, letting you use the same truck for a host of different driving conditions and operations. Drive both on-road and off-road? Need to transport extreme loads? Work at high altitudes? Special low-speed applications? No problem.

FIND ALL GEARBOX SPECIFICATIONS ON PAGES 48–50.

It’s dirty out there.

Yet clean and homely in here.

Room for work.
A comfortable driver’s seat, splendid visibility and lots of space make your work more enjoyable and safer. A good overview of the dashboard, plus every switch and stalk is within easy reach making driving easier and safer.

Easier steering wheel adjustment, more knee space.
We have modified the adjustment pedal for the steering wheel and redesigned the steering column to create more space for your knees.

Electric drying cupboard.
A quick way to dry your clothes, towels and shoes. Fits on the upper bunk or cab wall. Energy-efficient, quiet and easy to store. ■

Raven colour.
Raven is the colour of the dashboard. It is especially developed for the construction environment as it is easy to keep clean.

All at your thumb tips.
Push button and toggle switches for cruise control, audio, phone and the information displays, allow you to keep a tight grip on the wheel. With leather as an option.

A great position to be in.
Every driver knows the value of a good seat. The one in the Volvo FMX can be adjusted 20 cm fore-aft and 10 cm vertically. And it features a new cushion that’s more comfortable than ever.

New, modern and ergonomic dashboard.
The new, gently curved dash not only looks appealing, it’s designed for an ergonomic and comfortable driving position with all switches, instruments and storage within easy reach.

Audio with possibilities.
Whatever you want to listen to, the audio system has options to suit you. Mp3, wma or m4a? CDs, USB stick, smartphone or via the aux input? Anything goes. You can even listen to the radio. Find the complete table of specifications on **page 55.** ■

Plenty of room for your gear.
The spacious front, rear and exterior storages can be tailored to your needs and are accompanied by plenty of convenient compartments for smaller items. (Globetrotter cab only)

Advanced interior lighting.
The energy-efficient and powerful light sources make for fantastic in-cab lighting. All are easily controlled in three pre-set steps or with the dimmer. When driving in the dark – switch to the red lights to preserve your night vision.

Electronic Climate Control.
Manual air conditioning is standard with the option of electronic climate control ensuring you always have a comfortable in cab climate. Just set your preferred temperature. And with the new My Truck app, you can control the heater remotely.

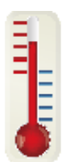
Bed for rest and sleep.
Don’t compromise on sleep quality just because you spend your night in the cab. The lower bed is 70 cm wide, features 16 cm pocket springs and a choice of three different firmness levels.

Stay in bed.
The sleeper control panel lets you control the interior lights, alarm clock, parking heater, audio system, windows and locks without leaving the bunk.

Electronic remote key.
It’s more than a key. Lock or unlock from a distance or turn on the lights to approach the cab safely. And, if you’re feeling threatened, just push the panic button to blast the horn. ■

Electric parking brake.
The electrically-controlled parking brake is controlled by an easy access dashboard lever. Automatically engaged at key-off, and – with a little help from EBS – it automatically releases when pulling away when the I-shift gearbox is specified.

Built in bird bath.
The bird bath is built in on the top of the dashboard. It’s a practical place to keep small odds and ends and it’s even got a penholder.



Parking heater.
Waiting out in the cold when loading, unloading or having a rest on the roadside? With the parking heater you can always keep a comfortable climate inside the cab. ■

■ **Also available as an accessory.**

The road ahead is straight.

Even when it isn't.

The unique Volvo Dynamic Steering drastically reduces the effort it takes to steer, making the job easier and safer whilst minimising the strain on your muscles. It's perfect for construction trucks, where rough terrains, heavy loads and challenging manoeuvers at low speeds are the part and parcel of the job. Now Volvo Dynamic Steering is also available for dual front axles - 8×2, 8×4 and 10×4.

How it works.
We have fitted an electrical motor on the steering gear. The motor is controlled – 2,000 times per second – via the truck's electronic control units and produce torque overlay. The torque is progressive and gives more power to the steering when needed, obtaining a predetermined steering feel, independent of load and tyres. This results in a totally different driving experience – reassuringly predictable.

At low speeds, Volvo Dynamic Steering reduces the forces on the driver by up to 85%.

At high speeds on paved roads, the system softens potholes and prevents disturbances from reaching the steering wheel.

The steering corrects course deviations, caused by gusts of wind for example.

When the road surface is banked, the steering compensates the slanting and corrects the course.

Reversing is far less demanding, and the steering wheel automatically returns to its neutral position when you're done.

Volvo Dynamic Steering is especially well suited for trucks with multiple rear axles and/or dual front axles.

How can a bumper affect your uptime?

It doesn't matter how skilled you are. On the narrow, dark stretches of the mine or in the gravel pit it's easy to bump into something and damage the truck. Thus, the headlights are well anchored and supplied with the option of headlamp protectors. Rough surfaces and rocks must not damage the oil pan. The bumpers are designed to withstand rough treatment catering for knocks and scuffs on-site.

The sturdy bumper.
It's made of steel, it's in three parts and the attachments are visible and easy to undo. This makes it easy to change the part that is damaged.

So if you run into a pile of rubble it's no big deal. Perhaps you don't even notice any damage on the bumper. This is because the steel bumper is also covered by a thick polypropylene centre section, that will return to its original form if damaged.

Tougher front bumper – with greater collision resistance.
The complete lower front is made as a box construction. Every part of it interacts, making the construction very sturdy, but at the same time resilient in a collision with a car.

At Volvo we have mistreated this truck in our tests, more than you ever will dream of. And we are now convinced that this is the sturdiest front bumper in the industry.

The skid plate.
This protecting skid plate under the engine is really worth its name. It is 3 mm thick and doesn't only protect the engine sump, but the hoses and cooler too. Everything that is vulnerable when driving off-road is protected, even when you reverse.

The option of the skid plate has another advantage too; if you drive in a very dusty environment the plate reduces dust vortices under the truck.

A streamlined belly-line.

At least the truck has one.

Compared to traditional leaf suspension, air suspension offers many benefits. It provides a smoother ride, regardless of the road conditions – saving the truck, the cargo and, most importantly, the driver from additional wear. We offer a rear air suspension especially developed for construction trucks, this offers high ground clearance (at least 300 mm) and is tough enough to handle rough terrain.

FOR DRIVEN FRONT AXLE
The rear air suspension is now also available for Volvo FMX with a driven front axle - 4×4, 6×6, 8×6 and 10×6.

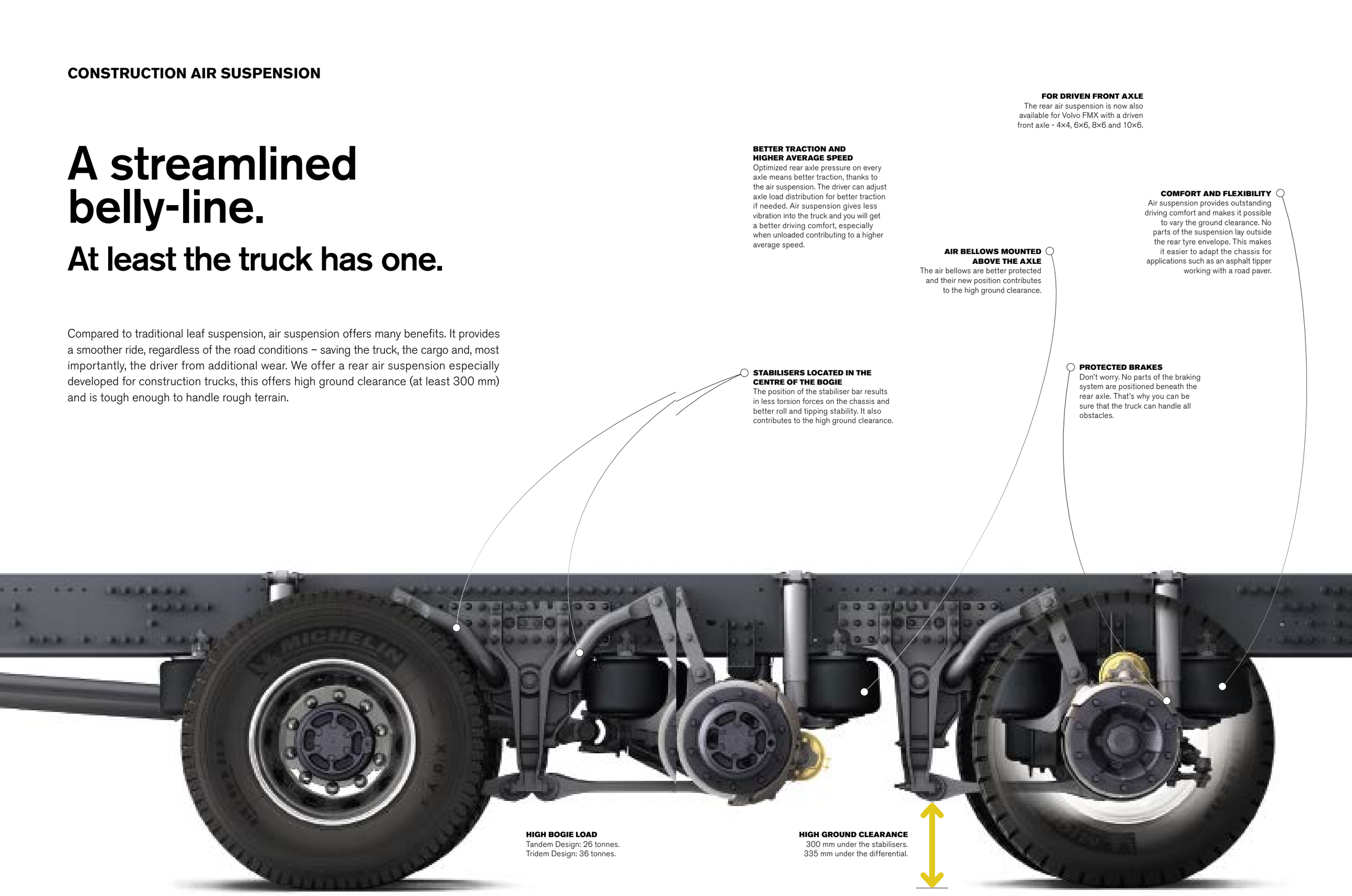
BETTER TRACTION AND HIGHER AVERAGE SPEED
Optimized rear axle pressure on every axle means better traction, thanks to the air suspension. The driver can adjust axle load distribution for better traction if needed. Air suspension gives less vibration into the truck and you will get a better driving comfort, especially when unloaded contributing to a higher average speed.

COMFORT AND FLEXIBILITY
Air suspension provides outstanding driving comfort and makes it possible to vary the ground clearance. No parts of the suspension lay outside the rear tyre envelope. This makes it easier to adapt the chassis for applications such as an asphalt tipper working with a road paver.

AIR BELLOWS MOUNTED ABOVE THE AXLE
The air bellows are better protected and their new position contributes to the high ground clearance.

STABILISERS LOCATED IN THE CENTRE OF THE BOGIE
The position of the stabiliser bar results in less torsion forces on the chassis and better roll and tipping stability. It also contributes to the high ground clearance.

PROTECTED BRAKES
Don't worry. No parts of the braking system are positioned beneath the rear axle. That's why you can be sure that the truck can handle all obstacles.



HIGH BOGIE LOAD
Tandem Design: 26 tonnes.
Tridem Design: 36 tonnes.

HIGH GROUND CLEARANCE
300 mm under the stabilisers.
335 mm under the differential.

32 tonnes.

Sometimes it can be more than a little troublesome out there. You simply get stuck. Therefore it's reassuring to know that Volvo FMX is equipped with a towing device that really pulls its weight.

Take a firm and easy grip.
With one simple grip, you can release the towing device to connect a tow bar. The device has passed tests with lateral pull/push forces of an astonishing 32 tonnes at a maximum angle of 15°.

This is why you can trust the towing device.
It is part of a cross member which is made of high-strength steel. The whole assembly is stably mounted in the longitudinal frame members. It provides not only a very strong structure, but it's also a great solution to counteract the vibration of the chassis, thus enhancing driving comfort.

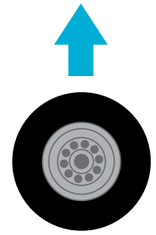
Lower fuel consumption and turning radius?

Just raise the drive axle.

Tandem Axle Lift is a unique feature, allowing your 6×4 or 8×4 to combine the traction and load capacity of four wheel drive with the driveability and efficiency of two wheel drive – all in one vehicle.

Up to 4% lower fuel consumption when unladen.
Because of the added friction and rolling resistance, drive axles usually consume quite a lot of fuel – all of the time. Not so with Tandem Axle Lift. By disengaging and raising the drive axle when it isn't needed, you can reduce your fuel consumption when unladen.

Enjoy better turning radius.
Tandem Axle Lift can effectively convert a 6×4 to a 4×2, or an 8×4 to a 6×2. Just like when raising a dead axle, this significantly improves the manoeuvrability of the truck by shortening the turning radius. In fact, a 6×4 with a wheelbase of 4.6 metres, for example, can reduce its turning radius by over a metre.



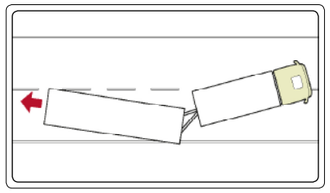
Get a grip.
As long as the axle load limits allow, the axle can be raised to shift all the weight to one drive axle, for better grip and traction. It can even be performed while driving at low speeds.

DOG CLUTCH
The inter-axle differential is replaced by a dog clutch, allowing the rearmost axle to be completely disengaged.

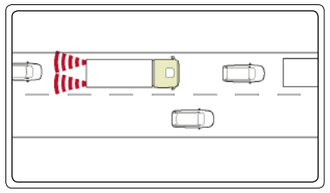
Optimum drive mode in 15 seconds.
Tandem Axle Lift is perfect if you drive heavily loaded in one direction and empty in the other. When the truck is unloaded, you just push a button on the dashboard to disengage and raise the drive axle. As soon as you load the truck, the drive axle automatically lowers itself and engages again to ensure maximum traction and driveability. It only takes about 15 seconds from start to finish, so you don't waste any valuable time.

AIR SPRING
An air bellow between the second drive axle and the chassis allows the axle to be raised or lowered.

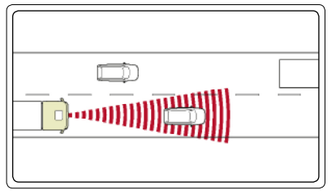
Even a first-rate driver can need some extra support on the road.



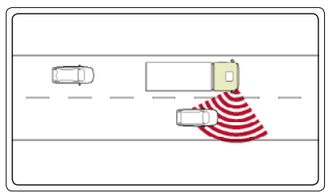
Stretch Brake.
In certain situations, such as turning or driving downhill on a slippery road, the trailer risks catching up with the truck, creating a hazardous jack-knife effect. The Stretch Brake is designed to stop that from happening. By pulse braking the trailer, the vehicle combination is stretched, and the danger reduced. The system can be automatically activated in risky situations, at speeds up to 30 mph. Stretch Brake is now available for rigid drawbar trucks as well as tractors.



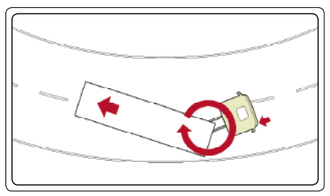
Emergency brake light.
If you need to slam on the brake in an emergency, the brake lights flash rapidly to alert the vehicles behind you. ■



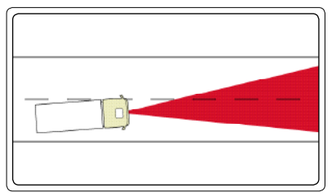
Adaptive Cruise Control, collision warning and emergency brake.
Follow the traffic rhythm without effort. The radar-based Adaptive Cruise Control (ACC) keeps a safe distance to the vehicle in front by controlling the accelerator and all available brakes. If there's a risk of collision, warning lights are projected on the windscreen – and if an impact is imminent, the automatic emergency brake quickly comes to your assistance. Available on 2 and 3 axle rear suspended models.



Lane Changing Support.
The blind-spot area on the passenger side can easily hide other road users. Lane Changing Support (LCS) is equipped with a radar that checks this area when you activate the indicator. If the area is not clear, you are notified by a warning sound and a flashing icon by the mirror.



Electronic Stability Program.
The Electronic Stability Program (ESP) applies the brakes individually on each wheel. This provides stability for the entire vehicle combination, thus counteracting jack-knifing, roll over and trailer swing. ESP is available for tractors and rigid trucks with two or three axles. ■



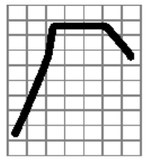
Driver Alert Support.
Driver Alert Support is an intelligent system that tracks your driving behaviour, complementing the camera-based Lane Keeping Support, which now comes as standard. If it differs from normal and indicates tiredness, you are alerted by a signal and a message in the display, advising you to take a break.

■ **Also available as an accessory.**

The availability of these options depends on the Volvo FMX model selected.

Up to 540 hp of pure power.

Without jeopardising fuel efficiency.



The Volvo torque curve. You'll feel it in the pedal.

Excellent torque at low revs. An extremely wide max torque range. Peak torque meets peak power. Volvo's leadership in diesel-engine technology is clearly visible once you start comparing engine curves. You'll experience fast acceleration, excellent pulling power, comfortable low-speed handling and, not least, a fuel-efficient and pleasurable ride at cruising speed.

Up to 540 hp. Pick yours.

The engine range for Volvo FMX comprises eight different power ratings: four 11-litre (D11) and four 13-litre (D13). You can rest assured there's one that suits your transport operation. View the complete specs for all engines on **page 46.**

Fuel efficiency built-in. More than ever.

The optimised combustion chamber geometry. The fast and precise EMS-controlled injection. The high gas-fill ratio. We could go on listing what makes Volvo engines hard to beat when it comes to fuel economy. And we've just improved it even further – without compromising performance. Your bottom line will reap the benefits. So will the environment.

VEB and VEB+. Up to 510 hp of braking effect.

Minimise wear on the brake pedal. Volvo's patented engine brakes absorb up to an impressive 375 kW (510 hp) on the D13 and 290 kW (394 hp) on the D11. Integrated with I-Shift and the cruise control, it makes a descent into the gravel pit or quarry comfortable, without compromising safety or fuel economy.

REAR TIMING MECHANISM
A compact and weight saving design, powering the air compressor along with the power steering, oil, and fuel feed pumps.

COMMON RAIL INJECTION
For superior efficiency and low emissions, the engines have common rail injection, perfectly timed thanks to the advanced Engine Management System.

INLINE SIX
6 cylinders. 7 bearings to distribute the forces. Reliability never goes out of style.

PTO WITH UP TO 1000 NM
Located at the rear, close to the flywheel, the engine PTO can deliver a massive torque output. Learn more on **page 51.**

CLOSED CRANKCASE VENTILATION
Recycles the crankcase gases, for improved air quality around the vehicle.

Take the curves in your stride.

If you drive a lot on decent roads and a large percentage unladen (which most construction trucks do), the air-suspended tridem is an excellent option. The three-axle bogie improves close-quarter manoeuvrability and offers the possibility to raise one of the axles (or even two) for lower fuel consumption and increased traction.

Steer tightly.
Ride comfortably.
The tridem bogie comes with a choice of a tag axle (behind the drive axles) or a pusher axle (in front of the drive axles), or even both (if you drive an 8×2). Since the axles can be hydraulically steered, the turning radius is much tighter than it is on a truck with dual front axles, making it easy to manoeuvre challenging routes. Plus, the air suspension makes for a comfortable ride, especially when unladen.

Raise the axle and save fuel.
If you want to reduce your fuel consumption, you want to minimise your rolling resistance when driving on the road. This is where tridem comes to your help. When a dead axle isn't needed to distribute the weight, it's automatically raised. By doing so, fuel consumption and tyre wear can be minimised. To avoid overload, the axle is then automatically lowered as soon as you load the truck.

Less weight, higher payload.
The tridem is now available in a lightweight variant. Depending on the application, by removing the innerliner and reducing the weight of several other components, we've managed to cut 150–200 kilograms.

TIGHT TURNING CIRCLES
Tridem gives the truck a tighter turning radius, saving time when navigating narrow spaces.

Enlightening news.

The powerful head-lights are improved and give a strong, wide beam with an extremely long range making construction assignments more relaxed and much safer.

Leading main beam.
While driving in the dark, Volvo FMX is a particularly good friend. The headlights produce a powerful beam, providing you with an early view on what is happening down the road. And, just as important, other road users will see you.

On at dusk and off at dawn. Automatically.
The headlights now come with automatic switching as an option. Just like on a car, a sensor detect when the dipped beam needs to be activated and does this automatically for you. And as soon as the light conditions allow, it automatically switches back to daytime running lights. ■

Bi-Xenon.
Equip the headlights with Bi-Xenon to experience a new level of brightness. They also offer longer service life compared with regular halogen lamps. Only available on models with rear air suspension.

■ Also available as an accessory.

Here's all the information you will need.

Information is central.
A quick glance at the centre of the speedo-meter is enough to get key information about gear, I-Shift mode, (adaptive) cruise control, auxiliary brakes and tachometer.

Secondary Information Display (SID).
To the left of the instrument cluster, you'll find the home of infotainment – an integrated display. It's called the Secondary Information Display and contains plenty of features. Some of them require the SID-High variant (shown), which is a high-end 7" colour display. ■

AUDIO SYSTEM
Lets you enjoy full information on each track, and navigate easily among them. ■

EXTERIOR VISION CAMERAS
SID-High can show the input of up to four cameras in full resolution. ■

DRIVER TIMES FEEDBACK
Helps you handle your driving and resting times, so you'll know when it's time to take a break.

PHONE
Connects via Bluetooth so you can browse your phonebook, talk into the built-in microphone and listen through the speakers.

DYNAFLEET
No separate display needed. All information from Volvo's transport management system is now integrated in the SID-High. The SID-high is required if office to vehicle messaging is specified, along with a remote keyboard supplied in the cab. ■

Driver Information Display.
Convenient 4" display showing a lot of additional information. Choose what you want to see, using the steering wheel switches.

GAUGES YOUR WAY
Plenty of status indicators and trip information. The customised view lets you select up to three favourites.

LOAD INDICATOR
The enhanced load indicator option allows you to precisely monitor axle load. Gross vehicle weight, axle loads and bogie loads are all shown separately, so you can easily check they are within the limits, on the truck as well as on the trailer. ■

UNDERSTANDABLE ERROR MESSAGES
No perplexing fault codes. The error messages quickly and accurately tell you what's wrong – in plain text.

CHECK ON THE TYRE PRESSURE
The new tyre pressure monitor provides an easy, yet effective, way to reduce fuel consumption and avoid unnecessary tyre wear.

■ **Also available as an accessory.**

We'll support you all the way.

And on your way.

SUPPORTING YOUR TRUCK

New Service Planning.
One step ahead.
Thanks to the telematics gateway (option), the workshop can access information such as engine data, mileage, fuel consumption, diagnostic trouble codes, driving conditions and status of crucial components (brake pads, clutch, battery and air dryer etc.). This means we can alert you in time, before you risk an unplanned stop. But most importantly, we're always perfectly prepared when you get to our workshop. So you'll be back on the road before you know it. New Service Planning is optional in combination with the New Volvo Gold Contract.

Need help?
Just push the button.
An unplanned stop out in the middle of nowhere? Volvo Action Service is just a button push away. Volvo Action Service On Call is an option, that automatically connects you to an operator who speaks your language (the truck checks the nationality of the card in the digital tachograph). And once connected, service is both fast and accurate, because they already know your chassis ID, position and possible diagnostic trouble codes.

Features Online.
Your wireless technician.
Some things shouldn't require a workshop visit. And now they don't. With Features Online, a service technician can access your vehicle remotely to calibrate displayed fuel consumption, fuel tank size (if you've fitted extra tanks) and your preferred road speed limit. It's even possible to enable the load indicator function from a distance. All you have to do is stop at the roadside for a short while. Service has never been quicker. Features Online is optional in combination with the New Volvo Gold Contract.

SUPPORTING YOUR DAILY WORK

Dynafleet app.
This app makes it a lot easier to work as a driver, and hopefully more fun. You can follow up on your fuel efficiency score and ranking, alongside your driver times and points of interest on a map. And you can also compare your performance with those of your colleagues. This app is available for both smartphones or tablets.

Fuel advice.
At an optional cost this service gives you access to our fuel management coaches – true experts in reducing fuel consumption. Every month they send you enhanced fuel reports with personalised advice on how to improve. You can get more advice via the dedicated help desk, or log on to the toolbox to find hands-on tips and inspiration.

The trucker's best app.
With the all new My Truck app installed on your smartphone, you can monitor the status of the truck before you get in, making sure it's ready to go when you are.

You can control the parking heater, alarm and door locks and see the vehicle's status, for example the levels of fuel, engine oil and coolant or washer fluid.

Work Remote.
The electronically controlled suspension (ECS) improves driving comfort and helps in making sure the cargo travels safely. ECS4 is the latest version and offers even more possibilities, with the Work Remote as the most prominent example. You now have perfect control of the vehicle weight (when a load indicator is specified), equipment such as PTOs and functions on the superstructure. You have full control, regardless of whether you're sitting behind the wheel or walking around the truck.

SUPPORTING YOUR BUSINESS

Volvo Premium Lease.
Sometimes it's smarter not to own your truck. Volvo Premium Lease gives you the opportunity to choose a solution that suits your needs, because it can include funding, road tax, insurance, repair and maintenance, and even replacement tyres.

You will greatly benefit from fixed and predictable costs for accurate budgeting, improved cash flow and reduced capital outlay.

An excellent factory option: add an extra axle.

Want to transport heavy loads? No problem. We've now extended the Volvo FMX offer to include the five-axle 10×4 configuration as well as the 10×6 with a driven front axle.

Ready to go, without delays or extra costs.
We now offer trucks with five axles directly from our factory. This way, you get a Volvo FMX that is ready for efficient, heavy transportation from day one. In other words, you don't have to contact an external supplier for costly and time-consuming retrofitting of an extra axle. Moreover, we also deliver your truck with a full vehicle type approval.

Full Volvo support from day one.
Since we deliver a complete truck to you, it not only comes with Volvo quality through and through. You also get full Volvo warranty and Volvo support. This means that you always have a truck in top condition, and that we quickly help you in all kinds of situations to keep you going and stay efficient.

For a wide range of jobs.
The five-axle Volvo FMX is equipped with dual front axles and an air-suspended tridem bogie (with a tag axle), allowing a maximum gross vehicle weight of 56 tonnes. This makes it well suited for a wide range of applications such as concrete mixers, fire trucks, sky lifts and large cranes. And if you're into heavy haulage, you might be able to take on bigger operations and avoid costly overweight permits. Drive in very rough terrain? Opt for the 10×6 with a driven front axle.

Tailoring your Volvo FMX.

No single truck fits all. That's why the Volvo FMX provides endless possibilities. The flexible chassis layout and VBI (Volvo Bodybuilder Instructions) make it easy to prepare the truck for a superstructure. And the driveline, cabs and equipment packages provide you with even more options. So welcome to a world of choices. A world where your dealer will happily guide you in finding the perfect truck for your requirements.

AXLE CONFIGURATIONS - TRACTOR

	Type	Rear suspension	Rear axle/bogie load (t)	Chassis height	Wheelbases (m)
4×2					
	RAD-L90	Parabolic/Multi-leaf	13	X-High	3.5/3.6/3.7/3.8
				High	3.5/3.6/3.7/3.8
	RAD-GR	Air	13	High	3.3/3.5/3.6/3.7/3.8
				Med	3.3/3.5/3.6/3.7/3.8
	RAD-G2	Air (for construction)	13	X-High	3.5/3.6/3.7/3.8
4×4					
	RAD-L90	Parabolic/Multi-leaf	13	XX-High	3.5/3.7/3.8
	RAD-G2	Air (for construction)	13	XX-High	3.9
6×2					
	RAPD-GR[1]	Air	19/22	High	3.9/4.1
				Med	3.9/4.1
	RADT-AR[2]	Parabolic	19/21	High	3.2/3.4
	RADT-GR[2]	Air	19/20.5/22.5/23	High	3.0/3.2/3.4/3.7
				Med	3.0/3.2/3.4/3.7
	[1)]Pusher axle (fixed/steered) [2)]Tag axle (fixed)				
6×4					
	RADD-BR	Parabolic	21	X-High	3.0/3.2/3.6
				High	3.0/3.2/3.6
	RADD-TR1	Parabolic/conventional leaf	23/26	X-High	3.0/3.2/3.4/3.6
				High	3.0/3.2/3.4/3.6
	RADD-TR2	Conventional leaf	26/32	X-High	3.0/3.2/3.4/3.6
				High	3.0/3.2/3.4/3.6
	RADD-GR	Air	21/23/26	High	3.0/3.2/3.6
	RADD-G2	Air (for construction)	21/23/26	X-High	3.0/3.2/3.4/3.6
6×6					
	RADD-BR	Parabolic	21	XX-High	3.6/3.7/3.9
	RADD-TR1	Parabolic/conventional leaf	26	XX-High	3.6/3.7/3.9
	RADD-TR2	Conventional leaf	26/32	XX-High	3.6/3.7/3.9
	RADD-G2	Air (for construction)	21/23/26	XX-High	3.6/3.7/3.9
8×4					
	RAPDD-GR[3]	Air	27/30.5/32/35	High	3.6/3.9
	[3)]Pusher axle (steered)				

● = Drive axle.
⊙ = Dead axle (tag, pusher or front axle).

AXLE CONFIGURATIONS – RIGID

	Type	Rear suspension	Rear axle/bogie load (t)	Chassis height	Wheelbases (m)
4×2					
	RAD-L90	Parabolic/Multi-leaf	13	X-High	3.4/3.7/4.0/4.6
				High	3.4/3.5/3.7/4.0/4.3/4.6/4.9/5.2/5.6/6.0
	RAD-GR	Air	13	High	3.4/3.7/4.0/4.3/4.6/4.9/5.2/5.6/6.0/6.3/6.5/6.7
				Med	3.7/4.0/4.3/4.6/4.9/5.2/5.6/6.0/6.3/6.5/6.7
	RAD-G2	Air (for construction)	13	X-High	3.4/3.7/4.0/4.3/4.6/4.9/5.2
4×4					
	RAD-L90	Parabolic/Multi-leaf	13	XX-High	3.7/4.0/4.3/4.6/4.9
	RAD-G2	Air (for construction)	13	XX-High	4.0/4.3/4.6/4.9
6×2					
	RAPD-GR[1]	Air	19/22	High	4.3/4.6/4.9/5.2/5.6/6.0
	RADT-AR[2]	Parabolic	19/21	High	3.4/3.7/3.9/4.3/4.6/4.9/5.2/5.6/6.0
	RADT-GR[3]	Air	19/20.5/22.5/23	High	3.5/3.7/3.9/4.3/4.6/4.8/4.9/5.2/5.6/6.0
				Med	3.5/3.7/3.9/4.3/4.6/4.8/4.9/5.2/5.6/6.0
	[1)]Pusher axle (fixed/steered) [2)]Tag axle (fixed) [3)]Tag axle (fixed/steered/self-steered)				
6×4					
	RADD-BR	Parabolic	21	X-High	3.2/3.4/3.7/3.9/4.3/4.6
				High	3.2/3.4/3.7/3.9/4.3/4.6/4.9/5.2/5.6
	RADD-TR1	Parabolic/conventional leaf	23/26	X-High	3.2/3.4/3.7/3.9/4.3/4.6
	RADD-TR2	Conventional leaf	26/32	X-High	3.2/3.4/3.9
				High	3.2/3.4/3.7/3.9/4.3/4.6/4.9/5.6
	RADD-GR	Air	21/23/26	High	3.2/3.4/3.7/3.9/4.3/4.6/4.9/5.2/5.6
				Med	3.4/3.7/3.9/4.3/4.6/4.9/5.2/5.6
	RADD-G2	Air (for construction)	21/23/26	X-High	3.2/3.4/3.7/3.9/4.3/4.6/4.9/5.2/5.6
6×6					
	RADD-BR	Parabolic	21	XX-High	3.6/3.7/3.9/4.3/4.6
	RADD-TR1	Parabolic/conventional leaf	26	XX-High	3.6/3.7/3.9/4.3/4.6
	RADD-TR2	Conventional leaf	26/32	XX-High	3.6/3.7/3.9/4.3/4.6
	RADD-G2	Air (for construction)	21/23/26	XX-High	3.6/3.7/3.9/4.3/4.6
8×2					
	RADT-GR[3]	Air	19/20.5/22.5/23	High	4.3/4.35/4.6/4.9/5.1/5.6/6.0
				Med	4.3/4.35/4.6/4.9/5.1/5.6/6.0
	RAPDT-GR[4]	Air	27/30/30.5/31.5/32	High	4.3/4.6/4.9/5.1/5.6/6.0
				Med	4.3/4.6/4.9/5.1
	[3)]Tag axle (fixed/steered/self-steered) [4)]Pusher axle (steered) + tag axle (fixed/steered)				
8×4					
	RADD-BR	Parabolic	21	X-High	4.3/4.35/4.6/4.9/5.1/5.6
				High	4.3/4.35/4.6/4.9/5.1/5.6/6.4
	RADD-TR1	Parabolic/conventional leaf	23/26	X-High	4.3/4.35/4.6/4.9/5.1/5.6
				High	4.3/4.35/4.6/4.9/5.1
	RADD-TR2	Conventional leaf	26/32	X-High	4.3/4.35/4.6/4.9/5.1
				High	4.3/4.35/4.6/4.9/5.1/5.6
	RADD-GR	Air	21/23/26	High	4.6/4.9/5.1/5.6/6.0/6.4
	RADD-G2	Air (for construction)	21/23/26	X-High	4.35/4.6/4.9/5.1/5.6/6.0

AXLE CONFIGURATIONS – RIGID (CONT.)

	Type	Rear suspension	Rear axle/bogie load (t)	Chassis height	Wheelbases (m)
8×4					
	RADDT-GR[5]	Air	27/33/36	High	3.7/3.9/4.1/4.3/4.6/4.9/5.2
				Med	3.7/3.9/4.1/4.3/4.6/4.9/5.2
	RADDT-G2[5]	Air (for construction)	27/33/36	X-High	3.2/3.4/3.7/3.9/4.1/4.3/4.6/4.9/5.2
	RAPDD-GR[6]	Air	27/30.5/32/35	High	4.3/4.6/4.9/5.1/5.3/5.6
	[5)]Tag axle (steered) [6)]Pusher axle (steered)				
8×6					
	RADD-BR	Parabolic	21	XX-High	4.6/4.9/5.1/5.6
	RADD-TR1	Parabolic/conventional leaf	26	XX-High	4.6/4.9/5.1/5.6
	RADD-TR2	Conventional leaf	26/32	XX-High	4.6/4.9/5.1/5.6
	RADD-G2	Air (for construction)	21/23/26	XX-High	4.6/4.9/5.1/5.6
10×4					
	RADDT-G2[5]	Air (for construction)	27/33/36	X-High	4.3/4.35/4.6/4.9/5.1/5.6/6.0
	RADDT-GR[5]	Air	27/33/36	High	4.3/4.35/4.6/4.9/5.1/5.6/6.0
	[5)]Tag axle (steered)				
10×6					
	RADDT-G2[5]	Air (for construction)	27/33/36	XX-High	4.6/4.9/5.1/5.6
	[5)]Tag axle (steered)				

CHASSIS HEIGHTS

☐ Med	approx 900 mm
☐ High	approx 1000 mm
☐ X-High	approx 1200 mm
☐ XX-High	approx 1240 mm

MAX FRONT AXLE LOAD (tonnes)

	Air	Leaf
Med	9/18*	10
High	9/18*	10/20*
X-High	–	10/20*
XX-High	–	10/20*

* With dual front axles (FAA20/FAA21).

VOLVO DYNAMIC STEERING

Active steering system with torque overlay. Delivers more steering force at low speeds, reduces steering kicks and keeps the steering wheel straight forward when braking on split friction. The steering wheel returns automatically to neutral position both when driving forward and when reversing.

Volvo Dynamic Steering is now available for all axle configurations except those with a driven front axle (4×4, 6×6, 8×6 and 10×6).

AUTOMATIC TRACTION CONTROL (ATC)

Automatically engages the driven front axle when it's needed and disengages it when the terrain permits, saving fuel and improving manoeuvrability. ATC comes as standard on all Volvo FMX configurations with a driven front axle (4×4, 6×6, 8×6 and 10×6).

TANDEM AXLE LIFT

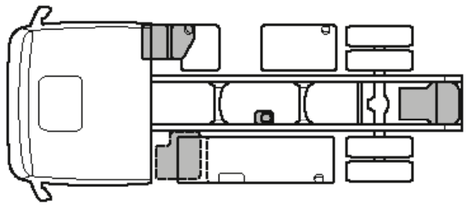
Allows the rearmost drive axle on the tandem bogie to be disengaged and raised, to reduce fuel consumption and turning radius. By pushing a button on the dashboard, the driver can raise the axle when the truck is unloaded. When the truck is loaded, the axle automatically lowers itself and engages.

Tandem Axle Lift is available for 6×4 and 8×4 configurations (with a tandem bogie) equipped with disc brakes.

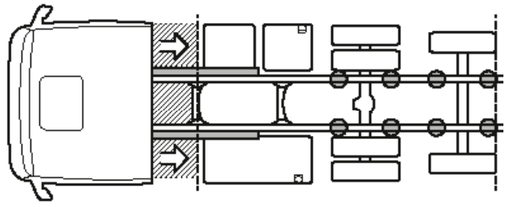
● = Drive axle.
⊙ = Dead axle (tag, pusher or front axle).

CHASSIS LAYOUT

The chassis is developed to give optimum space for superstructure and equipment. Here are some of the features, which may vary depending on the truck's specification.



TRACTOR



RIGID

TOWBARS

Centrally mounted, semi-undermounted and undermounted towbars for centre-axle trailers. Towbars can be fitted at intervals of 25 mm.

FUEL TANKS

Aluminium or steel tanks in volumes from 150 to 900 litres. Maximum fuel volume is 1,480 litres for a 4×2 tractor.

ADBLUE TANKS

Plastic. Volumes from 32 to 90 litres. The AdBlue pump is integrated in the AdBlue tank module.

TRACTOR

BATTERY BOX (BBOX-EF)

To free space on the sides, the battery box can be placed between the chassis frames at the rear (BBOX-EF).

ADBLUE TANK

A 50-litre AdBlue tank can be mounted on the top of the frame, behind the cab, allowing for more fuel capacity (ADTP-BC).

APM

The Air Production Modulator (APM) is placed between the chassis frames in order to create more space for chassis-mounted equipment such as fuel tanks.

FIFTH WHEELS

Certified installation permits up to 36 tonnes load. An ISO fifth wheel with L-shaped profiles at different heights is included in the range, offering considerable freedom of choice. The flange-mounted fifth wheel is a low-weight variant since it does not require any attachment plate. The fifth wheel's height above the chassis is from about 140 mm. Integrated lubrication and trailer connection indicator are available as options for specific variants.

RIGID

FRAME BODY BUILDER HOLE-ROW

The upper hole-row is reserved for the body builder. All brackets in the upper hole-row have an offset and an 8 mm spacer. No rivets are used in the upper hole-row.

FREE FRAME SPACE

The chassis packaging can be moved rearwards to create space for crane legs or other equipment. (FAA10; 500 mm), (FAA20; 600 mm).

CRANE PREPARATION

Crane plates on the chassis can be factory mounted.

REAR AIR SUSPENSION AND SHORT REAR END

The rear overhang can be shorter thanks to a redesigned forward-mounted stabiliser bar. This is a benefit for construction applications and improves the asphalt-layer interface and swapbody applications.

BRAKES

EBS (Electronically-controlled Brake System) provides superior response, performance and brake feel, while providing access to a number of handy features. EBS is now available both for disc brakes and Z-cam drum brakes (for a selected range of axle configurations and chassis heights). Upgrade your brake system by adding the EBS Medium package or any of the additional options.

☐ EBS MEDIUM

In addition to the EBS Standard package, EBS Medium adds the following features. ■

EBS STATUS CONTROL

EBS status monitoring via the TEA2+ vehicle electronic system and Volvo Tech Tool.

HILL START AID

The brakes are only released once there is sufficient engine torque to propel the vehicle forward.

LINING WEAR ANALYSIS

Brake lining warning – calculates the remaining mileage available with the current brake linings. (Only for disc brakes.)

AUTOMATIC PARKING BRAKE RELEASE

The parking brake is released when the driver pushes the accelerator pedal and a gear is selected (only I-Shift gearbox).

ADDITIONAL OPTIONS

In addition to the program packages there are the following options:

☐ STRETCH BRAKE

Enables the driver to request pulse braking of the trailer. The brake is then automatically activated and the risk of jack-knifing is minimised.

☐ ESP (ELECTRONIC STABILITY PROGRAM)

The brake stability system applies the brakes individually on each wheel, thereby providing stability for the entire vehicle combination and counteracting jack-knifing, rollover and trailer swing. ESP fulfils the legislation of Electronic Vehicle Stability Control, and is available for 2- and 3-axle vehicles. ■

☐ EMERGENCY BRAKE LIGHT

When you panic brake from speeds above 50 km/h, the brake lights flash with four flashes per second. ■

☐ HYDRAULIC RETARDER

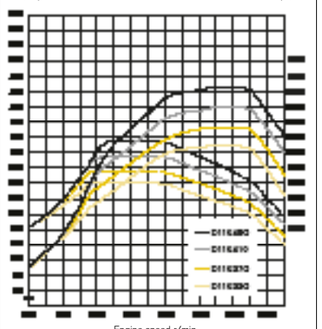
Gearbox-mounted compact retarder with a max effect of 440 kW.

■ Also available as an accessory.

ENGINE D11K – EURO-6

Power/Torque

Net output according to: EC 582/2011



☐ **D11K330** (243 KW)	
Max power at 1700–1800 r/min	330 hp
Max torque at 950–1400 r/min	1600 Nm
☐ **D11K370** (272 KW)	
Max power at 1700–1800 r/min	370 hp
Max torque at 950–1400 r/min	1750 Nm
☐ **D11K410** (302 KW)	
Max power at 1700–1800 r/min	410 hp
Max torque at 1000–1400 r/min	1950 Nm
☐ **D11K450** (332 KW)	
Max power at 1700–1800 r/min	450 hp
Max torque at 1040–1400 r/min	2150 Nm

D11K	
No. of cylinders	6
Displacement	10.8 dm^3
Stroke	152 mm
Bore	123 mm
Compression ratio	17:1
Economy revs	950–1400 r/min
Exhaust braking effect (2400 r/min)	160 kW
VEB effect (2400 r/min)	290 kW
VEB	option
Oil filters	2 full-flow, 1 bypass
Oil change volume, incl. filter	36 l
Cooling system, total volume	26 (42*) l
Oil change interval: Up to 100,000 km, or once a year with VDS4.	

* With retarder.

FUEL PREREQUISITES

Sulphur free fuel only (EN590, max 10 ppm sulphur).

ENGINE-MOUNTED POWER TAKE-OFFS

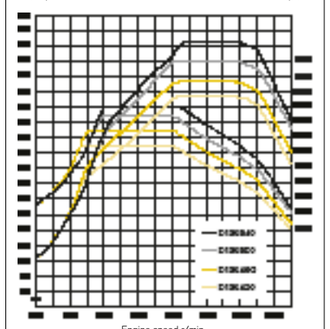
The engine-mounted power take-offs have a torque output of 650 Nm* and a ratio of 1.08:1. For complete specifications, see page 51.

* Torque output both when driving and standing still.

ENGINE D13K – EURO-6

Power/Torque

Net output according to: EC 582/2011



☐ **D13K420** (309 KW)	
Max power at 1400–1800 r/min	420 hp
Max torque at 860–1400 r/min	2100 Nm
☐ **D13K460** (338 KW)	
Max power at 1400–1800 r/min	460 hp
Max torque at 900–1400 r/min	2300 Nm
☐ **D13K500** (368 KW)	
Max power at 1400–1800 r/min	500 hp
Max torque at 980–1400 r/min	2500 Nm
☐ **D13K540** (397 KW)	
Max power at 1450–1800 r/min	540 hp
Max torque at 1000–1450 r/min	2600 Nm

D13K	
No. of cylinders	6
Displacement	12.8 dm^3
Stroke	158 mm
Bore	131 mm
Compression ratio	18:1 (17:1*)
Economy revs	900–1400 r/min
Exhaust braking effect (2300 r/min)	200 kW
VEB+ effect (2300 r/min)	375 kW
VEB+	option
Oil filters	2 full-flow, 1 bypass
Oil change volume, incl. filter	33 l
Cooling system, total volume	24 (44**) l
Oil change interval: Up to 100,000 km, or once a year with VDS4.	

* On D13K500 and D13K540. ** With retarder.

FUEL PREREQUISITES

Sulphur free fuel only (EN590, max 10 ppm sulphur).

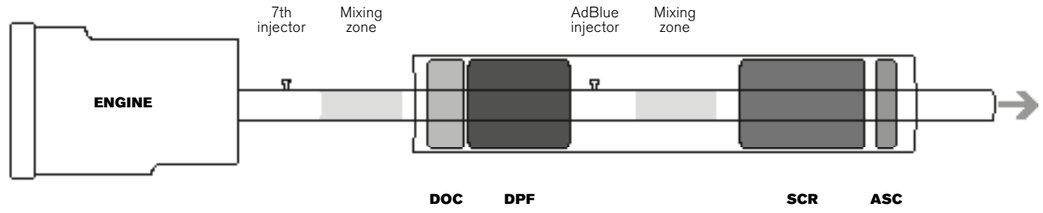
ENGINE-MOUNTED POWER TAKE-OFFS

Two torque output versions available. For complete specifications, see page 51.

EPTT650, ratio 1.26:1	650 Nm*
EPTT1000, ratio 1.26:1	1000 Nm*

* Torque output both when driving and standing still.

OUR SOLUTION FOR EURO 6



ENGINE

A closed loop butterfly, a waste-gate turbo, a so-called uncooled EGR and more. The new engine components serve two main purposes: to improve gas-flow and make sure the exhausts reach the after-treatment system at optimum temperature.

7TH INJECTOR

On D13K460, D13K500 and D13K540, a special diesel injector is used for heat management of the DOC and ensures the efficiency of the DPF and good SCR functionality.

DIESEL OXIDATION CATALYST (DOC)

The DOC produces the NO_2 necessary for the DPF to efficiently combust the particulates. In cold conditions, it also provides the heat needed for regeneration.

DIESEL PARTICULATE FILTER (DPF)

The filter collects particulate matter (PM) and stores it until it's burned off during regeneration. The regeneration is done automatically and the driver doesn't need to take any action.

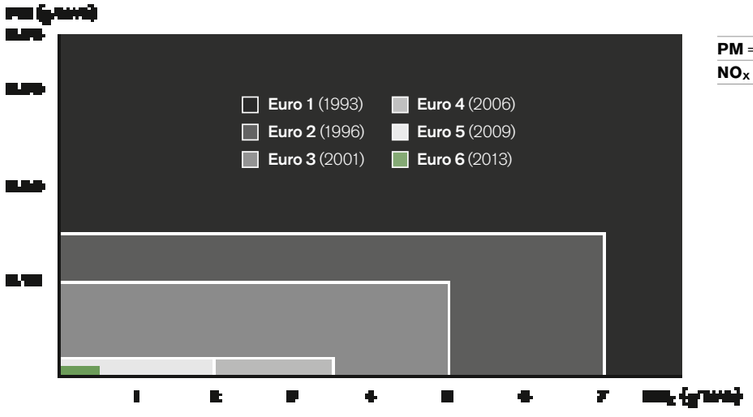
SELECTIVE CATALYTIC REDUCTION (SCR)

In the mixing zone, the exhausts are sprayed with AdBlue. When they reach the catalyst, the nitrogen oxides (NO_x) are efficiently transformed into harmless nitrogen gas and water.

AMMONIA SLIP CATALYST (ASC)

The last step before the tailpipe where the remaining ammonia (NH_3), if any, is removed.

EUROPEAN EMISSION STANDARDS 1993–2013



PM = Particulate Matter
NO_x = Nitrogen Oxides

I-SHIFT

12-speed splitter and range gearbox with automated gearchanging system. I-Shift can be fitted with a compact retarder, power take-off, emergency power steering pump and oil cooler.

I-SHIFT

Type	Top gear	Engine torque (Nm)	GCW approval (tonnes)
☐ AT2412F	Direct	2400	44
☐ AT2612F	Direct	2600	100
☐ ATO2612F	Overdrive	2600	60

I-SHIFT OPTIONS

SOFTWARE PACKAGES

By opting for the right software, you can add valuable functions to your I-Shift. Choose from four different add-on packages and several optional functions.

☐ REINFORCED I-SHIFT

For severe duty applications, I-Shift can be ordered in a reinforced version.

CRAWLER GEAR(S) AND EXTRA REVERSE GEARS

The reinforced I-Shift can also be equipped with one or two crawler gears and/or extra reverse gears.

I-SHIFT SOFTWARE PACKAGES

Functions	Basic	Distribution	Construction	Long Haul	Heavy Duty Transport*
Basic Shift Strategy	●	●	●	●	●
Performance Shift	●	●	●	●	●
Basic Gear Selection Adjustment	●	●	●	●	●
Gearbox Oil Temperature Monitor	●	●	●	●	●
Launch Control		●	●	●	●
Fuel Optimisation		●	●	●	●
Enhanced Shift Strategy (< 80t)		●	●	●	
Heavy Duty GCW Control (≥80t)					●
I-Roll				●	●**
Enhanced Performance – Bad roads		o	●	o	o
Enhanced PTO Functions	o	o	o	o	o
Enhanced Gear Selection Adjustment, including kick-down		o	o	o	o
Crawler gear(s)		o	o	o	o
Extra reverse gears		o	o	o	o
I-See, including I-Cruise				o	o

o = option * Only available for AT2612F. ** Available in long haul mode.

■ Also available as an accessory.

I-SHIFT FUNCTIONS EXPLAINED

BASIC SHIFT STRATEGY

Automatic selection of the right starting ratio (1st – 6th gear). The choice of starting gear is influenced by gross weight and road gradient.

PERFORMANCE SHIFT

Gives faster and gentler changes through intelligent utilisation of the engine brake, the vehicle's clutch and a special transmission brake.

BASIC GEAR SELECTION ADJUSTMENT

Makes it possible to adjust gear selection via the gear lever's buttons during engine braking in automatic mode.

GEARBOX OIL TEMPERATURE MONITOR

Shows the gearbox oil's temperature in the information display.

LAUNCH CONTROL

Optimises gear selection and EBS functions for manoeuvring at low speeds. Among other things, ensures that the Hill Start Aid function is only activated on uphill gradients.

FUEL OPTIMISATION

Saves fuel by tailoring the gear changing strategy to the driving characteristics of distribution, construction, long haul or heavy-duty transports.

ENHANCED SHIFT STRATEGY (<80 t)

By interacting with EBS and ECS, starting and close-quarter manoeuvring are made easier. Maximises the VEB/VEB+ braking effect by automatically selecting the right gear so that the engine operates at high revs. When changing gear during engine braking, the wheel brakes are activated to compensate for loss of braking torque.

HEAVY DUTY GCW CONTROL (≥80 t)

Optimises gear selection for gross combination weights above 80 tonnes. By manually switching to long haul mode when driving without load, the driver can enable I-Roll.

I-ROLL

Automatic engagement and disengagement of a freewheel function for the purpose of reducing fuel consumption. I-Roll is used when neither engine power nor engine braking is needed, for instance on flat roads.

☐ ENHANCED PERFORMANCE – BAD ROADS

Several functions that adjust gearchanging and assist starting and driving in poor road conditions and hilly terrain.

☐ ENHANCED PTO FUNCTIONS

Several functions that make power take-off use easier.

☐ ENHANCED GEAR SELECTION ADJUSTMENT INCLUDING KICK-DOWN

Makes it possible to adjust gear selection via the gear lever's buttons during start and when driving in automatic mode. The kick-down function selects the right gear for maximum acceleration.

☐ CRAWLER GEAR(S)

Adds one or two crawler gears, with a maximum ratio of 32:1, greatly improving startability, fuel economy and manoeuvrability. Also requires hardware.

☐ EXTRA REVERSE GEARS

Adds one reverse crawler gear with a ratio of 37:1 for low-speed reversing, and an additional reverse gear (3rd), that can allow you to start in high range to back up faster. Also requires hardware.

☐ I-SEE

A smart I-Shift software that can store topographical data and use this information to save fuel and improve driving comfort. The data is saved in a database available for other I-See users. When ordering I-See, the cruise control I-Cruise is also included. I-Cruise can also be ordered separately.

POWERTRONIC

Fully automatic power-shift transmission with torque converter and oil cooler. Changes gears without power loss. Powertronic can be factory-fitted with a power take-off, integrated retarder and emergency power steering pump.

POWERTRONIC

Type	Top gear	Engine torque (Nm)	GCW approval (tonnes)
☐ PT2106	Direct	2100	44
☐ PT2606	Direct	2600	60

POWERTRONIC, INTEGRATED DRIVING PROGRAMS

ECONOMY

Intended for optimal fuel economy. Gearchanges take place at the most economical revs.

PERFORMANCE

Is used when there is a need for added engine power output. Changes up and down at higher engine revs. ■

MANUAL GEARBOXES

14-speed splitter and range manual gearbox. Cable operation – with separate cables for longitudinal and lateral movements – results in short and distinct gear settings. Patented synchromesh with servo function means low gearchanging forces. The gearboxes can be fitted with a compact retarder, power take-off, emergency power steering pump and oil cooler.

MANUAL GEARBOXES

Type	Top gear	Engine torque (Nm)	GCW approval (tonnes)
☐ VT2009B	Direct	2000	60
☐ VT2214B	Direct	2200	100
☐ VTO2214B	Overdrive	2200	100
☐ VT2514B	Direct	2500	100
☐ VTO2514B	Overdrive	2500	100
☐ VT2814B	Direct	2800	100
☐ VTO2814B	Overdrive	2800	100

DRIVELINE COMBINATIONS

Manual gearboxes	D11K330	D11K370	D11K410	D11K450	D13K420	D13K460	D13K500	D13K540
VT2009B	•	•	•					
VT2214B	•	•	•	•	•	•		
VTO2214B	•	•	•	•	•	•		
VT2514B				•	•	•	•	
VTO2514B				•	•	•	•	
VT2814B								•
VTO2814B								•
Powertronic								
PT2106	•	•	•	•				
PT2606					•	•	•	•
I-Shift								
AT2412F	•	•	•	•	•	•		
AT2612F	•	•	•	•	•	•	•	•
ATO2612F	•	•	•	•	•	•	•	•
Single reduction axles								
RSS1344C	•	•	•	•	•	•	•	•
RSS1344D	•	•	•	•	•	•	•	•
RSS1356	•	•	•	•	•	•	•	•
RSS1360	•	•	•	•	•	•	•	•
RTS2370A	•	•	•	•	•	•	•	•
Hub reduction axles								
RSH1365	•	•	•	•	•	•	•	•
RSH1370F	•	•	•	•	•	•	•	•
RTH2610B	•	•	•	•	•	•	•	•
RTH2610F	•	•	•	•	•	•	•	•
RTH3210F	•	•	•	•	•	•	•	•
RTH3312	•	•	•	•	•	•	•	•

REAR AXLES

Type	Axle	Gear	Max torque (Nm)	Max axle/bogie load (tonnes)	GCW approval (tonnes)
Single reduction					
☐ RSS1344C/D	Solo	Hypoid	2600	13	44
☐ RSS1356	Solo	Hypoid	2400/2800	13	56/44
☐ RSS1360	Solo	Hypoid	3550	13	60
☐ RTS2370A	Tandem	Hypoid	3550	23	70
Hub reduction					
☐ RSH1365	Solo	Spiral bevel	2600	13	65
☐ RSH1370F	Solo	Conical spiral cut	3550	13	70
☐ RTH2610B	Tandem	Spiral bevel	3150	26	100
☐ RTH2610F	Tandem	Conical spiral cut	3550	26	100
☐ RTH3210F	Tandem	Conical spiral cut	3550	32	100
☐ RTH3312	Tandem	Conical spiral cut	3550	33	120

REAR AXLE RATIOS

RSS1344C/D	RSS1356	RSS1360	RTS2370A	RSH1365	RSH1370F	RTH2610B/F	RTH3210F	RTH3312
2.31:1*	2.50:1	2.47:1	2.43:1	3.61:1	3.46:1	3.33:1**	3.33:1	3.61:1
2.47:1*	2.64:1	2.64:1	2.57:1	3.76:1	3.61:1	3.46:1	3.46:1	3.76:1
2.64:1*	2.79:1	2.85:1	2.83:1	4.12:1	3.76:1	3.61:1	3.61:1	4.12:1
2.85:1*	3.10:1	3.08:1	3.09:1	4.55:1	4.12:1	3.76:1	3.76:1	4.55:1
3.08:1*	3.44:1	3.40:1	3.40:1	5.41:1	4.55:1	3.97:1**	3.97:1	5.41:1
3.36:1	3.67:1	3.67:1	3.78:1		5.41:1	4.12:1	4.12:1	6.18:1
3.70:1		4.11:1	4.13:1			4.55:1	4.55:1	7.21:1
4.11:1			4.50:1			5.41:1	5.41:1	
4.63:1			5.14:1			6.18:1	6.18:1	
5.29:1							7.21:1	

*For RSS1344D. **For RTH2610F.

POWER TAKE-OFFS

There is a wide range of clutch-independent and clutch-dependent power take-offs to drive all sorts of body equipment. ■

ENGINE-MOUNTED

☐ PTER-DIN
Rear-mounted engine power take-off for direct drive of a hydraulic pump.

☐ PTER1400
Rear-mounted engine power take-off with flange connection for hydraulic pump.

☐ PTER100
Rear-mounted engine power take-off with flange connection for hydraulic pump.

GEARBOX-MOUNTED

☐ PTR-F
Connecting flange attachment and low-rev or high-rev.

☐ PTR-FL/FH
Connecting flange attachment and low-rev or high-rev.

☐ PTR-D/PTR-DM/PTR-DH
Low/medium/high-rev with DIN-connection for direct attachment of a hydraulic pump.

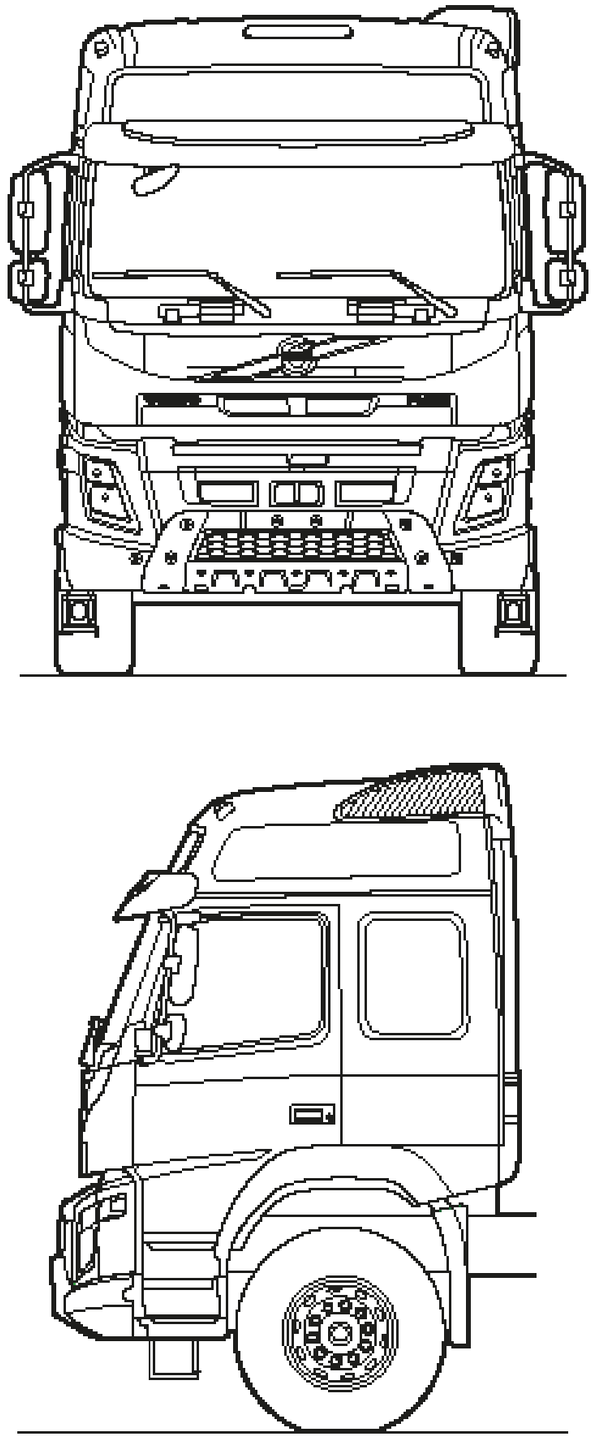
☐ PTRD-F
High-rev with connecting flange attachment for direct-fitted propshaft.

☐ PTRD-D
High-rev with dual drive. DIN connection front and rear for direct attachment of hydraulic pumps.

☐ PTRD-D1
High-rev with dual drive. Connecting flange attachment at the rear and DIN attachment at the front.

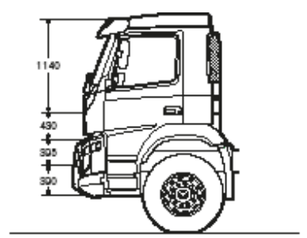
☐ PTRD-D2
High-rev with dual drive rear and single drive front. Two connecting flange attachments rear and one DIN attachment at the front.

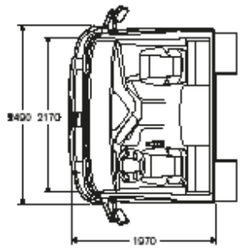
■ Also available as an accessory.



☐ DAY CAB

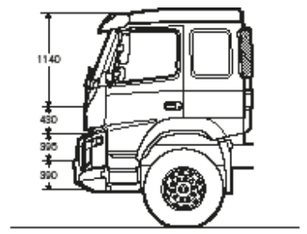
Day cab (FMX-DAY) with comfortable and ergonomic driver area. Interior height 157 cm, 114 cm on the engine compartment cover.

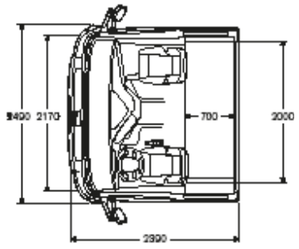




☐ SLEEPER CAB

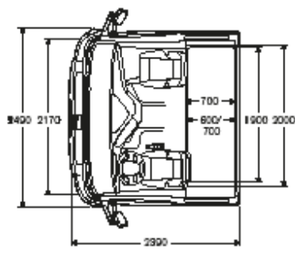
Sleeper cab (FMX-SLP) with comfortable overnight accommodation for one. Interior height 157 cm, 114 cm on the engine compartment cover.





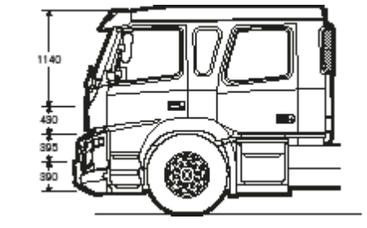
☐ GLOBETROTTER CAB

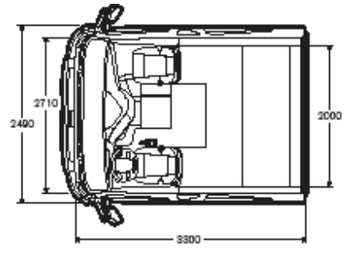
Globetrotter cab (FMX-HSLP) with comfortable overnight accommodation for up to two people. The Globetrotter cab offers extra storage above windscreen and as option under the bunk. Interior height 196 cm, 153 cm on the engine compartment cover.



☐ CREW CAB

Crew cab with ample space for several additional passengers, up to 6 people. Interior height 157 cm, 114 cm on the engine compartment cover.





FOUR-POINT CAB SUSPENSION

Coil springs with dampers all-round or air suspension with automatic level control all-round.

AIR INTAKES

Air intake positioned on the left side and available in high or low version.

COLOURS

Available in about 850 variants.

UPHOLSTERY

☐ Robust	Vinyl or leather
☐ Dynamic	Textile or leather
☐ Progressive	Soft textile or leather

DRIVER'S SEAT

Two different levels of comfort: Standard and Comfort. Both levels can be ordered with optional upholstery. The seat's total adjustment scope is 200 mm fore-aft, and 100 mm vertically. The driver's seat is fitted as standard with a head restraint, adjustable and fold-down backrest, vertical and fore-aft adjustment, adjustable lumbar support and adjustable seat angle.

PASSENGER SEAT

Two different levels of comfort: Standard and Comfort, both can can be ordered with optional upholstery. All the passenger seats are equipped as standard with head restraints.

BEDS

Lower bed: Bed measuring 70×200 cm.

16 cm mattress with pocket springs and excellent comfort. Three options of firmness: Soft, Semi-firm and Firm.

Two options of overlay mattress protector that improves sleeping comfort and facilitates bed-making.

Comfort upper bed dimensions 70×190 cm or 60×190 cm (option for Globetrotter cab).

INTERIOR STORAGE

The space above the windscreen consists of two storage compartments with roller doors on Globetrotter and LXL cabs, as well as four ISO slots, one of which is reserved for the tachograph. Under the bed in the sleeper cab and the Globetrotter cab there are two large storage compartments that are accessible from the outside, and in the sleeper section there are two storages for magazines and small items. In the dashboard there are four open storages, a small storage box, a DIN slot storage, bird bath and a bottle holder.

EXTERIOR STORAGE

Storage space accessible from the outside can be found behind the passenger and driver seats.

ROOF HATCH

The cab is equipped with a roof hatch that can be opened 50 mm. On the inside there is a perforated sunblind, which also acts as an insect net when the hatch is open. The roof hatch is manually operated.

STEERING WHEEL

Steering wheel in two different sizes – 450 mm or 500 mm in diameter depending on the truck specification. The steering wheel's height can be adjusted by up to 90 mm and the angle can be adjusted by 28 degrees. The steering wheel is available with an airbag. Integrated controls in the steering wheel provide safe and comfortable operation of cruise control, horn, phone and the functions in the driver information display and secondary information display.

CLIMATE SYSTEM

There is a choice of two alternative climate systems to cover all needs.

☐ Air conditioning with manual control (MCC).

☐ Air conditioning with automatic temperature control (ECC/ECC2).

DRIVING PACKAGES

	☐ Driving	☐ Driving+
Roof hatch, manual	●	●
Exterior sun visor	●	●
Interior sun visor with mirror	●	●
Mirrors, electrically controlled and heated	●	●
Armrests on driver seat		●
Locking of passenger door from driver side	●	
Central locking with remote key		●
Electronic Climate Control (ECC)		●

RESTING PACKAGES

	☐ Sleeper cab 1 bed	☐ Globetrotter 1 bed	☐ 2 bed
Sleeper control panel	●	●	●
Interior lighting with night light	●		
Interior lighting with night light and dimmer		●	●
Cab parking heater	●	●	●
Engine and cab parking heater			
Rear storage, locker overhead above bunk		●	
Top bunk, fixed and foldable			●

AUDIO PACKAGES

	☐ Basic	☐ High
Audio Functions		
Audio CD	●	●
CD-R/CD-RW	●	●
wav/wma/mp3/iTunes m4a		●
Speed-dependant volume control		●
Extended mute functions		●
Radio		
FM/AM antenna	●	●
FM stations	12	18
AM stations	6	6
RDS	●	●
Connections and interfaces		
Low-level input, 4 channels		●
3.5 mm stereo line input		●
USB connection		●
Bluetooth		●
Speakers		
Number of speakers	4	6*
Output	4×20 W	4×35 W

* 4 speakers on day cab.

ACTIVE SAFETY PACKAGE	□
ACC with forward collision warning and emergency brake	●
Lane Changing Support	●
Driver Alert Support	●

PERSONAL PROTECTION PACKAGE	□
Burglar alarm	●
Alarm with external sensor	○
Safe below bed	●
Main switch, remote controlled circuit shutdown	●
Main switch as for ADR trucks	○

○ = option

VISIBILITY PACKAGE	□
Headlamp cleaning	●
Rain sensor	●
Bi-Xenon headlamps	●
Automatic headlight switching	●

The Visibility package is only available with rear air suspension (RSS-AIR).

OFFROAD PACKAGE	□
Oil sump guard	●
Headlamp protector (grid)	●
Headlamp protector (mesh/off-road)	○
Handrail on the side	●*
Ladder	○*
Air cleaner with extra filter	●
Cover for APM center	●

○ = option. * Only available for the day cab

Some of the equipment shown or mentioned may only be available as options or accessories and may vary from one country to another in accordance with local legislation. Your Volvo dealer will be happy to provide you with more detailed information. Colours may vary somewhat owing to the limitations of the printing process. We reserve the right to alter product specifications without prior notification.

VOLVO TRUCK ACCESSORIES

You have chosen one of the most well equipped trucks in the world. But to make it really suitable for your particular transport assignments and for your personal needs, there's also a wide range of accessories to choose from. Developed and tested by Volvo Trucks for Volvo trucks. Here's a small selection. Ask your Volvo dealer or visit **www.volvotrucks.com** to learn more.

Red seat belt

Cradle plate for phone

Headlamp protector

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VOLVO

Volvo Truck Corporation