

**KEL-BERG**<sup>®</sup>  
TRAILERS AND TRUCKS LIMITED

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**KEL-BERG**  
**GRAB LOADER**

**VOLVO FMX 420 8X4**  
**KEL-BERG GRAB LOADER**



## Make / Model:

Volvo FMX 420 8x4 Rigid N3G X-High Chassis

## Drive Line:

Drive line is fitted with a 12.8 litre diesel D13K420 engine:

- Outputs: 420 hp at 1,400 to 1,800 rpm
- Peak torque: 2,100 nm at 860 to 1400 rpm

Also features an automatic AT2612 12 speed “I-Shift” gearbox, application software – off road, I-Shift economy mode with automatic power switch return, and differential and cross locks. Drive axle ratio - 3.09:1.

Two drive mode options, balanced and economy. Fitted with Volvo engine brake and exhaust pressure governor, providing 375kW retardation.

## Colour:

Cab is finished in 1103WHT winter white. Bumper, mirrors, instep and visor are finished in grey. Chassis is finished in grey.



## Cab External:

Cab external features the following items:

- Smoke grey external sun visor
- Heavy duty front bumper
- Tinted glass
- Electric operated tempered and tinted side windows
- Front and rear mechanical cab suspension and integrated shock absorbers
- Central door locking system
- Rain sensing windscreen wipers
- Insect screen in front of radiator
- LED headlights with headlamp protectors
- Sump and radiator guard to protect engine and hoses
- Side and rear marker lights
- Remote central door locking
- Daytime running lights

## Chassis:

Chassis height – X High is 300 mm x 8 mm steel web and flange.  
Chassis frame inner liner from front boogie to the end of the frame.  
Exhaust is fitted with horizontal silencer and rear outlet.

A 255 L aluminium fuel tank is located on OS and a 48 L AdBlue tank is mounted on NS, with anti-spill and anti-syphon device. Both have a locking cap. Wheel base is 5,100 mm with a 1,400 mm overhang with hinge hole centre 615 mm. Rear lights LED, steel air tanks.





## Cab Internal:

Fitted with following items: Continental VDO DTCO 4.1 version 2 Smart tachograph, dash finished in dark beige / rave, cruise control, I-See predictive cruise control using map-based topography information, manually operated air conditioning, Thatcham H2 approved immobiliser, reversing alarm, 3 kg fire extinguisher, SRS driver's airbags, driver side sun visor and interior sun blind.

Suspended driver seat with adjustable shock absorber, two arm rests, adjustable plastic steering wheel, back rest and lumbar controls, with integrated red seat belts. Fixed fold-up passenger seat with seat belt. Rubber floor mats.

Electronic stability control (ESC) for low centre of gravity loads. Forward collision warning with AEBS advanced emergency braking system. Side collision avoidance support on driver and passenger side. Drive alert support system.

The steel roof and escape hatch are electronically operated. Electrically heated and operated main and wide angle mirrors with manually adjusted passenger kerb and front mirror. Main mirrors do not have cowlings to improve visibility. Manual key door locking.

Also features rear cab window. And driver side sun visor. Storage as follows: central document box with twin cup holders, rear cab upper 300 mm high storage facility.



Four speakers mounted in dashboard and doors, DAB and AM/FM radio, 1 USB connector, GSR compliant rear mounted camera fitted at the end of the frame. Secondary colour information display.

Dashboard features an integrated 12" colour information display. White interior lights. Roof mounted air intake with single element air filter. Cab climate controlled electronically with air conditioning and sun sensor. In cab smoke detector.

### Braking System:

Features drum brakes on front and rear axles with front brake regulating valves (EBS). Fitted with Volvo engine brake and exhaust pressure governor providing enhanced performance thanks to additional exhaust rocker control. EBS medium, Hill hold function.

### Wheels & Tyres:

Wheels are steel rims with Bridgestone brand tyres and tyre pressure monitoring. Basic toolkit supplied. Anti-spray mud flaps on front axle wings.

- Front Axles: Tyre Size - 315/80R22.5
- Second Front Axle: Tyre Size - 315/70R22.5
- Driven Rear Axles: Tyre Size - 315/70R22.5
- Trailing Axle: Tyre Size - 315/70R22.5





## Axles & Suspension:

Drive Axle Type: RTS2370A 23-tonne single reduction differential and cross locks.  
tandem with

Front Suspension Type: 3 leaf parabolic spring – design capacity 16 ton – 2 x 8.0 ton front axles.

Front Suspension Maintenance: Lubricated rear shackles, pins and bushings.

Rear Suspension Type: Heavy duty parabolic spring with reinforcement.

Front anti roll bar medium stiffness. Rear anti roll bar normal stiffness.  
Rear boogie design weight - 21 ton. Fitted with drum brakes, EBS medium including “hill” hold function.

## GVC & GCM:

GCW: 60,000 kg

## Electrical Power Supply:

Alternator 110 A, 2 x 210 Ah batteries. Battery box is mounted on NS.  
Battery master switch operated using key fob.



### Connected Services:

Telematics gateway: GSM/GPRS/4G modern LTE & WLAN. Fleet management system gateway.  
Volvo Connect Vehicle status service – 2-years prepaid subscription.  
Volvo Connect Daily Inspection service – 2-years prepaid subscription.  
I-See predictive cruise map data – 5-years prepaid subscription.

Volvo action service on call assistance service enabled with switch and microphone. Media information Platform with navigation & Volvo Connect “On Board” Support.

### Warranty:

2 year full chassis warranty based on 80,000 KMs per annum, 6 weekly OLI's. This vehicle is not supplied with a service package.



## Body Construction:

The body is constructed with durable and hard wearing pressed HARDOX 450 abrasive resistant steel, suitable for muck-away, demolition rubble and aggregate.

The floor & sides are fixed and pressed from HARDOX 450 abrasive resistant steel, along with heavy duty top rails which are folded from the same steel; giving the body exceptional strength. The sides are 4mm and the floor is a single 5mm steel sheet with angled edges to the side wall, preventing material from sticking.

The bulkhead and top swing tailgate are also single 4mm HARDOX 450 pressed abrasive resistant steel material.

Four tab heavy duty bolt on locking bar 25 mm, steel cover plate over bar to stop stones becoming trapped. Rear pillars 100x190 mm box section.

Rear wings are N3G steel valance with drop down bolt on galvanised wings with smooth mud flaps, easily changed if damaged.

## Paint:

Prior to fitting, the body is shot blasted and finished in a two pack paint, single flat colour, in ether a RAL or BS code. This comes with a two year anti-corrosion warranty.

## Sub-Frame:

The bolt together Kel-Berg sub-frame is constructed from low weight, high tensile steel. This structural steel is high strength and has been developed for use in load-bearing components, whilst saving weight. This design allows a degree of flexibility within the sub-frame during its normal working duties. It is also fully galvanised to ensure it is long lasting and corrosion free.

## Auxiliary Items Included:

2 x galvanised handrails fitted on the O/S of the body near the rear axle, body raised warning with in cab light and buzzer, conspic markings fitted to conform with current C & U regulations, side guards fitted to both side of the vehicle on galvanised brackets.

## Galvanised parts:

- Shovel rack mounted on front bulkhead.
- Bolt on rear push bar.
- Mudwings covering the drive axles
- Rear under run bumper.
- Galvanised bolt on sheet roller cover prepared for sheet system.
- Galvanised fixed ladders will be fitted where possible, otherwise folding ladders.



## Crane:

Fitted with Palfinger Epsilon M125 Classic LC82 crane. Features dual stand up controls with cable controls on diver side. A double access catwalk and platform finished in black.

The crane has a double boom extension with BK057 4.5t rotator and Kinshofer KM 500ltr bucket with lifting hooks. It has two fixed stabiliser legs and ground controls fitted to the O/S, also features a main cylinder protection guard, rubber bump strip on outer boom, 2 spot lights, emergency stop and load hold valves on the main cylinder.

A rated capacity indicator can be found on the upper controls with LED's showing for 50%, 75% and 100%, the operator is inside invisible safety case which prevents the crane from making contact with the operator. It's finished in KTL primer and painted inn RAL 3002 red powder coating.

## Tipping Gear:

Tipping gear is EDBRO TS series. The high tensile steel frame within the TS effectively absorbs side loads imposed by the chassis during tipping, whist protecting the cylinders from side load. With 50% more torsional stiffness than comparable units, the TS provides ultimate stability for the safest tipping, even in the most demanding operating conditions.

## Electrics:

LED side marker lights mounted below bottom rail. Truck manufacturers rear lights to be used and fitted to galvanised bolt on light brackets. Rear LED marker lights fitted to tailgate. Body raised warning with in cab light and buzzer.

## Warranty:

Please note it is critical that you check T H White T&Cs with regard to their crane testing policy. If you do not check then it is possible you will lose your 2nd year warranty.

- Tipping body: 3 years
- PTO + Tipping Gear: 3 years
- Body paint: 2 years
- Crane: 2 years full + 3, 4, 5 sliding scale structural.

Third party components subject to their parties T&Cs (available on request).