



**KEL-BERG**  
**VACUUM TANKER**

**DAF FAX CF450 8X4 KEL-BERG**  
**NON-HAZARDOUS VACUUM TANKER**

### Make / Model:

DAF CF450 FAX 8x4 Rigid N3 Highway Chassis

### Drive Line:

Drive line is fitted with a 10.8 L, 6 cylinder Euro 6, MX-11 diesel engine: Step D requirements.

- Outputs: 330 kW @ 1,600 rpm
- Maximum Torque: 2,300 Nm @ 900 – 1,125 rpm

Also features an auto TraXon 12 speed ZF 12TX2210 DD gearbox, mechanical differential lock and ASR (anti-slip control). Traction aid – 15.0 ton.

### Cab External:

Cab external features the following items:

- Green translucent external sun visor
- Galvanised steel bumper
- Tinted glass
- Electric operated side windows
- 4-point mechanical cab suspension and integrated shock absorbers
- Central door locking system with exterior light checker functions
- Electrical adjustment of main mirror and wide angle mirror
- Double glassed window in the rear cab wall



# CHASSIS SPECIFICATION

Ver.1 | Issued  
08/21

## DAF FAX CF450 8X4 KEL-BERG NON-HAZARDOUS VACUUM TANKER

### Colour:

The cab is finished in H3279 white. Headlamp surrounds and bumper are finished in brilliant white. Mirror backs and chassis are finished in grey.

### Cab Interior:

Cab interior is finished in black rock with dark sand trim. The driver seat is air suspended with high back seat and comfort air. Upholstery is flash copper finish with black seat belts. Climate control automatically regulates cab temperature.

Also features radio / USB player, truck phone, hands free telephone kit with SIM card slot, Bluetooth antenna and two USB charging points. A 5" TFT display is fitted in instrument panel with driver performance assistant (DPA). Tachograph is Stoneridge or VDO digital smart tachograph.

A sleeper cab with sleeping compartment and lower bunk is fitted at engine tunnel level. There are storage facilities under the bunk which can be accessed by tilting the bunk. The lower bunk features a standard foam mattress with curtains along the windscreen and side windows.

A 3.8 Kw water to air night heater with residual heat pump and 7-day timer control panel are fitted. The roof features a fixed aluminium hatch. Driving height is adjusted using manual ECAS remote control which activates normal driving height, raise / lower of the rear axle and to stop any adjustments.



# CHASSIS SPECIFICATION

Ver.1 | Issued  
08/21

## DAF FAX CF450 8X4 KEL-BERG NON-HAZARDOUS VACUUM TANKER

### Chassis:

The chassis is 310 x 7 mm with full-length inner reinforcements. The exhaust is a single horizontal DPF & SCR unit with diffuser positioned behind the second front axle on the OS.

A 340 L aluminium fuel tank is located on NS and 45 L AdBlue tank is located on OS. The chassis wheel base is 5,700 mm with a 2,000 mm overhang.

### Brake System:

Ventilated disk brakes are fitted to the front and rear. This features a dual circuit air system with electronic control (EBS) and a twin cylinder air compressor with heated dryer. The MX engine brake works simultaneously with the exhaust brake, resulting in a high combined braking power available at low engine rpm. Also features park brake control.

### GVC & GCM:

Chassis weigh related technical GVM max – 35,000 kg.

Drawbar related GCM max – 44,000 kg (class 2).

First gearbox PTO ZF NT10B plus C is mounted below the gearbox and counter shaft.

### Electrical Power Supply:

Alternator 120 A, 2 x 175 Ah batteries



# CHASSIS SPECIFICATION

Ver.1 | Issued  
08/21

## DAF FAX CF450 8X4 KEL-BERG NON-HAZARDOUS VACUUM TANKER

### Axles Suspension:

Front Axle Type: 163 N vertical offset at 100. Parabolic leaf suspension with shock absorbers and stabiliser – max load: 2 x 8 ton. Air suspended driven rear axle and steered trailing axle. Driven single reduction axle type SR1344 with 4 bellows – max load: 11.5 ton

Steered axle with 2 air bellows, mechanical differential lock, and single reduction – max load: 7.5 ton. There is a lifting device for the steered trailing axle. The air suspension is lowered to its bump position as soon as the PTO is switched on.

### Wheels & Suspension:

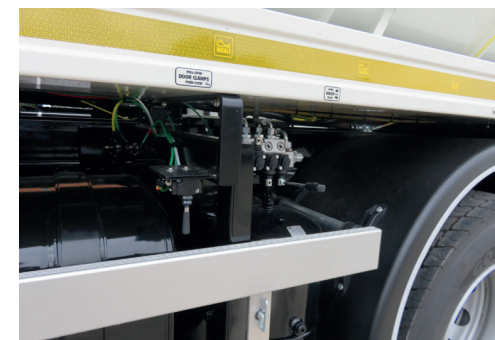
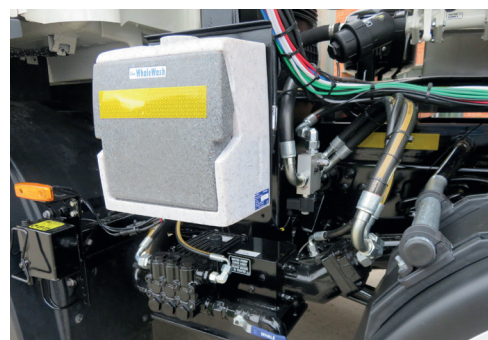
Front Axles: Tyre Size - 315/70R22.5  
Wheel Size – 22.5 x 9.00

Second Front Axle: Tyre Size – 315/70R22.5  
Wheel Size – 22.5 x 9.00

Driven Rear Axles: Tyre Size – 315/70R22.5  
Wheel Size – 22.5 x 9.00

Trailing Axle: Tyre Size – 315/70R22.5  
Wheel Size – 22.5 x 9.00

Wheels are steel disk wheels finished in silver grey. Wheel protection rings with open centre section fitted, also silver grey (RAL9006). Tyres are premium brand.



# CHASSIS SPECIFICATION

Ver.1 | Issued  
08/21

## DAF FAX CF450 8X4 KEL-BERG NON-HAZARDOUS VACUUM TANKER

### Warranty:

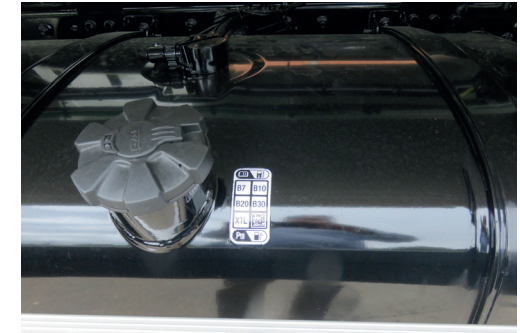
2 year chassis cab & 3rd year Driveline. This takes care of all warrantable repairs on the vehicle for the first two years and on the driveline for this year together with associated with breakdown coverage.

### Service & Maintenance:

Two options are available at additional monthly cost:

Option 1) Compliance package

Option 2) Full R&M Package



### Body Description:

Fitted with a 32 ton non-hazardous vacuum and jetting pressure vessel tanker. This is suitable for sewage and other non-hazardous sludge's.

Manufactured from:	Carbon Steel to BS EN10025 J2 specification fixed body
WVTA Directive:	2007/46 CAT N3
Operating / Vacuum Pressure:	1 bar (15 psi)
Nominal Capacity:	4,200 gallons (600 G clean water + 3,600 G dirty)

The body is fixed to the vehicle chassis with flexible mountings with a 2° slope – NO TIPPING. The body has two anti-surge baffles (walk through type). The front end of the vessel is a torispherical dished end and flanged to PD5500 spec.

Tank top is fitted with one 460 mm diameter, 6 clamp carbon steel manhole with access ladder & platform.

PRV: Tank-top Whale patented PRV – piped to ground with cable pull

PRV: In-line Whale PRV. PTFE components locked, sealed & set-piper to ground

Gauges: Combined vacuum pressure calibrated in working pressure & vacuum

Content Indicators: A full length 3" diameter acrylic side glass with cleaning and rodding access (calibrated in 500 gallon increments)

### Rear Door:

Rear door is hydraulically operated with a torispherical door and rear debris chute for ease of operation when unloading. The door is fitted with hydraulically operated door clamps on the nearside.

### Vacuum System:

Exhauster: Mistral 701 Series Exhauster / Compressor

- Outputs 345 cfm free air
- Deoiler System
- Vacuum pump controls fitted at rear

Drive: Mechanical with automatic engine speed setting

Cut Off: Primary and secondary overspill canister with cut-out & 1.5" drain

Protection: Suction side grit strainer and check valve

Control: External ergonomic controls fitted at operator work stations

- Air operated change over for vacuum or pressure selection on NS
- Emergency stop at the workstation

### Valves:

Outlet Valve:	4" lever operated ball valve mounted in base of rear door / dish
Outlet Connection:	4" Bauer with blank cap
Seal Breaker Valve:	25 mm fitted in pipework between valve and hose connection on outlet valve
Inlet Valve:	4" lever operated ball valve mounted in base of rear door / dish
Inlet Connection:	4" Bauer with blank cap
Seal Breaker Valve:	25 mm fitted in pipework between valve and hose connection on outlet valve
Internal Stack Pipe:	Fitted to Inlet Valve c/w splash plate bolted type to four angle brackets fully welded to the tank
Overspill Valve:	80 mm air operated valve interlinked to PTO
Vent Valve:	65 mm air operated valve interlinked to hand brake

### Low Volume Jetting:

Divisions:	One to give 200 gallons water compartment with 24" bolted access plate
Sight Glass:	2" diameter full depth acrylic sight glass in front compartment
Water Intake / Hydrant Filler:	Approved no back syphon hydrant filler – std 2.5" quick coupling
Jetting Pump:	Orca 170 high pressure hydraulic pump – performance is 10 gpm at 2000 psi to supply 200 gallon fresh water compartment

The hose reel is hydraulically operated and is located on the nearside, rear facing. Also includes free-wheel facility with 30 m x 0.5" high pressure hose and low volume jetting kit with forward facing & retro nozzles, and 1 m hand lance with fan & needle nozzles. A low water warning device with automatic water dumping circuit is also fitted.

### Lighting:

2 x 24 volt amber LED beacons with integral branch protection are fitted at the rear on NS and OS. There are also two work lights fitted, one over the work station and one on tank NS to illuminate the tray.

### Storage Section:

NS & OS: Full length carbon steel hose trays with tank protection strips and hoes straps

Cone Spikes: Cone spike holds six 750 mm high cones (motorway use)

Locker: 800 x 400 x 350 mm stainless steel locker

### General:

Regulations: Construction and Use 1986 (as amended)  
  
SI 2000 no.128 reg 4 (Pressure Systems Safety Regulations)

The Supply of Machinery (safety) regulations  
2008: SI 2008 no. 1597

Noise emission in the environmental directive  
2000/14/EC

PER / PED: To comply with the Pressure Systems Regulations  
  
SI 1999 no.2001 as amended by SI2002:1267  
directive no PED 2014/68/EU

Data Plate: Tank data plate (CE marked) as required by SI  
2000 no.128 reg 5(4)

The Quality Assurance Management System of Whale tankers has been approved to ISO9001:2015 by a UKAS accredited 3rd party. Hydraulic test 10 1.5 bar (23 psi) / full vacuum.

Insurance: £15 million products liability cover

Labels / Handbooks: Safety labels fitted to vehicle as required and Operator Handbook supplied

Commissioning: One day vehicle commissioning instruction

Online Docs: Vehicle Technical file & certification available on secure online applications

Certificates: Declaration of Conformity PER / PED 2014/68/EU

Declaration of Conformity for fitness and quality

Declaration of Conformity to UK Machinery (safety) Regulations SI2008 no, 1597

Certificate of hydraulic test

Certificate of noise emission measured / guaranteed power level

Vehicle weight ticket

### Type Approval:

COP4: Reversing Lamp

COP5: Direction Indicator Lamp -Hazard warning signal in accordance with regulation 6.5

COP6: Stop Lamp

COP7: Rear registration lamp

COP9: Rear position lamp

COP10: Rear fog lamp

COP11: End-outline marker lamp

COP12: Rear retro-reflector (Non-Triangular)

COP14: Front retro-reflector (Non-Triangular)

COP15: Side retro-reflector (Non-Triangular)

COP16: Side-marker lamps

COP17: Conspicuity markings - Conspicuity markings to UN ECE Reg 48 SI 2009 No 3220, white on front and red on rear. Amber on side.

COP18: Side guards fitted each side

COP19: Rear protection device (Underrun bumper)

COP20: Spray Suppression (Mudwings)

COP21: Rear registration plate space

COP22: Plates (Statutory)

COP26: Masses & Dimensions – EC Reg: 1230/2012

COP28: Dimensional requirements for Whole Vehicle Type Approval