



Tyres	A ±15mm	A ±15mm	B ±15mm	C ±15mm	Wheel base D	E (mm)
295/60R22.5	3228	note: for Mercedes Tier3/Tier4i, deduct 60mm	962	2035	3100	2040
11R22.5	3280		1078	2098	3200	2140
295/80R22.5	3318		1146	2136	3300	2240
13R22.5						

### ENGINE

#### Volvo TAD870VE (Tier 4f/Stage 4)

Six-cylinder four-stroke direct-injection diesel engine with turbo charging and intercooler.

Engine equipped with engine brake (not in combination with ZF 3WG171).

Engine equipped with Volvo Penta (AdBlue) system including SCR-catalyst.

Displacement: .....7,7 dm<sup>3</sup>

Bore: ..... 110 mm

Stroke: ..... 135 mm

Compression ratio: ..... 17,5:1

Output:..... 160 kW (218 hp) at 2200 rpm

Torque:..... 1050 Nm at 1000-1400 rpm

Acc. to ISO 3046

#### Mercedes OM936LA (Tier 4f/Stage 4)

Six-cylinder four-stroke direct-injection diesel engine with turbo charging and intercooler.

Engine equipped with engine brake.

Engine equipped with Mercedes (AdBlue) system including SCR-catalyst.

Displacement: .....7,7 dm<sup>3</sup>

Bore: ..... 110 mm

Stroke: ..... 135 mm

Compression ratio: ..... 17,6:1

Output:..... 180 kW (245 hp) at 2200 rpm

Torque:..... 1000 Nm at 1200-1600 rpm

Acc. to ECE R120

#### Only for use outside EU/US/Canada:

#### Mercedes OM906LA (Tier 3/Stage 3A)

Six-cylinder four-stroke direct-injection diesel engine with turbo charging and intercooler.

Engine equipped with engine brake (not in combination with ZF 3WG171).

Displacement: .....6,4 dm<sup>3</sup>

Bore: .....102 mm

Stroke: .....130 mm

Compression ratio: .....18,0:1

Output:..... 170 kW (231 hp) at 2200 rpm

Torque: .....810 Nm at 1200-1600 rpm

Acc. to ECE R120

[See table for note about dimension "A"]

#### Volvo TAD850VE (Tier 3/Stage 3A)

Six cylinder four-stroke direct injection diesel engine with turbo charging and intercooler.

Engine equipped with engine brake (not in combination with ZF 3WG171).

Engine equipped with normal silencer.

Displacement: ..... 7,7 dm<sup>3</sup>

Bore: .....110 mm

Stroke: .....135 mm

Compression ratio: .....17,5:1

Output:..... 160 kW (218 hp) at 2200 rpm

Torque: ..... 1050 Nm at 1000-1400 rpm

Acc. to ECE R24

### GEARBOX

ZF, type 3WG171 (not in combination with OM936LA)

- Powershift transmission with high efficiency torque converter and 3 gears forward and 3 gears reverse.

Gear ratio's theoretical speed (km/h)

4.578F+R 8 (F+R)

2.396F+R 15 (F+R)

0.994F+R 36 (F+R)

(Tyre size 11R22.5, axle ratio 11.98)

#### Optional:

ZF, type 5WG191 + Kessler W1000 dropbox (only i.c.w. Kessler rear axle)

- Powershift transmission with standard Lock-Up clutch ensuring the lowest

possible fuel consumption with 5 speeds forward and 3 gears reverse.

Gear ratio's	theoretical speed (km/h)
4.579F+4.062R	6+6 (F+R)
2.304F+2.044R	11+13 (F+R)
1.501F	17 (F)
0.963F+0.854R	27+30 (F+R)
0.627	41 (F)

(Tyre size 11R22.5, axle ratio 12.73)

ZF, type 6WG211 + Kessler W1000 dropbox (only i.c.w. Kessler rear axle)

Transfer case/dropbox:  
Kessler, type W1000

Transfer case standard locked to function as dropbox. Reduction ratio 1.371:1

### FRONT AXLE

Terberg TTA type 62-xx

Non-driven steering axle

Capacity 11.000 kg (20 km/h)\*

#### Optional:

Volvo Non-driven steering axle

Capacity 11.000 kg (20 km/h)\*

\* Actual axle load capacity depending on tyre load rating.

### REAR AXLE

Terberg TTA 70-11

Capacity 30.000 kg (20 km/h)\*

Reduction ratio 11.98:1

Differential lock : Lockable type

#### Optional:

Kessler D81PL478 (12.73/16.13:1)

Kessler D81PL477 (13.2/16.36:1)

\* Actual axle load capacity depending on tyre load rating.

### SUSPENSION

Front: Parabolic leaf springs in rubber mountings with 2 telescopic shock

absorbers and additional rubber stops. Maintenance-free system.

**Rear:** Directly bolted to chassis frame.

**Optional:** Air suspension with rubber stops.

## RIMS AND TYRES

**Tyres:** 11R22.5 (6 pieces)

**Rims:** 10 stud disc wheels 22.5 x 8.25

## STEERING SYSTEM

Fully hydrostatic orbitrol steering system with priority valve and double acting steering cylinders.

Emergency steering property.

Steering wheel fully adjustable in height and angle.

Steering wheel diameter 350 mm

Turning circle over front bumper (m)

Wheelbase [mm]	Driver side	Non driver side
3100	12.880	12.440
3200	13.140	12.700
3300	13.400	12.960
3500	13.920	13.480

## 5<sup>th</sup> WHEEL

### 2" Terberg cast steel plate

Technical capacity 36.000 kg.

Lifting capacity 30.000 kg\*.

Pneumatic unlocking of 5<sup>th</sup> wheel, operated from cabin.

Indicator light for positive locking inside the cabin.

Fully welded extremely strong and stable lifting frame construction.

All rotating points equipped with generously sized oscillating bearings.

### Optional:

- 3,5" 5<sup>th</sup> wheel
- Cardanic 5<sup>th</sup> wheel (2" or 3,5")

\*Actual lifting capacity depending on axle type, tyre load ratings, vehicle speeds and 5<sup>th</sup> wheel height.

## HYDRAULIC SYSTEM

Engine driven load sensing hydraulic pump for steering and lifting 5<sup>th</sup> wheel plate, directly mounted to gearbox, with priority valve for the steering system.

Hydraulic oil tank protected mounted inside the chassis frame.

Tank capacity 105 dm<sup>3</sup>.

Working pressure 200 bar.

2 heavy-duty hydraulic single stage, double acting lift rams.

## CHASSIS

Heavy Duty, torsional stiff, fully welded construction.

Air reservoirs and fuel tank protected mounted inside the chassis, fully bolted access steps with anti-slip surface integrated in chassis.

Towing pin for 40 and 50 mm tow hitches at front and rear of chassis.

## BRAKE SYSTEM

Full air brake system with split front and rear axle and parking brake circuits.

Front axle and rear axle with S-cam brake.

Volvo front axle with Z-cam brake.

Kessler D81PL478 rear axle with simplex wedge brake system.

Kessler D81PL477 rear axle with high capacity single jaw dry disk brake system. Automatic slack adjusters front and rear.

Air reservoirs: 2 x 40 dm<sup>3</sup>, 1 x 30 dm<sup>3</sup>.

Total 110 dm<sup>3</sup>.

2 Line trailer brake system mounted on rear side of cabin, with yellow and red spiral hoses with glad-hands.

Air dryer with integrated air pressure regulator.

Brake cylinders: front axle diaphragm only. Spring brake cylinders on rear axle.

Brake pressure: 7,8 – 8,5 bar.

## FUEL TANK

Capacity 200 dm<sup>3</sup> and integrated with hydraulic tank.

## COOLING SYSTEM

Fin and tube type radiator of heavy-duty construction mounted on rubber silent blocks with separate air to air transmission oil cooler and engine intercooler all mounted side by side.

## EXHAUST

Silencer with vertical pipe.

Exhaust system in critical area protected with steel grille.

## ELECTRICAL SYSTEM

24 Volt negative earth.

Alternator : 28 V/100 A

Batteries : 2 x 12 Volt / 140 Ah

Output starter : 4 kW (Mercedes)

Fuses and relays mounted in central electrical box.

Can-Bus system allowing multiple options/flexibility and easy fault tracing. All wiring with code numbers and easy readable/visible mounted in easily accessible electrical box.

7 pin SAE socket at rear of cab for trailer connection (DIN ISO 1185).

## LIGHTING

H4 headlights with dipped and main beam and direction indicators.

LED rear lights on rear of chassis, with direction indicators and brake lights.

5<sup>th</sup> wheel floodlight behind cabin.

Mounting for rotating beacon light.

Interior light in cabin with integrated spotlight.

## CABIN

1 person - left hand drive position.

With 180° swivelling seat.

### Dimensions inside:

- width : 1520 mm
- length : 1670 mm
- height : 1660 mm

Cabin construction of overdimensioned strong steel profiles to comply to latest Rops/Fops regulations.

Cab comfortable mounted on 3 anti-vibration mounts.

Entrance to cab by rear sliding door with rubber mounted window pane.

Vertical electric sliding window at driver's side with "Comfort" control.

Cabin can be tilted with hydraulic hand pump to 73°.

Large windows for excellent visibility.

All window panes safety glass and tinted.

Front window pane layered with a total thickness of 6,76 mm.

Noise insulation exceeds international standards.

ISRI driver's seat with air suspension and fully adjustable, mounted on a 180° swivelling seat assembly for easy entrance/exit to/from driver's position.

Swivelling seat assembly equipped with 2 brake pedals and 1 accelerator pedal.

Demister/heater with 3 speed blower, recirculation system and all around demisting including 4 adjustable outlet louvers.

### Side dashboard:

- Parking brake lever.
- Heater controls.
- Switches for:
  - \* Ignition
  - \* Wiper rear
  - \* Differential lock transfer case
  - \* Work light(s)
  - \* Hazard lights
  - \* Lighting
  - \* Differential lock rear axle

### Steering console:

- Steering wheel fully adjustable in height and angle.
- Combi switch for:
  - \* Direction indicators
  - \* Wiper front 2 speed
  - \* High/low beam+head lights flasher
  - \* Horn
- Gearbox selector
- Switches for:
  - \* 5<sup>th</sup> wheel up/down
  - \* 5<sup>th</sup> wheel unlocking
  - \* Unlocking swivelling seat
  - \* Electrically operated driver side window with "Comfort" control.
- Terberg Driver Information Module connected to the CAN-Bus system incorporating main indicator lights, gauges and vehicle information.