Model code : UKM_10XC036STPUS
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## Prepared for :

## T HIGH T6X2 PUSHER 13L E6-GVW 23.4 T / GTW 44 T

## RENAULT TRUCKS

## T HIGH 520

## WEIGHTS

| Wheelbase |  | mm | 3.900 |
| :---: | :---: | :---: | :---: |
| Maximum Weight (registered) | Total (GVW) | Kg | 23400 |
| Payload | (C) | Kg | 14828 |
| Maximum Weight (registered) | Front axle 1 | Kg | 8000.00 |
|  | rear axle 1 | Kg | 7500 |
|  | rear axle 2 | Kg | 11500 |
| Min. weight complete vehicle unladen | Front axle(s) | Kg | 7133.00 |
| Kerb Weight | total | Kg | 8572 |
| Chassis cab kerb weight | Front Axle 1 | Kg | 5470.00 |
|  | Rear Axle 1 | Kg | 1224.00 |
|  | Rear Axle 2 | Kg | 1878.00 |
|  | Front axles (Liftable axle down) | Kg | 5470 |
|  | Rear axles (Liftable axle down) | Kg | 3102 |
|  | Front axles (Liftable axle up) | Kg | 5811.00 |
|  | Rear axles (Liftable axle up) | Kg | 2686.00 |
| Total vehicle weight under full load at YMIN | Front axle(s) | Kg |  |
|  | Rear axle(s) | Kg |  |
| Total vehicle weight under full load at YMAX | Front axle(s) <br> Rear axle(s) | $\begin{aligned} & \mathrm{Kg} \\ & \mathrm{Kg} \end{aligned}$ |  |

This table includes the weights of the RENAULT TRUCKS options: full urea tank, oil, screen wash fluid and coolant at $100 \%$, fuel fill level $90 \%$ and driver present ( 75 kg )

To maintain the driving comfort (lightness of steering, braking) of vehicles in all load and driving conditions once the vehicle is bodied, the following minimum axle load(s) must be respected: A value corresponding to $26 \%$ of the weight of the unladen bodied vehicle kerb weight (with driver, without passenger)
LENGTHS

| Wheelbase |  | mm |
| :---: | :---: | :---: |
| Front Overhang | $(\mathrm{H} / \mathrm{BEP}$ L016) | $\mathbf{m m}$ |
| Wheelbase | $(\mathrm{F} / \mathrm{BEP}$ L011) | 1365 |
| Axle Spacing | Axle 2-3 (BEP L012.2) | mm |
| Rear overhang | Chassis | mm |
| Centre of Gravity of vehicle | at X (BEP L044) | 132500 |
| Technical wheelbase | (F' / BEP L015) | mm |
| Overall Chassis Length | (A /BEP L001) | 1046 |
|  |  | mm |

## HEIGHTS

| Wheelbase |  | mm | 3.900 |
| :---: | :---: | :---: | :---: |
| Ground clearance, laden | Front (U1 / BEP H015) | mm | 227 |
|  | Rear (U3 / BEP H016) | mm | 248 |
| Max. exterior height unladen | (BEP H001) | mm | 3973 |
| Max. exterior height, cab tilted, unladen | (01 / BEP H061) | mm | 4576.00 |
| Cab height (unladen) | (O) | mm | 3884 |
| Distance from ground to lowest point at front of vehicle | Unladen (H0 / BEP H18) | mm | 344.00 |
|  | Laden (H0 / BEP H18) | mm | 273.00 |
| Frame top height at front axle | Unladen (H1 / BEP H035) | mm | 994.00 |
|  | Laden (H1 / BEP H036) | mm | 935.00 |
| Frame top height at drive axle | Unladen (H2 / BEP H037) | mm | 1004 |
|  | Laden (H2 / BEP H038) | mm | 981 |
| Frame top height at the rear of the frame | Unladen (HN) | mm | 1006.00 |
|  | Laden (HN) | mm | 993.00 |
| Centre of Gravity of vehicle | Unladen at Z (BEP H044) | mm | 937.00 |
| Side member height | (BEP H032) | mm | 300.00 |

## TOWING DEVICE

| Wheelbase |  | mm | 3.900 |
| :---: | :---: | :---: | :---: |
| Distance between the front of the vehicle and the centre of the trailer coupling device | (BEP L073 + L016) | mm | 4715.00 |
| Distance between centre of last axle to centre of coupling device |  | mm |  |
| Fifth wheel height, from top of side member | (BEP H074 + H071) | mm | 270.00 |
| Fifth wheel height from ground | Unladen (BEP H076) | mm | 1272 |
| Frth wheel height from ground | Laden (BEP H078) | mm | 1244 |
| Swept Swing Clearance | (BEP L078) | mm |  |
| Fifth wheel position | Max. (Ymax / BEP L075) | mm | 1100 |
| Gross Vehicle Weight | at YMAX | Kg | 23400.00 |
| Gross Vehicle Weight, load on front axle(s) | at YMAX | Kg | 8000.00 |
| Gross Vehicle Weight, load on rear axle(s) | at YMAX | Kg | 15400.00 |
| King Pin Load | at YMAX | Kg | 14828.00 |
| King Pin Load on Front Axle(s) | at YMAX | Kg | 2530.00 |
| King Pin Load on RearAxle(s) | at YMAX | Kg | 12298.00 |
| Fifth wheel position | Min. (Ymin / BEP L077) | mm | 550 |
| Gross Vehicle Weight | at YMIN | Kg | 23400.00 |
| Gross Vehicle Weight, load on front axle(s) | at YMIN | Kg | 4400.00 |
| Gross Vehicle Weight, load on rear axle(s) | at YMIN | Kg | 19000.00 |
| King Pin Load | at YMIN | Kg | 14828.00 |
| King Pin Load on Front Axle(s) | at YMIN | Kg | -1070.00 |
| King Pin Load on RearAxle(s) | at YMIN | Kg | 15898.00 |


| Fifth wheel position | Manufacturer's recommendation (Y / BEP L076) | mm | 550 |
| :---: | :---: | :---: | :---: |
| Gross Vehicle Weight | in fifth wheel position recommended by manufacturer | Kg | 23400.00 |
| Gross Vehicle Weight, load on front axle(s) | in fifth wheel position recommended by manufacturer | Kg | 7885.00 |
| Gross Vehicle Weight, load on rear axle(s) | in fifth wheel position recommended by manufacturer | Kg | 15515.00 |
| King Pin Load | in fifth wheel position recommended by manufacturer | Kg | 14828.00 |
| King Pin Load on Front Axle(s) | in fifth wheel position recommended by manufacturer | Kg | 2415.00 |
| King Pin Load on RearAxle(s) | in fifth wheel position recommended by manufacturer | Kg | 12413.00 |
| Fifth wheel position | Intermediate 1 | mm | 500.00 |
| Gross Vehicle Weight | in intermediate fifth wheel position 1 | Kg | 23400.00 |
| Gross Vehicle Weight, load on front axle(s) | in intermediate fifth wheel position 1 | Kg | 7665.00 |
| Gross Vehicle Weight, load on rear axle(s) | in intermediate fifth wheel position 1 | Kg | 15735.00 |
| King Pin Load | in intermediate fifth wheel position 1 | Kg | 14828.00 |
| King Pin Load on Front Axle(s) | in intermediate fifth wheel position 1 | Kg | 2195.00 |
| King Pin Load on RearAxle(s) | in intermediate fifth wheel position 1 | Kg | 12633.00 |
| Fifth wheel position | Intermediate 2 | mm | 450.00 |
| Gross Vehicle Weight | in intermediate fifth wheel position 2 | Kg | 23400.00 |
| Gross Vehicle Weight, load on front axle(s) | in intermediate fifth wheel position 2 | Kg | 7446.00 |
| Gross Vehicle Weight, load on rear axle(s) | in intermediate fifth wheel position 2 | Kg | 15954.00 |
| King Pin Load | in intermediate fifth wheel position 2 | Kg | 14828.00 |
| King Pin Load on Front Axle(s) | in intermediate fifth wheel position 2 | Kg | 1976.00 |
| King Pin Load on RearAxle(s) | in intermediate fifth wheel position 2 | Kg | 12852.00 |
| Sliding fifth wheel | front fork | mm | 4.71 |
|  | rear yoke | mm | 4.22 |

## WIDTHS

| Wheelbase |  | mm | 3.900 |
| :---: | :---: | :---: | :---: |
| Max exterior cab width with rear view mirrors open | (BEP W001) | mm | 2960.00 |
| Max. cab width | (BEP W002) | mm | 2534 |
| Frame width | Front (BEP W035) | mm | 1080 |
|  | Rear (BEP W036) | mm | 850 |
| Width at rear wheels | Rear axle 1 (V3 / BEP W003.2) | mm | 2350 |
|  | Rear axle 2 (V5 / BEP W003.3) | mm | 2518.00 |
| Track | Front (V1 / BEP W013.1) | mm | 2043 |
|  | Rear 1 (V2 / BEP W013.2) | mm | 2038 |
|  | Rear 2 (V4 / BEP W013.2) | mm | 1854.00 |

## OTHER

| Wheelbase |  | mm | 3.900 |
| :---: | :---: | :---: | :---: |
| Approach angle | (BEP H010) | 。 | 10 |
| Ramp angle | (BEP H012) | - | 22.00 |
| Departure angle | (BEP H011) | - | 20.60 |
| Side member thickness | (BEP W034) | mm | 7.00 |
| Turning Radius | Overall (BEP W012) | mm | 6900.00 |
|  | kerb to kerb | mm | 6206.00 |
|  | interior | mm | 2773.00 |

## DTI 13 ENGINE

Max. power: 382 kW from 1430 to 1800 rpm
Max. torque: 2550 Nm from 1000 rpm to 1430 rpm
Power output (UK): 512 hp
6 -cylinder in-line diesel engine - Common rail high-pressure fuel-injection (2000 bar) - 24 valves - overhead camshaft, rear-mounted timing
High pressure provided by three pumps on injector bodies.
Bore 131 mm - stroke 158 mm - Capacity 12.8 L

Electronically-controlled fan
Turbocharger
Direction of rotation (seen from gearbox end): anti-clockwise Oil filter with additive
Intervalle vidange huile jusqu'à 100000 km
EEC EURO VI pollution control level
Compact after-treatment system (catalytic converter, DPF, SCR)
Cooling liquid
Automatic regeneration of particulate filter

## ENGINE EQUIPMENT

Mode Power (Eco - Eco off)
Partial gas recycling (semi-closed circuit)
Without engine Power Take Off.
Electronic speed limiter ( $90 \mathrm{~km} / \mathrm{h}$ ).

## CLUTCH

Single-plate clutch, diameter 430 mm

## GEARBOX

Optidriver AT 2612F gearbox (14.94-1) with automatic clutch. Aluminium housing.
Max. torque 2550 Nm, 12 forwards gears and 3 reverse gears.
Steering wheel-mounted operating mode selection (automatic/manual) via gear shift selector.
Gearbox rear intermediate housing in aluminium
Gearbox oil cooler, oil/water heat exchanger

## RETARDER

OPTIBRAKE+ (power rating 382 kW at 2300 rpm ):
combination of the exhaust brake and valve compression braking, coupled to service brake

## POWER TAKE-OFF

## Power take-off S81

Output: splined hollow shaft (DIN 5462)
Direction of rotation: opposite to engine
Torque: 1000 Nm
Ratios: 0.71/0.90
Position: 18h

## STEERING



Power steering, variable-flow hydraulic pump
Steering ratio 20:1-Steering wheel diameter 460 mm Driving on the left

## FRONT AXLE

Axle with zero-maintenance steering knuckles
Front load capacity (technical max.): $8 t$

## REAR AXLE

Liftable rear axle
Load transfer to drive axle ( $10.5 \mathrm{t}+30 \%$ if speed below 30 km/h)
Rear axle position : in front of engine drive axle

## WHEELS AND TYRES

Dimension 315/80 R22.5
Profile C. ECOREGIONAL HS3 / HD3
Alcoa Dura-Bright aluminium wheels.
Chrome wheel nut protectors with chrome wheel nut caps Without spare wheel.

## REAR DRIVE AXLE

P13170-E single reduction final drive axle Integral differential lock
Rear loading capacity (technical max.): 19 t
Rear load 7.5t-11.5t
Drive axle ratio: 2.64
Engine speed at $90 \mathrm{~km} / \mathrm{h}$ : 1207 rpm

## Service brake:

Twin-cylinder air compressor $1100 \mathrm{I} / \mathrm{min}, 760 \mathrm{~cm}^{3}$
Braking system with two independent circuits.
Ventilated disc brakes.
Electronic management of air production by EACU (Electronic Air Control Unit):
Dryer cartridge optimised by preventive maintenance.
Disengageable air compressor

Aluminium air tanks.
Brake hose couplers, UK standard
Electrical lead with one 15-pin connector to two 7-pin
connectors (24N, 24S)
Upward orientation of air hoses
Dummy sockets for electrical cables on DFR
Trailer brake device at cab rear

## EBS:

Anti-lock braking system (ABS).
Anti-slip regulation (ASR).
Brake balancing between tractor unit and trailer.
(Disc) brake pad wear compensation
Retarder and service brake linking
Differential engagement management (if equipped) at speeds
$<10 \mathrm{~km} / \mathrm{h}$ (4x2)
Hill Start Assist
Braking performance warning
ESC (Electronic Stability Control) trajectory control and anti-
rollover system
Coupling traction test
Emergency brake assist (EBA)
Stop lights emergency lighting

## Parking brake:

EPB (Electronic Parking Brake) automatic parking brake, immobilization provided by spring cylinders

## Brake adjustment:

Automatic brake lining slack compensation.

## Emergency brake:

Ensured by independence of main device circuits

## CAB

## Cab exterior:

## High Sleeper cab

All steel Cab, electro-zinc plated and cataphoretic paint treatment.
Cab paint colour: White ekla
technical code: 09350
Black emblem
Aerodynamic dirt deflectors on the headlamps
4 -point cab air suspension with ride-height control system
Electrically operated cab tilt.
Four side storage compartments of which one is accessible
from inside the cab
2 heated, remote control rear view mirrors.
2 wide angle rearview mirrors.
Kerb view mirror.
Rear view mirrors for bodywork up to 2.55 m wide
Fold-back front view mirror
Twin air horns - roof mounted.
Spray suppression on front wings
Fixed roof deflector
Side deflectors (2 opening panels)
Door extensions
Exterior parts finished in cab colour
Wide external sun visor

Tinted, laminated windscreen.

## Cab interior:

Cab interior finish - Anthracite
Performance roof console, 4 storage compartments with doors including 1 with key lock, 1 storage space with net, 4 ISO modules
Electric interior sun blind on windscreen, manual blinds on driver and passenger side windows

- 7" colour multimedia touchscreen

Pre-equipment for cameras
TV aerial pre-equipment
CB pre-equipment.
DTCO 4.0 digital chronotachograph
Offset 24 V socket
Electrically operated roof hatch with controls at the driver's
position and in the bunk area
Mosquito net on air vent
Synthetic carpet floor mats
Heating system (driver's seat)
Ventilation (siège conducteur)
Seat with longitudinal suspension
Two driver's armrests
Red seat belts
Rappel ceinture enclenchée
Air suspension
Adjustable vertical damping
Neck support
Height-adjustable
Easy Access
Stowage on rear of seat back
2 arm rests
Two passenger armrests
Leather seat trim.
Performance lower bunk
Prise soufflette
Grand volume drawer under bunk
Cab interior lighting management rotary control
(Activity/Rest/Night driving), brightness adjustment
Reading lamps on overhead console
LED direct and indirect cab lighting
Red night lighting covering 3 rows on the overhead console and on the dashboard
Cab lighting time-delay.
Curtains around cab. Curtain separating driving position from rest area.
Bunk area lighting
Remote control for comfort functions in bunk area with integrated display
Prise 12V \& 5V (couchette)
Provision for 50A max. electrical power supply
40 L refrigerator in central storage under bench, quiet with thermostat and vehicle battery management
2 storage boxes under bunk, one accessible from interior and exterior
One-touch electric windows
Cab independent night heater air/air (2 kW)
Electronically regulated comfort air conditioning with
compressor optimisation
Cab air filtration

Handbook and Service pack in English. 4 loudspeakers and 2 tweeters

## Steering wheel equipment:

Ultimate leather steering wheel
OPTIDRIVER control
OPTIBRAKE and retarder control on right-hand side
Easy Access steering column adjustable in 3 directions
Removable writing board on steering wheel
ROADPAD+:

- HGV-specific TOM TOM navigation system
- FM and DAB+ radio
- USB port and jack socket
- dual Bluetooth connection


## Instrument panel:

Panoramic dashboard including:

- large central storage.
- drawer (capacity 2 litres), transformable into ISO module for supplementary equipment.
- storage tray chilled by air conditioning (capacity 9.4 litres) .
- cup or movable ashtray location.
- A4 size paper storage space (capacity 10 litres).

7" HD colour information display
Speedometer in miles
$12 \mathrm{~V}+24 \mathrm{~V}$ socket on dashboard, for accessories.
Starting inhibitor controlled by transponder key.
Remote control central door locking with folding key
Bouton de démarrage
Vitesse client $+5 \mathrm{~km} / \mathrm{h}$ en descente
Cruise control and speed limiter configurable by rotary control
Mode Power (Eco - Eco off)
Sans mode Eco



## ELECTRONIC EQUIPMENT:

English and French language display Additional language (Spanish)
SAE cab socket for vehicle data extraction
FMS Gateway fleet management interface 3.0
Assistance button for geolocation via the 24/7 platform
Lane Departure Warning System (LDWS)
Adaptive cruise control (ACC) linked to advanced emergency
braking system (AEBS)

## ELECTRICAL EQUIPMENT

Batteries located in the rear overhang
Two 12 V, 210 Ah, 800 A gel batteries
Maintenance-free batteries
Battery cut-out remote control
Electrical circuit automatically goes to standby
Battery charge indicator
Alternator: 150 amp capacity.
LED rear signalling and lighting (EEC standard e2 10113)
CHASSIS
Chassis protective paintwork, mineral grey colour
technical code: 03650
Removable front towing cap.
Front under-run protection.
Transmission crossmember Reinforced
Closing cross member with pre-drilling for towing yoke
Manual sliding medium fifth wheel mounting $\mathrm{H}=50 \mathrm{~mm}$
Sheet metal Fontaine SP150 (sheet metal) 2" fifth wheel, D
150 kN
Fifth wheel position: $\mathrm{Y}=550 \mathrm{~mm}$
Extended rear platform.

Rear wings with anti-spray
Wings fitted in standard position.
Side exhaust.

## BUMPER - STEPS AND LIGHTING

Plastic bumper with integral spoiler
Retractable windscreen access step in radiator grille
Access to driving position by 4 steps
Step lighting.
Metallic door sills
BUMPER CORNERS, CENTER, AND STEPS PAINTED IN

## CAB COLOR

Automatic windscreen wiping with rain sensor and automatic illumination of lights
Electrical headlamp levelling control.
LED day running lights
Provision for lighting rail on front end
White LED work light ( 850 Im )
Front fog lights.
Fixed Bending Lights
Feux à LED
Roof beacon pre-equipment

## SUSPENSION

## Front suspension

2-leaf front leaf springs
Stabiliser bar

## Rear suspension:

Air suspension
Suspension remote control (2 channels).

## FUEL TANK

Main aluminium tank
Main fuel tank: 480 litres capacity D710 profile mounted on left \& with access steps
Anti-siphoning device
Heavy duty sedimenter and prefilter (R90).Bleed control on dashboard.

## AdBlue

63-litre AdBlue tank
Urea tank at the rear right-hand of the cab
63-litre capacity

## STANDARD EQUIPMENT

Tool kit
Reversing warning buzzer, including night switch.

## BODYWORK

Orange LED side marker lights with reflector
Interface for bodybuilder connections and BBM module (Body Builder Module)

## SERVICE

## Optifleet:

Optifleet Check: technical data reports for fuel consumption monitoring by vehicle and by driver, 2-year prepaid subscription
GEARBOX RATIOS

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14.94 | 11.73 | 9.04 | 7.09 | 5.54 | 4.35 | 3.44 | 2.70 | 2.08 | 1.63 | 1.27 | 1.00 |

The manufacturer reserves the right to modify the specifications above without prior notice.
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For further assistance please contact Product Applications at Renault Trucks UK Limited, Wedgnock Lane, Warwick, CV34 5YA Telephone +44 (0)1926 475333.

