Model code: UKM\_10XC036UK136

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## Prepared for:

# T HIGH T6X2 PUSHER TML E6 RHD - GVW 23.4 T / GTW 44 T

# RENAULT TRUCKS T HIGH 520

## **WEIGHTS**

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Wheelbase		mm	3.900
Maximum Weight (registered)	Total (GVW)	Kg	23400
Payload	(C)	Kg	14777
	Front axle 1	Kg	8000.00
Maximum Weight (registered)	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	8623
	Front Axle 1	Kg	5451.00
	Rear Axle 1	Kg	1252.00
	Rear Axle 2	Kg	1920.00
Chassis cab kerb weight	Front axles (Liftable axle down)	Kg	5451
-	Rear axles (Liftable axle down)	Kg	3172
	Front axles (Liftable axle up)	Kg	5801.00
	Rear axles (Liftable axle up)	Kg	2747.00
T	Front axle(s)	Kg	
Total vehicle weight under full load at YMIN	Rear axle(s)	Kg	
T . I . I . I . I . I . I . I . I . I .	Front axle(s)	Kg	
Total vehicle weight under full load at YMAX	Rear axle(s)	Kg	

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	3.900
Front Overhang	(H / BEP L016)	mm	1365
Wheelbase	(F / BEP L011)	mm	3900
Axle Spacing	Axle 2-3 (BEP L012.2)	mm	1325.00
Rear overhang	Chassis	mm	1046
Centre of Gravity of vehicle	at X (BEP L044)	mm	1253.00
Technical wheelbase	(F' / BEP L015)	mm	3377
Overall Chassis Length	(A / BEP L001)	mm	6311

## **HEIGHTS**

Wheelbase		mm	3.900
Ground clearance, laden	Front (U1 / BEP H015)	mm	192



	Rear (U3 / BEP H016)	mm	215
Max. exterior height unladen	(BEP H001)	mm	3935
Max. exterior height, cab tilted, unladen	(O1 / BEP H061)	mm	4538.00
Cab height (unladen)	(O)	mm	3846
Distance from ground to lowest point at front of values	Unladen (H0 / BEP H18)	mm	304.00
Distance from ground to lowest point at front of vehicle	Laden (H0 / BEP H18)	mm	297.00
France too beight at frant and	Unladen (H1 / BEP H035)	mm	956.00
Frame top height at front axle	Laden (H1 / BEP H036)	mm	946.00
Frame top height at drive axle	Unladen (H2 / BEP H037)	mm	973
Frame top neight at drive axie	Laden (H2 / BEP H038)	mm	952
Frame ton beight at the year of the frame	Unladen (HN)	mm	977.00
Frame top height at the rear of the frame	Laden (HN)	mm	953.00
Centre of Gravity of vehicle	Unladen at Z (BEP H044)	mm	934.00
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 whool beight from ground	Unladen (BEP H076)	mm	1240
Fifth wheel height from ground	Laden (BEP H078)	mm	1221
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	14777.00
King Pin Load on Front Axle(s)	at YMAX	Kg	2549.00
King Pin Load on RearAxle(s)	at YMAX	Kg	12228.00
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	14777.00
King Pin Load on Front Axle(s)	at YMIN	Kg	-1051.00
King Pin Load on RearAxle(s)	at YMIN	Kg	15828.00
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	7858.00
Gross Vehicle Weight, load on rear axle(s)	in fifth wheel position recommended by manufacturer	Kg	15542.00
King Pin Load	in fifth wheel position recommended by manufacturer	Kg	14777.00
King Pin Load on Front Axle(s)	in fifth wheel position recommended by manufacturer	Kg	2407.00
King Pin Load on RearAxle(s)	in fifth wheel position recommended by manufacturer	Kg	12370.00
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	7639.00
Gross Vehicle Weight, load on rear axle(s)	in intermediate fifth wheel position 1	Kg	15761.00
King Pin Load	in intermediate fifth wheel position 1	Kg	14777.00
King Pin Load on Front Axle(s)	in intermediate fifth wheel position 1	Kg	2188.00
King Pin Load on RearAxle(s)	in intermediate fifth wheel position 1	Kg	12589.00
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	7420.00
Gross Vehicle Weight, load on rear axle(s)	in intermediate fifth wheel position 2	Kg	15980.00
King Pin Load	in intermediate fifth wheel position 2	Kg	14777.00
King Pin Load on Front Axle(s)	in intermediate fifth wheel position 2	Kg	1969.00
King Pin Load on RearAxle(s)	in intermediate fifth wheel position 2	Kg	12808.00
Cliding fifth whool	front fork	mm	4.71
Sliding fifth wheel	rear yoke	mm	4.05

#### **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
Frame widin	Rear (BEP W036)	mm	850
Width at rear wheels	Rear axle 1 (V3 / BEP W003.2)	mm	2490
Width at real wheels	Rear axle 2 (V5 / BEP W003.3)	mm	2518.00
	Front (V1 / BEP W013.1)	mm	2109
Track	Rear 1 (V2 / BEP W013.2)	mm	2104
	Rear 2 (V4 / BEP W013.2)	mm	1854.00

#### **OTHER**

Wheelbase		mm	3.900
Approach angle	(BEP H010)	0	11
Ramp angle	(BEP H012)	0	20.80
Departure angle	(BEP H011)	0	17.70
Side member thickness	(BEP W034)	mm	7.00
	Overall (BEP W012)	mm	6900.00
Turning Radius	kerb to kerb	mm	6243.00
	interior	mm	2633.00

## **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

EEC EURO VI pollution control level

Compact after-treatment system (catalytic converter, DPF,

SCR)

Cooling liquid

Automatic regeneration of particulate filter

## **ENGINE EQUIPMENT**

Power mode inhibited after passing the 'hard spot' of the accelerator pedal
Partial gas recycling (semi-closed circuit)

Partial gas recycling (semi-closed circuit)

Automatic engine cut-off (5 min)

Without engine Power Take Off. Electronic speed limiter (90 km/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.

Optivision Map Based gear shift strategy for FUEL ECO (anticipation of topography and centralised data storage).

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**

Without gearbox mounted PTO

#### **STEERING**

Hydraulic power steering, variable flow 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 t + 30% if speed below 30 km/h)

Rear axle position: in front of engine drive axle

#### WHEELS AND TYRES

Dimension 385/55 + 385/55 + 315/70 R22.5 Profile M. XLINE ENERGY F (ANTISPLASH) / D2 Alcoa Dura-Bright aluminium wheels. ISO\_11992 compatible tyre pressure monitoring system Chrome wheel nut protectors with chrome wheel nut caps Without spare wheel.

#### **REAR DRIVE AXLE**

Drive axle ratio: 2.47

P13170-ER single reduction final drive axle Integral differential lock Rear loading capacity (technical max.): 19 t Rear load 7.5t - 11.5t Engine speed at 90 km/h: 1228 rpm

#### Service brake:

Twin-cylinder air compressor 900 l/min, 636 cm<sup>3</sup> 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)

Downward orientation of air hoses

Dummy sockets for electrical cables on DFR

Trailer brake device at cab rear, in aluminium

#### 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 km/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: Grey metallic corail

technical code: 03721

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.

Laminated side windows.

Spray suppression on front wings

Fixed roof deflector

Side deflectors (2 opening panels)

Door extensions

Cab accessories: cab colour Wide external sun visor Tinted, laminated windscreen.

#### Cab interior:

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

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

Seat with longitudinal suspension

Two driver's armrests

Safety belt warning.

Two passenger armrests

Leather seat trim.

Performance lower bunk

Removable back rest

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 with insulation around the cab and bunk separation Bunk area lighting

Remote control for comfort functions in bunk area with integrated display

Provision for 50A max. electrical power supply

40L 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)

Reinforced heat insulation

Electronically regulated comfort air conditioning with

compressor optimisation

Cab air filtration, washable filter

Handbook and Service pack in English.

4 loudspeakers and 2 tweeters

Fire extinguisher 3kg

## 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

7" HD colour information display

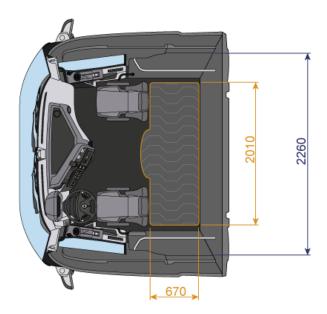
Speedometer in miles

12 V + 24 V socket on dashboard, for accessories.

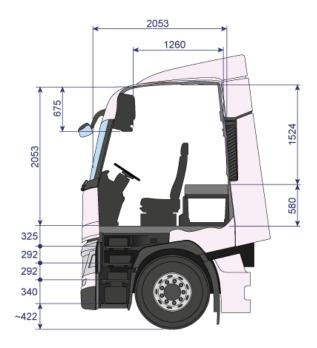
Starting inhibitor controlled by transponder key.

Remote control central door locking with folding key

Two additional ignition keys ECO Cruise control with Optiroll







#### **ELECTRONIC EQUIPMENT:**

English and French language display Additional language (Polish)

SAE cab socket for vehicle data extraction

Load per axle indicator

FMS Gateway fleet management interface 3.0

Assistance button for geolocation via the 24/7 platform 4G TGW telematics unit (telematic gateway) including an antenna and enabling subscription to Optifleet services (Map, Check, Drive)

Lane Departure Warning System (LDWS)

Electrical pre-arrangement for safety system (LDWS: lane departure warning system, alcolock, cameras)

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 Pneumatic sliding medium fifth wheel mounting H=50 mm Jost JSK 36D (sheet metal), 2" sheet metal fifth wheel, D 152 kN

Fifth wheel position: Y = 550 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

Automatic windscreen wiping with rain sensor and automatic illumination of lights

Electrical headlamp levelling control.

LED day running lights

Provision for lighting rail on roof

White LED work light (850 lm)

Front fog lights.

Roof beacon pre-equipment

Integrated headlamp washer

#### SUSPENSION

### Front suspension

2-leaf front leaf springs Stabiliser bar

## Rear suspension:

Air suspension

Stabiliser bar

Suspension remote control (2 channels).

#### **FUEL TANK**

Main aluminium tank

Main fuel tank: 480 litres capacity D710 profile mounted on left & with access steps

Heavy duty sedimenter and prefilter (R90).Bleed control on dashboard.

#### **AdBlue**

64-litre AdBlue tank (D710) Urea tank on the right

#### STANDARD EQUIPMENT

Tool kit

Reversing warning buzzer, including night switch.

#### **BODYWORK**



Bodybuilder access through bulkhead Provision for rear loading lighting Orange LED side marker lights with reflector

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

## **Optifleet:**

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

Optifleet Map: vehicle geolocation, geofencing and route analysis, 2-year prepaid subscription

## **SERVICE**

## **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. Non contractual document.

For further assistance please contact Product Applications at Renault Trucks UK Limited, Wedgnock Lane, Warwick, CV34 5YA Telephone +44 (0)1926 475333.

