

C 10x4 – 2+3 CONFIGURATION W/ CENTRAL STEERING AXLE

Renault Trucks C Range

GVW 48 t



DESCRIPTION

Conversion developed by System Truck in collaboration with the Renault Trucks factory for the application of an 8 t central (pusher) axle on 4-axle (8x4*4) vehicles from the C range, recently revised to suit also the new **Euro VI - step D** vehicles. The transformed vehicle has EWVTA (European Whole Vehicle Type Approval).

The conversion to a 5-axle vehicle (10x4*6) is carried out through the application of an 8 t pusher axle with single wheels, steering hydraulically, with disc brakes. The suspension is pneumatic and features the axle lifting device with automatic operation. The central axle suspension benefits from a traction control system for increased grip which can be used up to a speed of 30 km/hr.

The new solution involves a more efficient management of spaces and auxiliary groups on the chassis, leaving further room for the vehicle body, using components designed by System Truck engineering when appropriate (see page 3).

System Truck's **Technology** system for the hydraulic control of the added axle steering is completely independent from the front steering system and therefore does not affect in any way the original vehicle driving comfort. The pneumatic section of the system guarantees the centring of the wheels of the added axle in the event of a pressure loss or oil overheating (> 90°C) in the hydraulic system.

TECHNICAL NOTES

 Specifications of the **base vehicle** for the conversion to 10x4*6 2+3 central¹:

Model	Renault Trucks C 8x4*4
Suspensions drive axles	Mechanical <i>or</i> Pneumatic 4 air bellows / 8 air bellows
Wheelbase (mm)	5100 / 5300 / 5600
Tyres	315/80 R22.5 or 385/65 R22.5
Other	<ul style="list-style-type: none"> - <u>Factory preparation for the conversion to 10x4 (to be ordered to Renault Trucks)</u> - Engine PTO with spline shaft 650 Nm (Renault Trucks code 22811) / 1000 Nm (Renault Trucks code 22813) - Plastic 275 l or 290 l diesel tank between 1st and 2nd axle (left hand side) <i>or</i> without diesel tank (with distance 1st - 2nd axle 2145 mm) for installation of 380 l System Truck tank - Without second diesel tank - 48 l AdBlue tank - For vehicles with 5100 mm and 5300 mm wheelbase: distance 1st - 2nd axle 2145 mm, muffler between 1st and 2nd axle (right hand side, vertical exhaust)

 Specifications of the **vehicle converted** to 10x4*6 2+3 central:

Model	Renault Trucks C 10x4*6 2+3 central			
Suspensions added central axle	Pneumatic (with automatic lifting device)			
Wheelbase (mm)	5100 / 5300 / 5600			
Tyres added central axle	315/80 R22.5 or 385/65 R22.5			
Tare increase (kg) (including tyres and wheel rims)	~1100			
Maximum allowed weights (kg)	1 st axle	7100 / 7500 / 8000 / 8500 / 9000		
	2 nd axle	7100 / 7500 / 8000 / 8500 / 9000		
	3 rd axle	8000 ²	<i>or</i>	9000 ²
	4 th axle (drive axle)	9500		10500
	5 th axle (drive axle)	9500		10500
Maximum GVW ³ (kg)	48000 (technical) / 32000 (legal) ⁴			

The turning radiuses remain the same with respect to the base (8x4) vehicle with the same wheelbase.

The hydraulic pump of the Technology steering system is connected to the engine power take-off. For vehicle bodies requiring the use of the engine PTO, a **double output adapter** devised by System Truck engineering can be supplied to split the exit and leave the main exit available for the bodybuilder⁵.

This conversion is available for vehicles with both left hand and right hand drive.

The converted vehicle is homologated with second stage European homologation (WVTA) and is accompanied by the certificate of conformity (CoC) for incomplete vehicle⁶, allowing registration in all countries of the European Union.

¹ We recommend that a consultation is requested to our technicians to define the correct configuration of the base vehicle to be ordered to Renault Trucks before placing such order.

² Legal maximum allowed weight. The technical maximum weight is 9000 kg (or, upon request, 10000 kg).

³ Gross Vehicle Weight.

⁴ The legal GVW can vary according to single country regulations, which must always be checked – e.g., it is 36000 kg for the Netherlands.

⁵ System Truck code 30.04.25.0028-GR

⁶ The vehicle must be completed by the bodybuilder in order to be registered.

For vehicles with **5100 mm wheelbase** – prepared with distance 1st – 2nd axle 2145 mm, muffler located on the right hand side of the chassis between 1st and 2nd axle (with vertical exhaust), diesel tank on the left hand side of the chassis between 1st and 2nd axle – two single battery boxes are installed (on the left and right hand side of the chassis) and the AdBlue tank is relocated behind the cabin. It is also possible to replace the original – 270 or 295 l – diesel tank with a new aluminium tank, designed by System Truck, with a capacity of 345 l.

For vehicles with **5300 mm wheelbase** – prepared as above – only one vertical battery box is installed and there are no components relocated behind the cabin. It is possible to replace the original diesel tank with the 380 l System Truck tank.

For vehicles with **5600 mm wheelbase** the conversion is feasible also with the standard distance 1st – 2nd axle of 1995 mm, with the muffler located between the 2nd and 3rd axle, keeping the original Renault Trucks battery box and with no component relocation. In this case it is not possible to replace the original diesel tank with the 380 l System Truck tank.

Alternatively, with the preparation with distance 1st – 2nd axle 2145 mm, the vertical battery box is installed and it is possible to install the 345 l System Truck tank.

For any further information and to ask for custom designed solutions to meet your specific needs, please don't hesitate to contact our Technical Commercial Office: T +39 (0)376 1590804 commerciale@st-truck.com