

SCANIA 10x4 2+3 CONFIGURATION W/ CENTRAL STEERING AXLE

Scania P / G / R / S Series 8x4



DESCRIPTION

Conversion developed by System Truck for the application of a central (pusher) axle with a maximum capacity of 10 t on Scania 4-axle (8x4*4) vehicles from the P, G, R and S series.

The conversion to a 5-axle vehicle (10x4*6) is carried out through the application of a pusher **axle** with single wheels, **steering hydraulically**, with drum brakes. The pneumatic suspension benefits from a traction control system for increased grip which can be used up to a speed of 30 km/hr. Upon request it is possible to evaluate the feasibility of installing the axle lifting device with automatic operation.

The solution involves an efficient management of spaces and auxiliary groups, leaving further room for the vehicle body, through their relocation on the chassis or behind the cabin and the use of components designed by System Truck engineering when appropriate

Also included is the supply of a front **tow bar**¹ to enable the towing of the exceptional vehicle in the event of a breakdown.

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 converted vehicle is homologated with second stage European homologation (**WVTA**) and is accompanied by the certificate of conformity (CoC) for incomplete vehicle², indicating only the technical (not legal) maximum allowed weights. Documentation and proof of testing as an exceptional vehicle is not available and remains the responsibility of the bodybuilder.

Alongside the conversion to 10x4*6, we can make further modifications (extension or reduction) of the **wheelbase** and/or of the **rear overhang** of the vehicle, and/or provide for the **repositioning of components** applied to the chassis (moving them from one side to the other or to the rear overhang) in order to achieve a configuration suitable for the foreseen body, as well as the installation on the vehicle of a **vertical battery box** designed and supplied by System Truck, smaller than the original one.

¹ Included in the vehicle homologation – not homologated as a technical entity.

² The vehicle must be completed by the bodybuilder in order to be registered.

TECHNICAL NOTES

 Specifications of the **base vehicle** for the conversion to 10x4*6 2+3 central³:

Model	Scania P / G / R / S 8x4*4			
Suspensions	Front and rear mechanical			
Wheelbase (mm)	1990 + 3160			
Other	Braking system with pneumatic control (4S/4M or 6S/6M) (not electronic – without EBS)		(Scania option 02452A)	
	Drum brakes		(Scania option 01405A)	
	Without ESP		(Scania option 02439Z)	
	Parking brake mandatory on all axles	1 st - 2 nd axle	24"/24"	
		3 rd - 4 th axle (drive axles)	30"/30"	
	Braking system with emergency circuit type ZF 8099		(Scania option 00238I)	
	Reinforced frame 9.5 + 7 mm or 9.5 + 8 mm not single frame (9.5 mm)		(Scania option F957 or F958)	
	Engine PTO ED120 (for 6-cylinder engines) or ED160 (for V8 engines) ⁴			

The tyre types are all those specified by the manufacturer according to the vehicle configuration.

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

Model	Scania P / G / R / S 10x4*6 2+3 central					
Suspensions added central axle	Pneumatic					
Distance between axles (mm)	1 st - 2 nd axle	1990				
	2 nd - 3 rd axle	1758				
	3 rd - 4 th axle	1402				
	4 th - 5 th axle	1445				
Tare increase (kg) (including tyres and wheel rims)	~950					
Maximum allowed weights (kg)	1 st axle	6700 / 7100 / 7500 / 8000 / 8500 / 9000 / 10000				
	2 nd axle	6700 / 7100 / 7500 / 8000 / 8500 / 9000 / 10000				
	3 rd axle	8000	or	9000	or	10000
	4 th axle (drive axle)	9500		10500		13000
	5 th axle (drive axle)	9500	10500	13000		
GVW ⁵ (max) (kg)	56000					
GCW ⁶ (max) (kg)	80000					

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

The tyres of the added axle are identified each time depending on those mounted on the base vehicle axles and on the capacity of the added axle itself.

Body fitting dimensions must be checked each time with System Truck and with the subsequent bodybuilder according to the actual vehicle configuration.

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

³ We recommend that a consultation is requested to our technicians to define the correct configuration of the base vehicle to be ordered to Scania before placing such order.

⁴ The engine power take-off (PTO) is dedicated to the application of the steering system pump and will therefore not be available for the bodybuilder.

⁵ Gross Vehicle Weight.

⁶ Gross Combination Weight: maximum technically allowable weight of the combined vehicle (rigid + trailer).