

Weights of principal components

Components from top downwards	Rocker arm casing with rocker arms	729 kg	
	Rocker arm casing	470 kg	
	Cylinder head with valves	1208 kg	
	Cylinder head	1016 kg	
	Inlet valve	22 kg	
	Exhaust valve	24 kg	
	Cylinder liner	663 kg	
	Backing ring of cylinder liner	632 kg	
	Top land ring	106 kg	
	Piston with connecting rod big end and piston pin	592 kg	
	Piston without piston pin	353 kg	
	Piston pin	100 kg	
	Connecting rod (conrod shank, connecting rod big end, big-end bearing cap)	655 kg	
	Connecting rod big end	139 kg	
	Connecting rod shank	289 kg	
	Big-end bearing cap	152 kg	
	Main bearing cap	app. 516 kg	
	Main bearing shell (shell half)	10 kg	
	Crankshaft with balance weight	12V 48/60 B 20018 kg 14V 48/60 B 22822 kg 16V 48/60 B 25637 kg 18V 48/60 B 28816 kg	
	Balance weight of the crankshaft	525 kg	
	Crankshaft gear wheel (two parts)	518 kg	
	Torsional vibration damper (crankshaft)	2945 kg	
	Crankcase/tierod	Crankcase	12V 48/60 B app. 53500 kg 14V 48/60 B app. 60700 kg 16V 48/60 B app. 67800 kg 18V 48/60 B app. 83600 kg
		Tierod	114 kg
		Tierod (external bearing)	16 kg
		Cross tierod	14 kg
		Cylinder head bolt	35 kg
		Injection system	Camshaft
	Torsional vibration damper (camshaft)		353 kg
	Fuel injection pump		104 kg
Fuel injection valve	22 kg		

Charge-air and exhaust gas system	TCA 77 Turbocharger	app. 9000 kg	
	TCA 88 Turbocharger	app. 15500 kg	
	Charge air cooler	app. 2550 kg	
	Charge air pipe (section)	211 kg	
	Exhaust pipe	12V 48/60 B	2580 kg
	14V 48/60 B	2964 kg
	16V 48/60 B	3597 kg
.....	18V 48/60 B	3797 kg	
	Exhaust gas pipe (section)	app. 434 kg	
Others	Oil pump for cylinder lubrication	7 kg	
	Block distributor for cylinder lubrication	5 kg	
	Oil pump for valve seat lubrication	20 kg	
	Injection time adjusting device	app. 220 kg	
	Speed governor	app. 160 kg	

Weights of complete engines

12V 48/60 B	181 t
14V 48/60 B	206 t
16V 48/60 B	230 t
18V 48/60 B	256 t