

## Which torque sockets fit the wheels on different cars?



Car manufacturer and Model	Torque socket	Car manufacturer and Model	Torque socket
Alfa Romeo 147, 166	4-19-90 NmC	Renault Megane	4-19-110 NmC
Alfa Romeo 156	4-19-110 NmC	Renault Scenic	4-19-140 NmC
Audi	4-17-120 NmC	Rover 25, 45	4-19-110 NmC
BMW X5	4-19-140 NmC	Rover 75	4-19-125 NmC
BMW others	4-17-110 NmC	Saab	4-17-110 NmC
Chrysler Jeep, PT Cruiser	4-19-140 NmC	Seat Alhambra	4-17-170 NmC
Chrysler Voyager	4-19-120 NmC	Seat Arosa	4-17-110 NmC
Citroën	4-19-90 NmC	Seat Cordoba	4-17-120 NmC
Fiat	4-19-90 NmC	Seat Ibiza	4-17-120 NmC
Ford Galaxy	4-19-170 NmC	Seat Leon	4-17-120 NmC
Ford others	4-19-90 NmC	Seat Toledo	4-17-120 NmC
Honda	4-19-110 NmC	Skoda Felicia	4-17-110 NmC
Hyundai	4-21-110 NmC	Skoda Octavia	4-17-120 NmC
Jaguar S-type	4-19-140 NmC	Skoda Superb	4-17-120 NmC
Jaguar X-type	4-22-100 NmC	Subaru	4-19-90 NmC
Kia	4-21-110 NmC	Suzuki	4-19-90 NmC
Lexus	4-21-110 NmC	Toyota	4-21-110 NmC
Mazda	4-21-110 NmC	Volkswagen Beetle	4-17-120 NmC
Mercedes-Benz A-class	4-17-110 NmC	Volkswagen Bora	4-17-110 NmC
Mercedes-Benz C-class	4-17-110 NmC	Volkswagen Caddy	4-17-110 NmC
Mercedes-Benz E-class	4-17-130 NmC	Volkswagen Golf	4-17-120 NmC
Mercedes-Benz M-class	4-17-150 NmC	Volkswagen Lupo	4-17-110 NmC
Mercedes-Benz CLK	4-17-110 NmC	Volkswagen Passat	4-17-120 NmC
Mercedes-Benz SLK	4-17-110 NmC	Volkswagen Polo	4-17-120 NmC
Mitsubishi	4-21-110 NmC	Volkswagen Sharan	4-19-170 NmC
Nissan	4-21-110 NmC	Volvo S40	4-19-90 NmC
Opel	4-17-110 NmC	Volvo S60	4-19-140 NmC
Peugeot	4-19-90 NmC	Volvo S80	4-19-140 NmC
Porsche	4-19-140 NmC	Volvo V50	4-19-90 NmC
Renault Clio	4-19-90 NmC	Volvo V70	4-19-140 NmC
Renault Kangoo	4-19-90 NmC	Volvo XC70	4-19-140 NmC
Renault Laguna	4-19-110 NmC	Volvo XC90	4-19-140 NmC

(This table includes the latest and most popular models from each manufacturer. Check with the car's Owner's manual.)

### Why should you use Torque sockets?

During car manufacturing well-balanced wheels are fitted using torque controlled, multi-spindle nut runners. The rims are made of relatively thin sheet metal or aluminium. Bolt holes are usually conical to centre the rims. The bolt holes will be deformed and centering lost if the tightening torque is too high. Brake drums can be misaligned. In service and tyre workshops it is virtually impossible to tighten wheel nuts with reasonable precision when standard nut runners are used. A quick and reliable method to attain sufficient accuracy is to use torque sockets and a ½" percussive, pneumatic driven nut runner (220-320 Nm).

### This how the Torque socket works.

A normal nut runner gives a high tightening torque on a butted bolted joint such as wheel nuts. The long and narrow waist on the torque socket means that the force from the nut runner is limited by torsion spring. Once the right tightening torque has been reached, the end of the socket stops turning and in doing so the wheel nut. The drive end continues to turn for each turn the nut runner makes, but the long waist springs back between turns. Accordingly, torque sockets only work together with pneumatic driven, percussive nut runners that give 220-320 Nm and must not be used by hand. The actual tightening torque depends on the condition of the nut runner and the air pressure. Therefore check regularly with a torque wrench.