

'Denovo' fitment .....	155/65SF x 310 radial ply
1100 Special (alloy option) .....	165/70HR x 10

Tyre pressures	lbf/in <sup>2</sup>	bar
<b>Crossply tyres:</b>		
Front .....	24	1.7
Rear (normal load) .....	22	1.6
Rear (fully laden) .....	24	1.7
<b>Radial tyres</b>		
<b>145 x 10:</b>		
Front .....	28	1.9
Rear .....	26	1.8
<b>145/70SR x 12:</b>		
Front .....	28	1.9
Rear .....	28	1.9
<b>155/65SF x 310 Denovo:</b>		
Front .....	26	1.8
Rear .....	24	1.7
<b>165/70HR x 10:</b>		
Front .....	24	1.7
Rear .....	26	1.8

### Hydrostatic suspension

Note: The suspension and steering on vehicles equipped with Hydrostatic suspension is identical to models fitted with rubber cone suspension, with the following exceptions:

#### Front suspension

Type ..... Independent by interconnected Hydrostatic displacers and unequal length upper and lower suspension arms

Trim height (measured from the centre of the front hub to the edge of the wheel arch) ..... 13.5 in (343 mm) ± 0.37 in (9.5 mm)

#### Rear suspension

Type ..... Independent by interconnected Hydrostatic displacers, trailing radius arms and coil hold-down springs

### Torque wrench settings

	lbf ft	Nm
<b>Front hub nut (driveshaft):</b>		
All models except Cooper S and 1275GT .....	60	83
Cooper S and 1275GT .....	150	207
Brake caliper retaining bolts .....	38	52
Tie-rod to subframe .....	22	30
Tie-rod to suspension arm .....	19	26
Upper suspension arm pivot shaft nut .....	53	72
Lower suspension arm pivot bolt nut .....	33	45
Roadwheel nuts .....	45	63
Steering column lower clamp pinch-bolt .....	12	16
Steering column upper clamp .....	14	19
Steering rack U-bolts .....	11	15
Tie-rod balljoint retaining nut .....	22	30
Swivel hub balljoint domed nut .....	75	102
Swivel hub balljoint to suspension arm .....	40	54
Steering wheel nut .....	35	47
Steering rack tie-rod ball housing collar .....	38	52
Rear hub retaining nut .....	60	81
Radius arm pivot shaft nut .....	53	72

## 1 General description

The front and rear suspension assemblies and associated components are mounted on subframes which are bolted to the underside of the bodyshell. The subframes are of welded all-steel construction, the front subframe also providing mounting points for the engine/transmission assembly.

The front suspension on all Mini models is of the independent type, each side consisting of a lower wishbone and single upper link. The lower wishbone is supported in rubber bushes at its inner end, while the inner end of the upper link pivots on two caged needle roller bearings. The outer ends of the two suspension arms are bolted to the tapered shanks of the upper and lower swivel hub balljoints. Fore-and-aft movement of each front suspension assembly is controlled by a tie-bar bolted at one end to the lower wishbone and mounted at the other end, via rubber bushes, to the subframe. The swivel hub contain tapered roller or ball bearings which support the outer ends of the

driveshafts, and also provides mounting points for the drum brake backplate or disc brake calipers. Suspension and steering movement of the swivel hub is catered for by adjustable upper and lower balljoints.

The rear suspension on all models is also independent by means of two trailing radius arms. The forward end of each radius arm contains a needle roller bearing and bronze bush, which allows the arm to pivot on a shaft bolted to the subframe. The brake backplate is bolted to the rear end of each radius arm, as is the stub axle which carries the rear wheel hub and bearings.

While all Mini models share the same suspension component layout, two different types of springing and damping have been employed. All models are now equipped with dry suspension, whereby a rubber cone spring and telescopic shock absorber are fitted to the suspension assembly at each wheel. Early Clubman and 1275GT models were equipped with Hydrostatic suspension, whereby a displacer unit which combines the actions of both spring and shock absorber is fitted to each suspension assembly, in place of the rubber cone. The displacer units are interconnected front-to-rear on each side