

2012 - Mazda6 - Suspension

SUSPENSION TECHNICAL DATA [General (L.H.D.) specs.]

Front wheel alignment (Unloaded)* 1

Item		Specification				
Fuel gauge indication		Empty	1/4	1/2	3/4	Full
Maximum steering angle [Tolerance ±3°]	Inner	38°54′				
	Outer	32°36′				
Total toe-in	(mm {in})	Tire: 2±4 {0.08±0.16}, Rim inner: 1±3 {0.04±0.12}				
	(degree)	0°10′±20′				
Caster angle*2 (Reference value) [Tolerance ±1°]	MZR 2.5	3°37′	3°38′	3°39′	3°41′	3°42′
	MZI 3.7 V6	3°34′	3°35′	3°37′	3°38′	3°40′
Camber angle*2 (Reference value) [Tolerance ±1°]	MZR 2.5	-0°09′	-0°10′	-0°12′	-0°13′	-0°15′
	MZI 3.7 V6	-0°10′	-0°11′		-0°14′	-0°16′
Steering axis inclination (Reference value) [Tolerance ±1°]	MZR 2.5	6°31′	6°32′	6°34′	6°36′	6°37′
	MZI 3.7 V6	6°32′	6°33′			6°38′

*1
Engine coolant and engine oil are at specified level. Spare tire, jack and tools are in designated position.

*2
Difference between left and right must not exceed 1°30′.

Rear wheel alignment (Unloaded)* 1

Item		Specification				
Fuel gauge indication		Empty	1/4	1/2	3/4	Full
Total toe-in	(mm {in})	Tire: 2±4 {0.08±0.16} Rim inner: 1±3 {0.04±0.12}				
	(degree)	0°10'±20'				
Camber angle*2 (Reference value) [Tolerance ±1°]		-0°48'	-0°50'	-0°53'	-0°55'	-0°57'
Thrust angle [Tolerance ±0°48']		0°				

*1

Engine coolant and engine oil are at specified level. Spare tire, jack and tools are in designated position.

*2

Difference between left and right must not exceed 1°30'.

Suspension

Item		Specification	
Front upper arm ball joint rotation torque		1.5 N·m {15 kgf·cm, 13 in·lbf} max.	
Front lower arm starting torque		18 N·m {1.8 kgf·m, 13 ft·lbf} max.	
Front lower arm rotational torque		1.2—2.2 N·m {13—22 kgf·cm, 11—19 in·lbf} max.	
Front stabilizer control link ball joint starting torque		0.2—0.8 N·m {2.1—8.1 kgf·cm, 1.8—7.0 in·lbf}	
Rear stabilizer control link ball joint starting torque		0.2—0.8 N·m {2.1—8.1 kgf·cm, 1.8—7.0 in·lbf}	

Standard tire and wheel

Item			Specification	
Wheel	Size		17 x 7J	18 x 8J
	Inset		(mm {in})	55 {2.17} 60 {2.4}
	Pitch circle diameter		(mm {in})	114.3 {4.50}

	Material	Aluminum alloy		
Tire	Size	P215/55R17 93V P235/45R18 94W		
	Air pressure (kPa {(bar), <psi>})	Front	220 {(2.2), <32>}	
		Rear	220 {(2.2), <32>}	
	Remaining tread	(mm {in})	1.6 {0.063} min.	
Wheel and tire	Lug nut tightening torque	(N·m {kgf·m, ft·lbf})	88—118 {9.0—12, 65—87}	
	Wheel and tire runout	Radial direction	1.5 {0.059} max.	
	(mm {in})	Lateral direction	2.0 {0.078} max.	
	Wheel imbalance	(g {oz})	Adhesive-type*1: 14 {0.49} max. Knock-type*2: 9 {0.3} max.	Adhesive-type*1: 13 {0.46} max. Knock-type*2: 8 {0.28} max.

*1
Total weight exceeds 160 g { 5.65 oz} .

*2
One balance weight: 60 g { 2.12 oz} max. If the total weight exceeds 100 g { 3.53 oz} on one side, rebalance after moving the tire around on the rim. Do not use three or more balance weights.

Spare tire and wheel

Item			Specification
Wheel	Size	16 x 6 1/2J	
	Inset	(mm {in})	55 {2.17}
	Pitch circle diameter	(mm {in})	114.3 {4.50}
	Material	Steel	
	Size	205/60R16 92H	

Tire	Air pressure	Front	240 {(2.4), <35>}
	(kPa {(bar), <psi>})	Rear	
	Remaining tread	(mm {in})	1.6 {0.063} min.
Wheel and tire	Lug nut tightening torque	(N·m {kgf·m, ft·lbf})	88—118 {9.0—12, 65—87}

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Rear wheel alignment (Unloaded)* 1

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Fuel gauge indication		Empty	1/4	1/2	3/4	Full
Total toe-in	(mm {in})	Tire: 2±4 {0.08±0.16} Rim inner: 1±3 {0.04±0.12}				
	(degree)	0°10'±20'				
Camber angle*2 (Reference value) [Tolerance ±1°]		-0°48'	-0°50'	-0°53'	-0°55'	-0°57'
Thrust angle [Tolerance ±0°48']		0°				

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Standard tire and wheel

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	Pitch circle diameter		(mm {in})	114.3 {4.50}

	Material	Aluminum alloy		
Tire	Size	P215/55R17 93V P235/45R18 94W		
	Air pressure (kPa {(bar), <psi>})	Front	220 {(2.2), <32>}	
		Rear	220 {(2.2), <32>}	
	Remaining tread	(mm {in})	1.6 {0.063} min.	
Wheel and tire	Lug nut tightening torque	(N·m {kgf·m, ft·lbf})	88—118 {9.0—12, 65—87}	
	Wheel and tire runout	Radial direction	1.5 {0.059} max.	
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	Pitch circle diameter	(mm {in})	114.3 {4.50}
	Material	Steel	
	Size	205/60R16 92H	

Tire	Air pressure	Front	240 {(2.4), <35>}
	(kPa {(bar), <psi>})	Rear	
	Remaining tread	(mm {in})	1.6 {0.063} min.
Wheel and tire	Lug nut tightening torque	(N·m {kgf·m, ft·lbf})	88—118 {9.0—12, 65—87}