

BMW - Kinematics Diagnosis System

Construction measurement

Date: 13.5.20 16:38

WinAlign Version 15.1.1	Specification Version BMW/Univ 118.0.3	Version Hx421 7.1	Cal Date 16.7.18
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Customer: 20# 2175 Work Order Position:
 Vehicle Key no: Odometer:
 Customer number: [redacted] First Reg.:
 License: Technician:

Vehicle [redacted] BMW : 2 Series - F22 (2013 -) : All Rear Wheel Drive Models : Series : 18" Wheel

Tire Inspection		Front left	Front right	Rear left	Rear right
Tire Air Pressure					
Tire Tread Depth					
Tire Marking	Star	No	No	No	No
Rear Axle		Initial Measurement	Target Data	Final Measurement	
Ride Height	left	602mm	-2mm[602mm]+2mm		
	right	602mm			
Front Axle		Initial Measurement	Target Data	Final Measurement	
Ride Height	left	607mm	-2mm[607mm]+2mm		
	right	607mm			
Rear Axle		Initial Measurement	Target Data	Final Measurement	Target Data
Camber	left	-1°12'	-0°25'[-1°30']+0°25'		
	right	-1°35'			
Toe	left	0°19'	-0°12'[0°18']+0°12'		
	right	-0°06'			
	total	0°13'			
Thrust Angle	total	< 0°13' >	-0°12'[0°00']+0°12'		
Front Axle		Initial Measurement	Target Data	Final Measurement	Target Data
Camber	left	< -2°55' >	-0°30'[-0°20']+0°30'		
	right	< -1°03' >			
	cross	< -1°52' >			
Toe	left	0°03'	-0°12'[0°00']+0°12'		
	right	0°03'			
	cross	0°00'			
	total	0°06'			
Track differential angle	left	-1°32'			
	right	-1°32'			
Max steering lock on curve inside wheel	left		[-40°24']		
	right				
Caster	left	6°12'			
	right	6°51'			
SAI	left	< 11°56' >			
	right	< 7°12' >			
Setback	total	-0°08'	-0°15'[0°00']+0°15'		

<> = Measured value is outside of tolerance

BMW - Kinematics Diagnosis system

Construction measurement

Date: 11.6.20 14:57

WinAlign Version 15.1.1	Specification Version BMW/Unlv 118.0.3	Version Hx421 7.1	Cal Date 16.7.18
Customer:		Work Order Position:	
Vehicle Key no:		Odometer:	
Customer number: [REDACTED]		First Reg.:	
License:		Technician:	

Vehicle BMW : 2 Series M2 - F87 (2015 -) : Series (19" Wheel)

Tire Inspection		Front left	Front right	Rear left	Rear right
Tire Air Pressure					
Tire Tread Depth					
Tire Marking	Star	No	No	No	No
Rear Axle		Initial Measurement		Target Data	
Ride Height	left	613mm			
	right	615mm			
			-2mm[615mm]+2mm		615mm
					615mm
Front Axle		Initial Measurement		Target Data	
Ride Height	left	612mm			
	right	612mm			
			-2mm[612mm]+2mm		612mm
					612mm
Rear Axle		Initial Measurement		Target Data	
Camber	left	< -1°27' >			
	right	< -1°17' >			
			-0°20'[-1°50']+0°20'		-1°49'
					-1°43'
					-0°20'[-1°50']+0°20'
Toe	left	0°20'			
	right	-0°07'			
	total	0°14'			
			-0°12'[0°16']+0°12'		0°09'
					0°06'
					-0°12'[0°16']+0°12'
Thrust Angle	total	< 0°14' >			
			-0°10'[0°00']+0°10'		0°01'
					-0°10'[0°00']+0°10'
Front Axle		Initial Measurement		Target Data	
Camber	left	< -0°58' >			
	right	< -0°37' >			
	cross	-0°21'			
			-0°30'[-1°29']+0°30'		< -0°41' >
					< -0°48' >
					-0°30'[0°00']+0°30'
					-0°30'[0°00']+0°30'
Toe	left	0°17'			
	right	0°17'			
	cross	0°00'			
			-0°12'[0°00']+0°12'		0°07'
					0°04'
					-0°12'[0°00']+0°12'
			-0°12'[0°10']+0°12'		0°11'
					-0°12'[0°10']+0°12'
Track differential angle	left	-1°35'			
	right	-1°33'			
					-1°35'
					-1°33'
Max steering lock on curve inside wheel	left				
	right				
			[-40°00']		
Caster	left	6°29'			
	right	6°58'			
					6°29'
					6°58'
SAI	left	12°20'			
	right	5°39'			
					12°02'
					5°51'
Setback	total	0°02'			
			-0°15'[0°00']+0°15'		0°02'
					-0°15'[0°00']+0°15'

<> = Measured value is outside of tolerance

BMW - Kinematics Diagnosis System

Construction measurement

Date: 23.6.20 13:36

WinAlign Version 15.1.1	Specification Version BMW/Univ 118.0.3	Version Hx421 7.1	Cal Date 16.7.18
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Customer:
Vehicle Key no: **2175 - ALUN # 2**
Customer number: XXXXXXXXXX
License:

Work Order Position:
Odometer:
First Reg.:
Technician:

Vehicle **BMW : 2 Series - F23 (2014 -) : All Rear Wheel Drive Models : Series : 18" Wheel**

Tire Inspection	Front left	Front right	Rear left	Rear right
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Tire Air Pressure

Tire Tread Depth

Tire Marking **Star**

Rear Axle		Initial Measurement	Target Data	Final Measurement
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Ride Height	left	602mm	-2mm[602mm]+2mm	602mm
	right	602mm		602mm

Front Axle		Initial Measurement	Target Data	Final Measurement
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Ride Height	left	607mm	-2mm[607mm]+2mm	607mm
	right	607mm		607mm

Rear Axle		Initial Measurement	Target Data	Final Measurement	Target Data
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Camber	left	-1°30'	-0°25'[-1°30']+0°25'	-1°32'	-0°25'[-1°30']+0°25'
	right	-1°21'		-1°28'	

Toe	left	0°21'	-0°12'[0°18']+0°12'	0°08'	-0°12'[0°18']+0°12'
	right	-0°08'		0°09'	
	total	0°13'		0°18'	

Thrust Angle	total	< 0°15' >	-0°12'[0°00']+0°12'	0°00'	-0°12'[0°00']+0°12'
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Front Axle		Initial Measurement	Target Data	Final Measurement	Target Data
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Camber	left	-0°30'	-0°30'[-0°20']+0°30'	-0°26'	-0°30'[-0°20']+0°30'
	right	-0°35'		-0°34'	
	cross	0°06'		0°08'	

Toe	left	0°21'	-0°12'[0°00']+0°12'	0°08'	-0°12'[0°00']+0°12'
	right	0°21'		0°07'	
	cross	0°00'		0°01'	
	total	< 0°42' >		0°15'	

Track differential angle	left	-1°31'	-1°31'
	right	-1°37'	

Max steering lock on curve inside wheel	left		[-40°24']
	right		

Caster	left	7°41'	7°41'
	right	6°46'	

SAI	left	3°08'	3°04'
	right	10°59'	

Setback	total	0°05'	-0°15'[0°00']+0°15'	0°05'	-0°15'[0°00']+0°15'
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<> = Measured value is outside of tolerance