Driveshaft and axle

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Service data

Service Data

Engine	T/M	Joint type		Max. permissible angle	
		Outer	Inner	Outer	Inner
Gamma 1.6 MPI	MT	BJ#23	CTJ#23	46.5°	23°
	AT	BJ#23	CTJ#22	46.5°	23°
Nu 2.0 MPI	MT	BJ#23	CTJ#23	46.5°	23°
	AT	BJ#23	CTJ#22	46.5°	23°
Gamma 1.6 T-GDI	DCT	BJ#24	CTJ#24	46.5°	23°
	MT	BJ#23	CTJ#23	46.5°	23°
New U 1.6	DCT	BJ#24	CTJ#24	46.5°	23°
	MT	BJ#24	CTJ#24	46.5°	23°

Tightening torque

Tightening torque

Item		N·m	kgf·m	lb·ft	lb·in
Front	Tire wheel hub nuts	107.9 - 127.5	11.0 - 13.0	79.6 - 94.0	
	Driveshaft caulking nut	274.6 - 294.2	28.0 - 30.0	202.5 - 217.0	
	Strut assembly to knuckle	156.9 - 176.5	16.0 - 18.0	115.7 - 130.2	
	Lower arm to knuckle	58.8 - 70.6	6.0 - 7.2	43.4 - 52.1	
	Tie rod end ball joint nut	34.3 - 44.1	3.5 - 4.5	25.3 - 32.5	
	Front caliper to knuckle	78.4 - 98.0	8.0 - 10.0	57.8 - 72.3	
	Front disc fixing screw	4.9 - 5.9	0.5 - 0.6	3.6 - 4.3	43.4 - 52.1
	Wheel speed sensor mount bolt	8.8 - 13.7	0.9 - 1.4	6.5 - 10.1	
Rear - Couple Torsion Beam Axle	Tire wheel hub nuts	107.9 - 127.5	11.0 - 13.0	79.6 - 94.0	
	Rear caliper to torsion beam axle	63.7 - 73.5	6.5 - 7.5	47.0 - 54.0	
	Rear herb bearing to torsion beam axle	49.0 - 58.8	5.0 - 6.0	236.1 - 43.3	
	Rear disc fixing screw	4.9 - 5.9	0.5 - 0.6	3.6 - 4.3	43.4 - 52.1
Rear - Multi Link	Wheel hub nuts	107.9 - 127.5	11.0 - 13.0	79.6 - 94.0	
	Shock absorber to rear lower arm	137.3 - 156.9	14.0 - 16.0	101.3 - 115.7	
	Brake caliper mounting bolt	78.5 - 98.1	8.0 - 10.0	57.9 - 72.3	
	Disc fixing screw	4.9 - 5.9	0.5 - 0.6	3.6 - 4.3	43.4 - 52.1
	Hub bearing mounting bolt	88.3 - 107.9	9.0 - 11.0	65.1 - 79.6	
	Upper arm to rear carrier	137.3 - 156.9	14.0 - 16.0	101.3 - 115.7	
	Lower arm to rear carrier	137.3 - 156.9	14.0 - 16.0	101.3 - 115.7	
	Assist arm to rear carrier	137.3 - 156.9	14.0 - 16.0	101.3 - 115.7	

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	Trailing arm to body	98.1 - 117.7	10.0 - 12.0	72.3 - 86.8	
	Trailing arm to rear carrier	137.3 - 156.9	14.0 - 16.0	101.3 - 115.7	

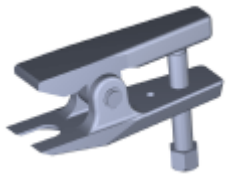
Lubricant

Lubricants

Engine	Joint	Lubricants	Quantity
Gamma 1.6 MPI	BJ	RBA	90 - 100 g
	CTJ	CW09-VX21	125 - 135 g
Nu 2.0 MPI	BJ	RBA	90 - 100 g
	CTJ	CW09-VX21	125 - 135 g
Gamma 1.6 T-GDI	BJ	RBA	90 - 100 g
	CTJ	CW-13TJ	125 - 135 g
New U 1.6	BJ	RBA	100 - 110 g
	CTJ	CW09-VX21	130 - 140 g

Special service tools

Special Service Tools

Tool Name / Number	Illustration	Description
Ball joint puller 09568-1S100		Use for removal of ball joint
Band installer 09495-3K000		Used for installing ear type boot band

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Band clamp pliers 09495-39100		Used for installing hook type boot band
CV joint puller 09517-4E000		Used for removing CV joint

Troubleshooting

Troubleshooting

Symptom	Expected cause	Countermeasure
Leaning phenomenon of vehicle	Defect on front suspension and steering.	Adjust or replace
	Wheel bearing burning	Replace
Vibration	Over abrasion, separation, damaged or bended on drive shaft	Replace
	Wheel bearing separation	Replace
shimmy	Inappropriated wheel balance	Adjust or replace
	Combination of front suspension and steering	Adjust or replace
Noise	Over worned out, damaged or bended	Replace
	Noise on connecting part of drive shaft and hub while driving straight, back or curve (Clicking or Creaking noise)	Adjust hub nut fastening or replace inner washer
	Noise from inner side of shaft while driving curve (Repeated tapping noise)	Replace
	Friction noise on drive shaft boots (Sticky noise)	Clean and apply fluorine lubricant
	Damaged or burnt of drive shaft damper (Booming noise)	Replace damper kit
	Hub nut has got loosen	Adjust
	Trouble on the front suspension and steering	Adjust or replace
	Disk fixing bolt has got loosen	Adjust
	Noise on wheel bearing while driving (Whir noise)	Replace
	Wheel bearing has separation, contacted surface of flange burnt	Replace

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Leakage	Leakage of grease on drive shaft boots (partial parts replacement when inboard side boots has leakage)	Replace
Rust	corrosion on nonpainting area (Not a problem for functioning)	Explain to customer it is normal
ABS warning lamp illuminated	Loosen assembly on wheel bearing sensor and sensor cable	Adjust
	Foreign substance on wheel bearing sensor assembly area (connector)	Cleaning
	Communication trouble (KDS inspection and trouble code deletion)	Adjust

- Front Hub / Knuckle
- Driveshaft Assembly
    1. Front Driveshaft
    2. TJ Joint
    3. Dynamic Damper
    4. BJ Boot
    5. Rear Hub - Carrier

Clutch Engagement Fork and Engagement Bearing

Components and components location Components 1. Clutch housing 2. Engagement bearing 2 (Even) 3. Engagement bearing 1 (Odd) 4. Engagement bearing sleeve ...

Front Hub / Knuckle

Components and components location Components 1. Front brake disc 2. Front hub bearing 3. Dust cover 4. Knuckle Repair procedures Remova ...

Other information:

Kia Forte 2019-2023 (BD) Owners Manual: User Settings Mode (For type B, C cluster)

On this mode, you can change setting of the doors, lamps, and so on. WARNING Do not adjust the User Setting while driving.You may lose your steering control and cause severe personal injury or accidents. Shift to P to edit settings/Engage parking brake to edit settings A warning messag ...

Kia Forte 2019-2023 (BD) Owners Manual: Washer fluid

Checking the washer fluid level The reservoir is translucent so that you can check the level with a quick visual inspection. Check the fluid level in the washer fluid reservoir and add fluid if necessary. In warm climates, plain water may be used if washer fluid is not available; h ...

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