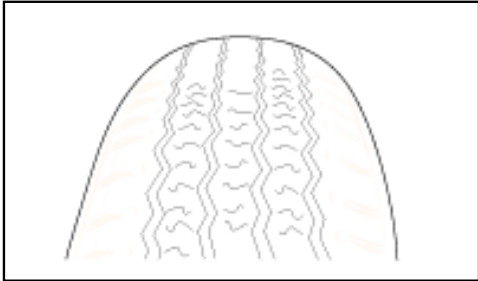
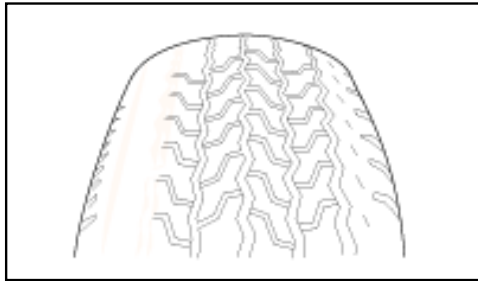
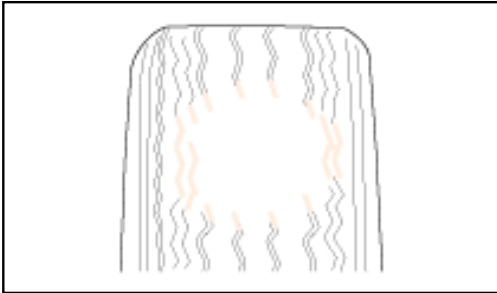
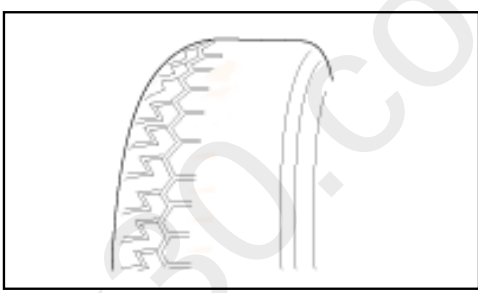
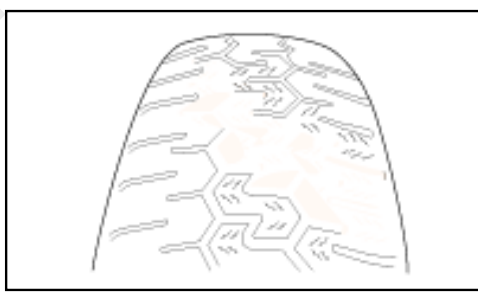


Troubleshooting

Symptom	Possible cause	Remedy
Hard steering	Improper front wheel alignment	Correct
	Excessive turning resistance of lower arm ball joint	Replace
	Low tire pressure	Adjust
	No power assist	Repair and replace
Poor return of steering wheel to center	Improper front wheel alignment	Correct
Poor or rough ride	Improper front wheel alignment	Correct
	Malfunctioning shock absorber	Repair or replace
	Broken or worn stabilizer	Replace
	Broken or worn coil spring	Replace
	Worn lower arm bushing	Replace the lower arm assembly
Abnormal tire wear	Improper front wheel alignment	Correct
	Improper tire pressure	Adjust
	Malfunctioning shock absorber	Replace
Wandering	Improper front wheel alignment	Correct
	Poor turning resistance of lower arm ball joint	Repair
	Loose or worn lower arm bushing	Retighten or replace
Vehicle pulls to one side	Improper front wheel alignment	Correct
	Excessive turning resistance of lower arm ball joint	Replace
	Broken or worn coil spring	Replace
	Bent lower arm	Repair
Steering wheel shimmy	Improper front wheel alignment	Correct
	Poor turning resistance of lower arm ball joint	Replace
	Broken or worn stabilizer	Replace
	Worn lower arm bushing	Replace
	Malfunctioning shock absorber	Replace
	Broken or worn coil spring	Replace

Wheel and tire diagnosis		
Rapid wear at the center	Rapid wear at both shoulders	Wear at one shoulder
		
•Center-tread down to fabric due to excessive over inflated tires •Lack of rotation •Excessive toe on drive wheels •Heavy acceleration on drive	•Under-inflated tires •Worn suspension components •Excessive cornering speeds •Lack of rotation	•Toe adjustment out of specification •Camber out of specification •Damaged strut •Damaged lower arm
Partial wear	Feathered edge	Wear pattern
		
•Caused by irregular burrs on brake drums	•Toe adjustment out of specification •Damaged or worn tie rods •Damaged knuckle	•Excessive toe on non-drive wheels •Lack of rotation

Specifications

Front Suspension

Item		Specification
Suspension type		MacPherson Strut
Shock absorber	Type	HPD(High Performance Damper)

Rear Suspension

Item		Specification
Suspension type		Multi link
Shock absorber	Type	HPD(High Performance Damper)

Wheel & Tire

Item		Specification	
		Front	Rear
Aluminum	17 inch	7.0J x 17	
	18 inch	7.5J x 18	
	19 inch	7.5J x 19	
Tire	17 inch	235/65 R17	
	18 inch	235/60 R18	
	19 inch	235/55 R19	
	Spare tire	TMK (Tire Mobility Kit)	
Tire pressure kPa (psi)	235/65 R17	240 (35)	
	235/60 R18		
	235/55 R19		
PCD		Ø114.3	

Wheel Alignment

Item		Specification	
		Front	Rear
	Individual	0.05° ± 0.1°	0.1° ± 0.1°

Toe-in	Total	$0.1^{\circ} \pm 0.2^{\circ}$	$0.2^{\circ} \pm 0.2^{\circ}$
Camber angle		$-0.5^{\circ} \pm 0.6^{\circ}$	$-1.0^{\circ} \pm 0.6^{\circ}$
Caster angle		$4.85^{\circ} \pm 0.6^{\circ}$	-
King-pin angle		$14.1^{\circ} \pm 0.5^{\circ}$	-
Ride height		$441 \pm 10\text{mm}$	$441 \pm 10\text{mm}$
		$(17.3622 \pm 0.3937 \text{ in.})$	$(17.3622 \pm 0.3937 \text{ in.})$

Tightening Torque

Front Suspension

Item	Tightening torque (kgf.m)		
	N.m	kgf.m	lb-ft
Tire wheel Hub nuts	107.9 - 125.5	11.0 - 13.0	79.6 - 94.0
Stabilizer link to strut assembly	98.1 - 117.7	10.0 - 12.0	72.3 - 86.8
Stabilizer bar to stabilizer link	98.1 - 117.7	10.0 - 12.0	72.3 - 86.8
Stabilizer bar to sub frame	49.0 - 63.7	5.0 - 6.5	36.2 - 47.0
Lower arm to knuckle	98.1 - 117.7	10.0 - 12.0	72.3 - 86.8
Lower arm to sub frame (Front)	156.9 - 176.5	16.0 - 18.0	115.7 - 130.2
Upper roll rod bracket bolt	(A) 107.9 - 127.5	11.0 - 13.0	79.6 - 94.0
	(B) 49.0 - 63.7	5.0 - 6.5	36.2 - 47.0
Lower arm to sub frame (Rear)	156.9 - 176.5	16.0 - 18.0	115.7 - 130.2
Strut assembly to knuckle	156.9 - 176.5	16.0 - 18.0	115.7 - 130.2
Strut assembly lock nut	53.9 - 73.5	5.5 - 7.5	39.8 - 54.2
Tie rod end nut	98.1 - 117.7	10.0 - 12.0	72.3 - 86.8
Steering gear box to sub frame	107.9 - 127.5	11.0 - 13.0	79.6 - 94.0

Sub frame mounting bolts & nuts	176.5 - 196.1	18.0 - 20.0	130.2 - 144.7
Sub frame stay mounting bolts	39.2 - 53.9	4.0 - 5.5	28.9 - 39.8
Sub frame stay mounting nuts	39.2 - 53.9	4.0 - 5.5	28.9 - 39.8
Universal joint to pinion of steering gear	53.9 - 58.8	5.5 - 6.0	53.9 - 58.8

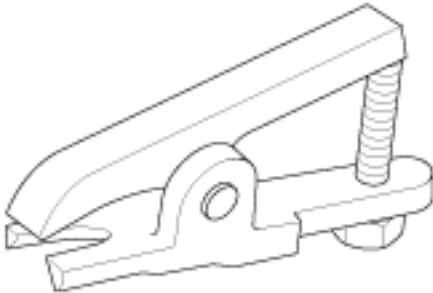
Rear Suspension

Item	Tightening torque (kgf.m)		
	N.m	kgf.m	lb-ft
Tire wheel Hub nuts	107.9 - 125.5	11.0 - 13.0	79.6 - 94.0
Trailing arm to body	98.1 - 117.7	10.0 -12.0	72.3 - 86.8
Trailing arm to knuckle	98.1 - 117.7	10.0 -12.0	72.3 - 86.8
Lower arm to sub frame	137.3 - 156.9	14.0 -16.0	101.3 - 115.7
Lower arm to knuckle	137.3 - 156.9	14.0 -16.0	101.3 - 115.7
Assist arm to sub frame	137.3 - 156.9	14.0 -16.0	101.3 - 115.7
Stabilizer bar to stabilizer link	98.1 - 117.7	10.0 -12.0	72.3 - 86.8
Stabilizer bar to sub frame	53.9 - 63.7	5.5 - 6.5	39.8 - 47.0
Sub frame mounting bolt & nut	156.9 - 176.5	16.0 - 18.0	115.7 - 130.2
Upper arm to sub frame	137.3 - 156.9	14.0 -16.0	101.3 - 115.7
Shock absorber to frame	49.0 - 63.7	5.0 - 6.5	36.2 - 47.0
Shock absorber to lower arm	137.3 - 156.9	14.0 -16.0	101.3 - 115.7
Upper arm to knuckle	137.3 - 156.9	14.0 -16.0	101.3 - 115.7

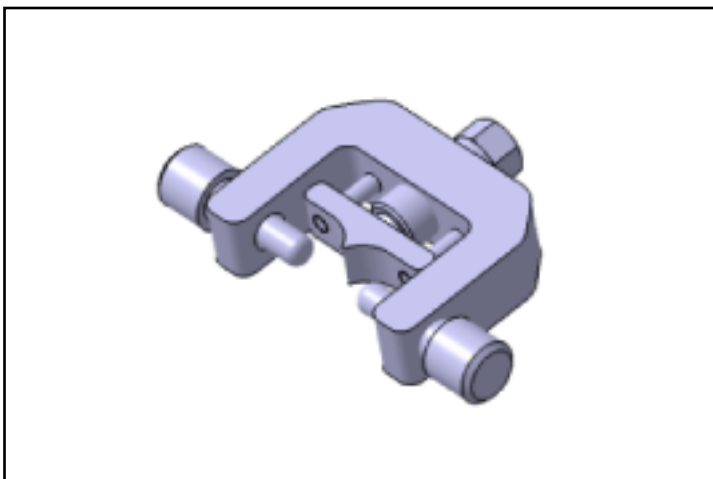
Assist arm to knuckle	156.9 - 176.5	16.0 - 18.0	115.7 - 130.2
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Special Service
Tools

Tool (Number and Name)	Illustration	Use
0K546-F6100 Shock absorber lock nut removal tool		Used for remove the front shock absorber lock nut
09546-3X100 Shock absorber lock nut removal tool		Used for remove the rear shock absorber lock nut
09568-1S100 Ball joint remover		Removal of the tie rod end ball joint.

09568-4R100
Lower arm ball joint
remover



Removal of the lower arm
ball joint.

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