

Troubleshooting

Symptom	Probable cause	Remedy
Play in steering	Loose yoke plug	Retighten
	Loose steering gear mounting bolts	Retighten
	Loose or worn tie rod end	Retighten or replace as necessary
Steering wheel does not return properly	Excessive turning resistance of tie rod end	Replace
	Yoke plug excessively tight	Adjust
	Tie rod and/or ball joint cannot turn smoothly	Replace
	Loose mounting of gear box mounting bracket Worn steering shaft joint and/or	Retighten
	Worn steering shaft joint and / or body grommet	Correct or replace
	Distorted rack	Replace
	Damaged pinion bearing	Replace
	Twisted or damaged hoses	Reposition or replace
	Damaged oil pressure control valve	Replace
	Damaged oil pump input shaft bearing	Replace
Rattling or chucking noise in the rack and pinion	Interference with hoses from vehicle body	Reposition
	Loose gear box bracket	Retighten
	Loose tie rod end and / or ball joint	Retighten
	Worn tie rod and / or ball joint	Replace

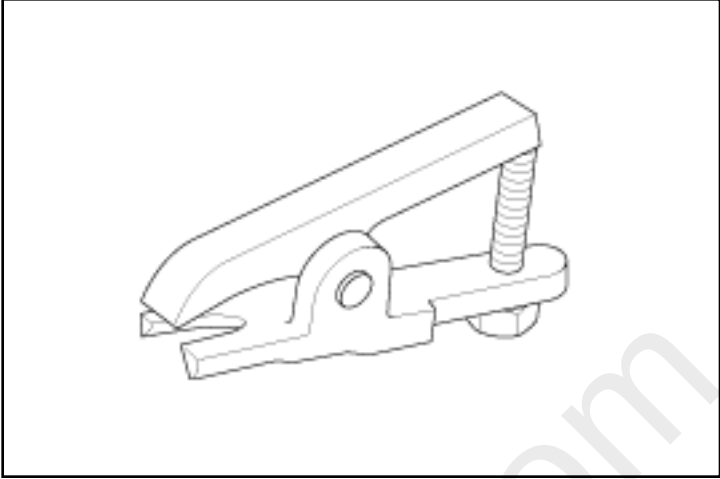
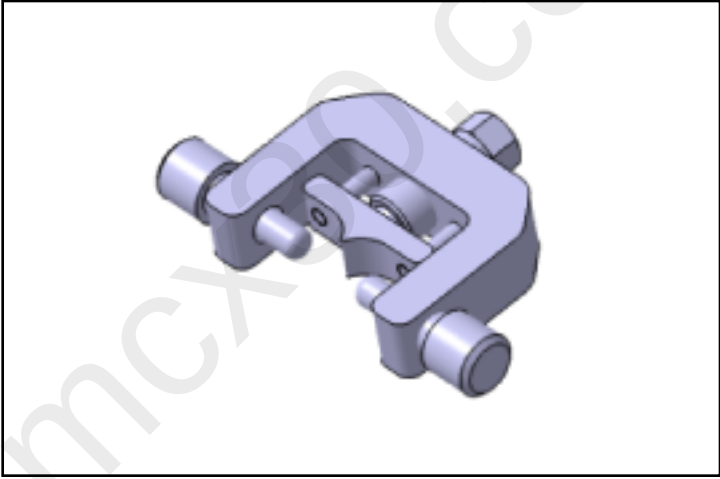
Specifications

Item		Specification
Type		Electric Power Steering System
Steering gear	Type	Rack & Pinion
	Rack stroke	146 ± 1 mm (5.75 ± 0.04 in)
Steering angle (Max.)	Inner	35.1° (+0.5°/-1.5°)
	Outer	30.3°

Tightening
torque

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
Steering wheel lock nut	44.1 - 49.0	4.5 - 5.0	32.5 - 36.2
Steering column assembly to Universal joint	53.9 - 58.8	5.5 - 6.0	39.8 - 43.4
Steering column mounting bolts	53.9 - 58.8	5.5 - 6.0	39.8 - 43.4
Steering column mounting nuts	24.5 - 29.4	2.5 - 3.0	18.1 - 21.7
Tie rod end castle nut	98.1 - 117.7	10.0 - 12.0	72.3 - 86.8
Steering gear box to sub freame	107.9 - 127.5	11.0 - 13.0	79.6 - 94.0
Lower arm to knuckle	98.1 - 117.7	10.0 -12.0	72.3 - 86.8

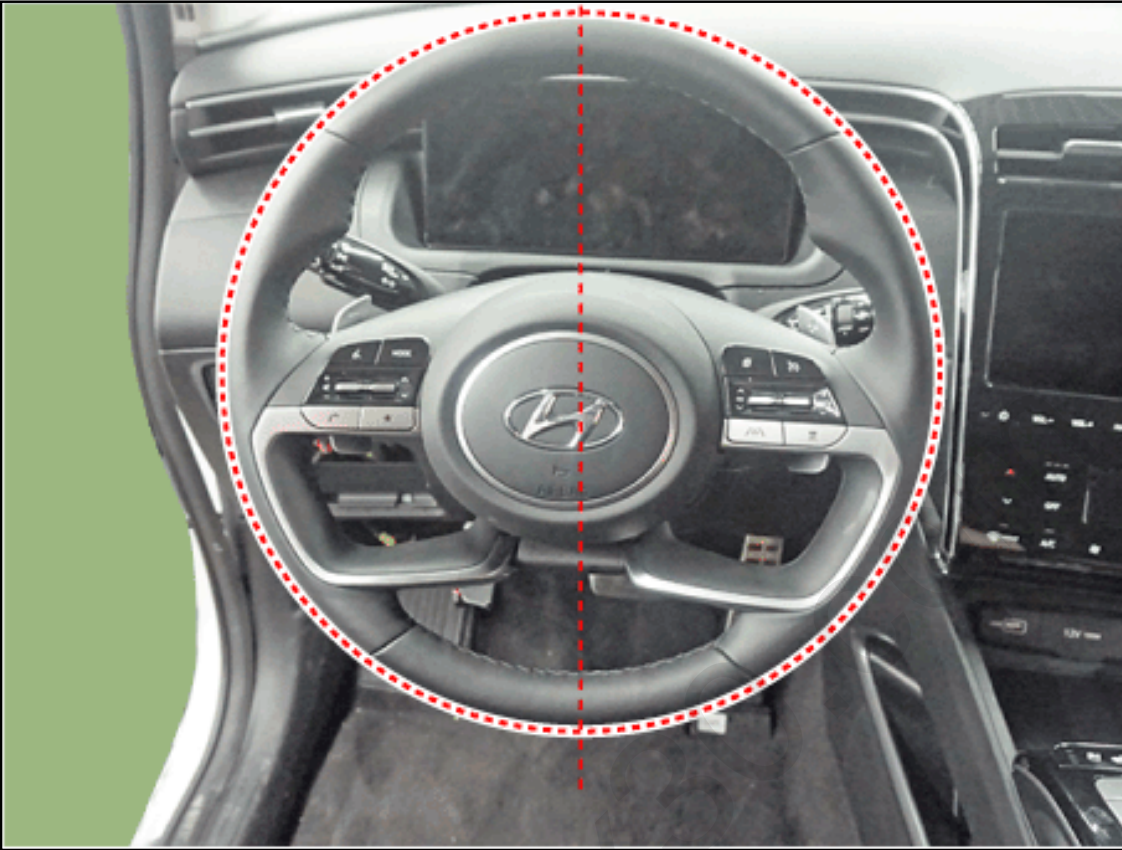
Special Service
Tools

Tool (Number and Name)	Illustration	Use
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.

Service Adjustment
Procedure

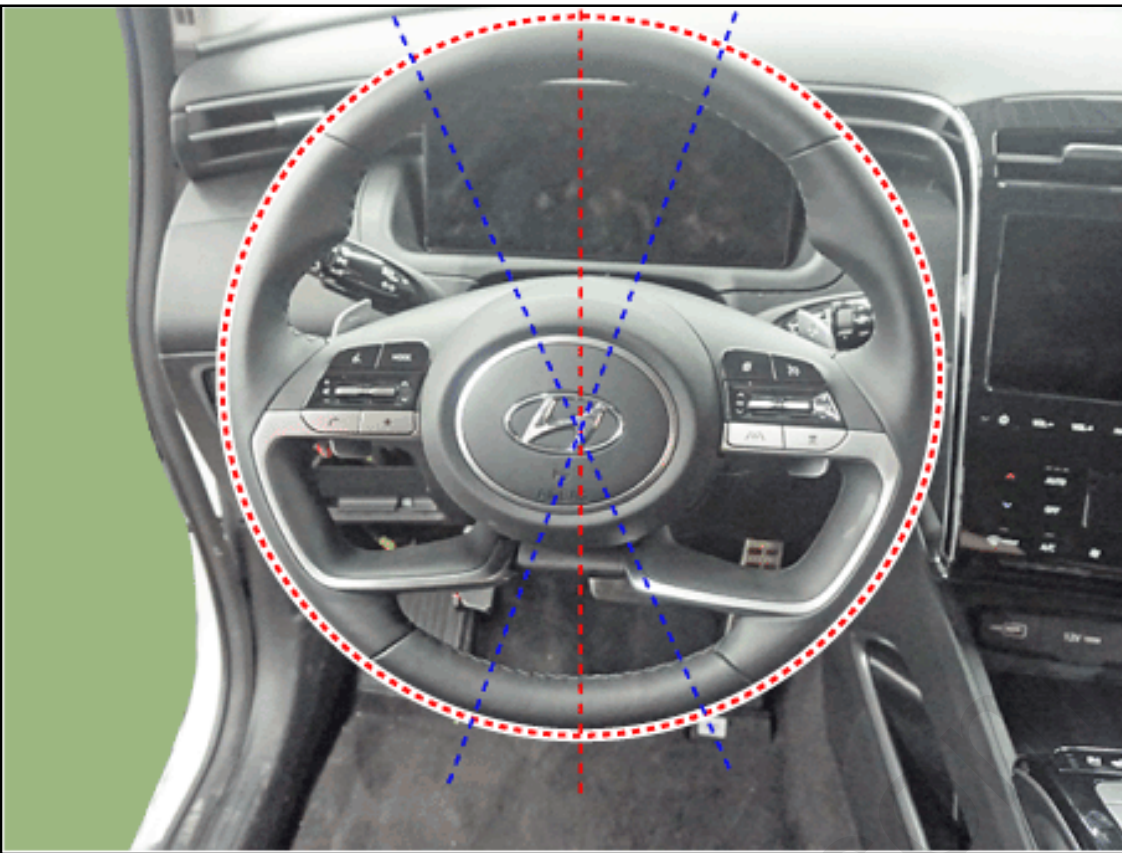
Steering Wheel Play Inspection

1. Turn the steering wheel so that the front wheels can face straight ahead.
2. Mark the center of the steering wheel.



3. Measure the distance that the steering wheel can be turned without moving the front wheels.

Standard value : 0 - 30mm (1.1811in.) or less

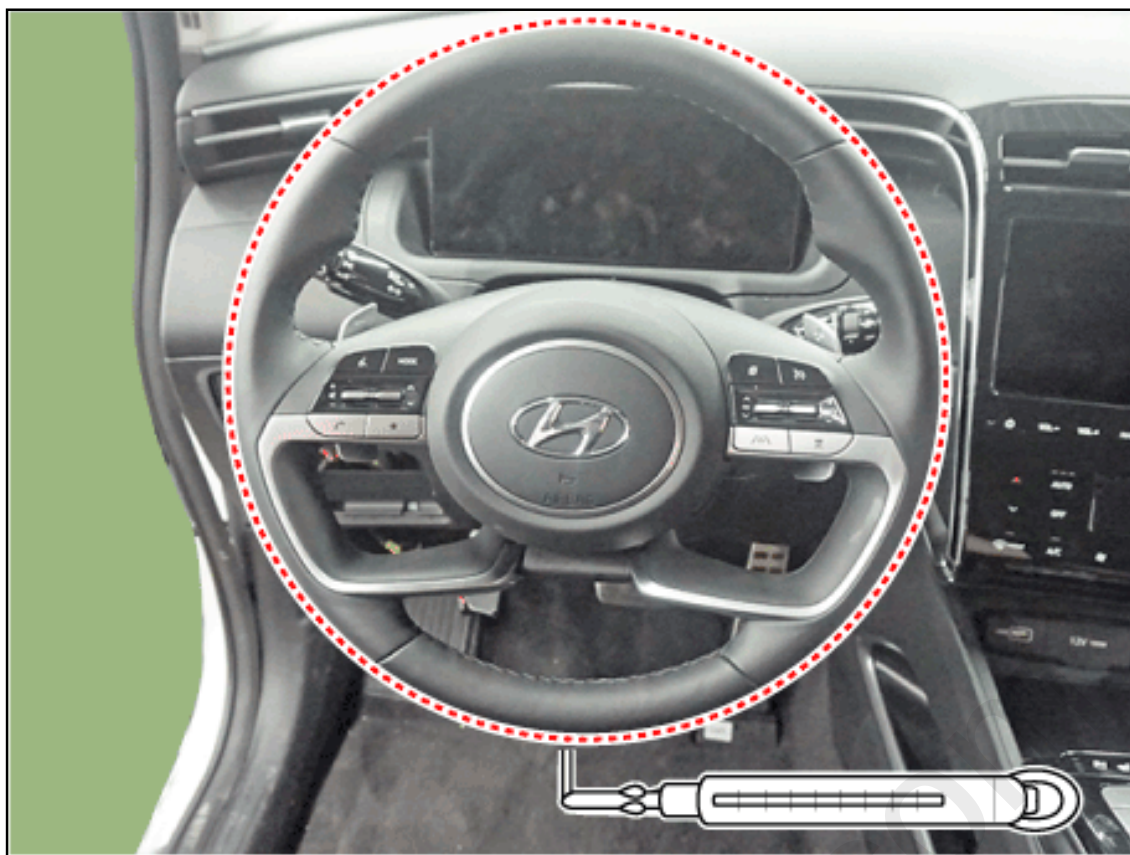


4. If the play exceeds standard value, inspect the steering column, shaft, and linkages.

Checking Stationary Steering Effort

5. Position the vehicle on a level surface and place the steering wheel in the straight ahead position.
6. Attach a spring scale to the steering wheel. With the idle RPM, pull the scale and read it as soon as the tires begin to turn.

Standard value : 3.0kgf



mcx30.c