# I. REAR SUSPENSION SYSTEM

### **Cautions**

- The final tightening must be carried out under tire grounding and no-load conditions when installing the suspension or rubber bushing
  - It is necessary to check the wheel alignment after repairing the suspension components.
  - The oil will shorten the service life of rubber bushing. It is necessary to wipe the spilled oil.
- The no-load condition means that the fuel, engine coolant and lubricating agent have been filled normally and the spare tires, jacks, tools and foot pads are placed in the designated position.
- The lock nut is not reusable. Always use the new bolt during installation. Please do not wipe the anti-rust oil on the lock nut before tightening up the lock nut during replacement.

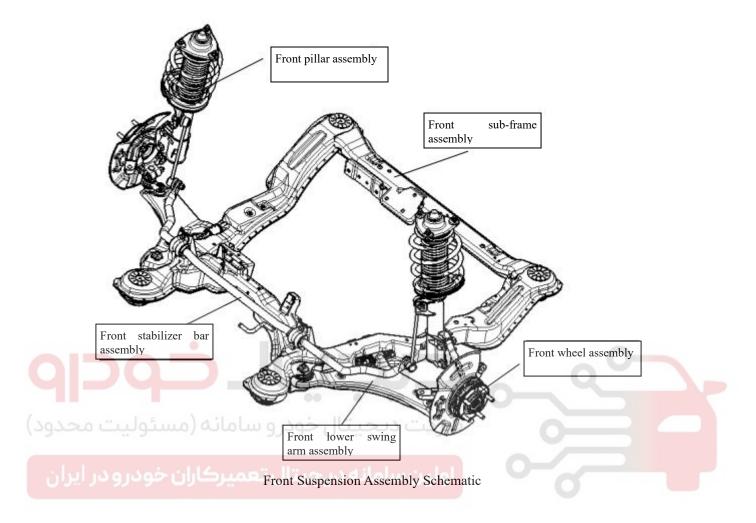
### **Preparation**

The special tools used as follows:

# Special Tool List

N	o. Tool	Outside View	No.	Instructions
ت م 1 در ای	Steerin g Drive Rod Die		JAC-T1D003	Remove the connecting ball
2	Shock absorbe r spring remove r		JAC-T1D004	Remove and install the damper spring

# **Front Suspension System**



### **Front Suspension Assembly**

### 1. Vehicle inspection

Confirm that whether the fixing condition (clearance) and wear condition of each component are normal or not.

- 1) Check the steering tie rod clearance:
- ① Stop the vehicle after the vehicle tires are in straight state, and the steering wheel is in the middle position.
  - ② Place the crowbar(or similar tools) between the tie rod and steering knuckle.
  - ③ Pry the tie rod up and down and check the clearance.

### **Attention:**

- Please do not damage the dirt-proof boot of ball head.
- Please do not use excessive force to damage the installation position.
- 2)Shock Absorber Inspection.

©The copy right is owned by Jianghuai Automobile Co., Ltd. Unauthorized copying is prohibited 2/119

Check if the installation part is loosened, if there is oil leakage, damage or breakage in the shock absorber body.

# 2. Front Wheel Alignment Inspection:

1)Instructions

Check the wheel alignment under no-load conditions.

2) Pre-Check

Check the following item, if there is problem, please adjust to proper state:

- ① Check the tire pressure for standard value, check the tire for wear;
- 2 Check if the tire has runout;
- 3 Check if there is clearance in the wheel bearing shaft end;
- 4 Check if there is clearance in the tie rod shaft end;
- ⑤ Check if there is looseness and deformation in the each fixed point of axle and suspension;
- ⑥ Check if there is crack, deformation and other damage in each suspension component, steering knuckle, shock absorber and tie rod;
  - 7 Check if the height of vehicle body is correct.
  - 3. Inspection of Front Wheel Toe-In

# **Attention:**

- The wheel alignment inspection must be conducted in a horizontal place and in no-load condition.
- Front Wheel Toe-In Value:6°±3′

If the front wheel toe-in value is not within the standard range,

- 1) Check the setting of toe-in value on the four-wheel aligner.
- 2) Straighten and fix the steering wheel.
- 3) Loosen the lock nut of tie rod end:
- 4) Turn the tie rod clockwise or counterclockwise to adjust the toe value to the standard value.
- ■Note: When adjusting the tie rod, rotate slightly, to prevent excessive rotation caused to large data deviation.
  - 5) Lock the lock nut of tie rod end.

# Inspection of Camber Angle, Kingpin Caster Angle and Kingpin Inclination Angle:

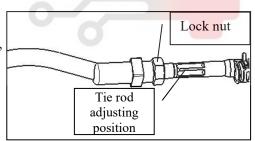
Front-Wheel Camber: 23'±30'

Kingpin Caster Angle: 3.5°±30′

Kingpin Inclination Angle: 14°±30′

■Attention:

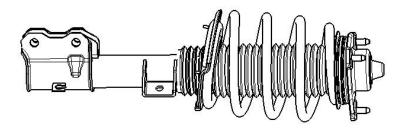
1) The camber angle,kingpin caster angle and kingpin inclination angle have been set at the factory,please do not make any adjustment.



©The copy right is owned by Jianghuai Automobile Co., Ltd. Unauthorized copying is prohibited 3/119

2) If the camber, kingpin angle and kingpin inclination are not within the standard range, check whether the front suspension, knuckle, shock absorber and tie rod are worn or damaged. If any, please replace the suspicious parts.

# 1. Front column assembly



Front column assembly component diagram

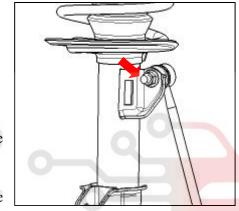
Removal and Installation:

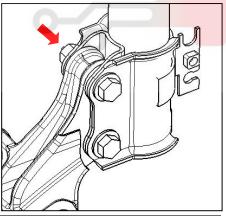
### 1) Disassemble

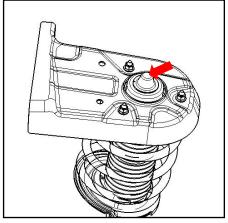
- (1) Remove the front wheel tire.
- ② Disconnect the connector of wheel speed sensor.
- ■Note: Please do not pull the wire harness of wheel speed sensor.
- 3 Remove the brake hose card, and disconnect the brake hose.
- 4 Remove the stabilizer bar pull rod fixing nuts, and the nuts can't be reused.
  - Note: Tightening Torque: 100N·m~120N·m
  - ⑤ Remove the fixing bolt and nut of shock absorber and steering knuckle.
    - ■Tighten torque: 160N·m~180N·m
  - ® Remove the self-locking nut of shock absorber and vehicle body
    - Tightening torque: 40N·m~50N·m
    - 7 Take out the shock absorber assembly.
    - 2) installation

Install in the reverse order of removal.

- ■Attention:
- Please do not use the damaged parts.
- Conduct the final tightening of each component removed from the disassembled shock absorber under no-load condition.



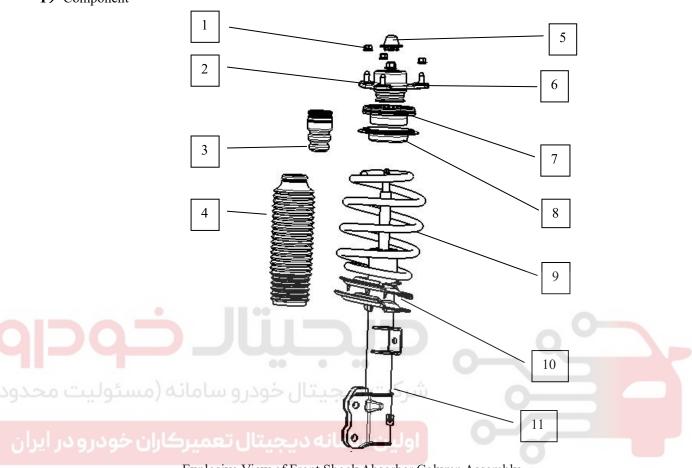




■ Check the wheel alignment

# Disassembly and Assembly

1) Component



Explosive View of Front Shock Absorber Column Assembly

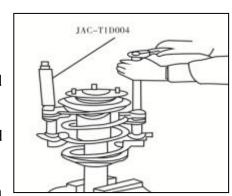
1-Fixing nut 2-Upper support assemble 3-Bumper block 4-Dust cover 5-Sealing cover 6-Self-lock fixing nut 7-Surface bearing 8-Spring upper bracket 9-Front sprial spring 10-Spring lower cushion 11-Front shock absorber body

- 2) Disassembly
- a) Use spring compressor to compress spiral spring until it totally separates;

**Note:** Do not damage the shock absorber piston push rod when removing the shock absorber parts.

**Note:** • Make sure that the compressor has been installed in the right place and then start compressing the spiral spring.

■Never use the pneumatic power tools when tightening up the spring compressor bolts.



b) Fix the terminal of the damper piston bar and disassemble the lock nut of the piston push rod.

©The copy right is owned by Jianghuai Automobile Co., Ltd. Unauthorized copying is prohibited 5/119

- c) Fastening torque: 60N·m~80N·m
- d) Make sure the spiral spiral is loose after compressing.
- e) Remove spiral spring upper bracket, spiral spring upper vibration insulation pad, dust guard and dumper block.
  - f) Disassemble the spiral spring with compressor, then loosen the compressor slowly.
  - g) Disassemble spring lower vibration insulation pad and remove the shock absorber body.

# 3)Inspection After Disassembly

a) Shock absorber

**Attention:** ■ Check the shock absorber for deformation,crack and damage. If any, please replace.

- Check the piston push rod for damage, wear and deformation. If any, please replace.
  - Check the piston for oil leakage. If any, please replace.
- b) Spring vibration pad, bumper block and dust cover: check if there is crack or worn. If any, please replace.
  - c) Spiral spring: Check the spiral spring for crack, wear and damage. If any, please replace.
  - d) Spiral spring upper bracket: Check for crack, wear and damage. If any, please replace.
  - e) Surface bearing: Check for crack, wear and damage. If any, please replace.
  - f) Upper bracket assembly: Check for crack, wear and damage. If any, please replace.

# اولین سامانه دیجیتال تعمیرکاران <4)Assembly

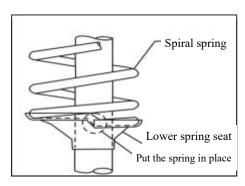
Install in the reverse order of removal.

#### Attention:

- Do not damage the piston push rod when mounting parts to the shock absorber.
- Put the big diameter end of sprial spring downward, and aim at the spring lower bracket.
- Make sure that the compressor has been installed on the spiral spring and then start

compressing the spiral spring.

- When loosening the compressor, check whether the installation position of spiral spring is correct or not.
  - Check whether the assembly mark is correct or not.



### II. Lower Swing Arm

#### **Removal and Installation:**

### 1) Disassemble

- 1) Lift the vehicle and remove the wheel tires.
- ② Pull out the split pin and remove the fixing nuts of the lower swing arm ball pin and the lower swing arm.
- ③ Remove fixing bolts between the lower swing arm and sub frame rear connecting point.
- 4 Remove fixing bolts (2) between the lower swing arm and the sub frame front connecting point.
  - ⑤ Take down the lower suspension arm assembly

# 2)Inspection After Removal(visual inspection)

- 1 Check if the bushing is worn or damaged, replace if it is.
- 2 Check the lower arm deformation or other damage, if any, please replace.
- 3 Check the hem arm ball dust jacket for cracks, if any, please replace.
  - 4 Check all the fixing bolts and nuts for damage, if any, please replace.

### 3) Installation

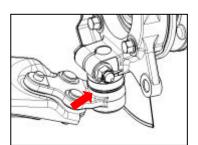
Install in the reverse order of removal.

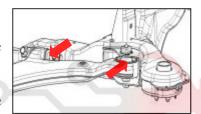
Tightening Torque of each mounting point

- 1 Ball pin lock nut: 100 N·m~120N·m
- ② When installing, keep the split direction of ball pin left and right;
- ③ Front fixing bolt of the lower swing arm and subframe: 120 N⋅m~140N⋅m
- ④ Front fixing bolt of the lower swing arm and subframe: 130 N·m~150N·m

#### **Attention:**

- Please do not use the damaged parts.
- Pre-tighten the bolt of the lower swing arm front shaft pin core shaft and the sub-frame, and avoid the distortion of rubber sleeve.
- Conduct the final tightening of each component removed from the disassembled lower suspension arm under no-load condition.
  - Check the wheel alignment.





©The copy right is owned by Jianghuai Automobile Co., Ltd. Unauthorized copying is prohibited 7/119

#### III. Front transverse stabilizer bar

#### **Removal and Installation:**

# 1) Disassemble

1 Remove the stabilizer bar pull rod

Use the wrench fix the stabilizer pull rod ball head to avoid turning, the self-lock nut can not be repeated using.

- ② Remove the left and right stabilizer bar mounting bolts and remove the mounting bracket and bushing.
  - 3 Remove the stabilizer bar assembly

# 2)Inspection After Removal

Check if the stabilizer bar, stabilizer bar pull rod assembly, stabilizer bar fastening bracket and stabilizer bar bushings have deformation, wear or other damages.

If any, please replace it.

### 3) Installation

■ Install in the reverse order of removal.

Bolt tightening torque table during installation:

Tightening torque of the stabilizer bar pull rod locking nut: 100

 $N \cdot m \sim 120 N \cdot m$ ;

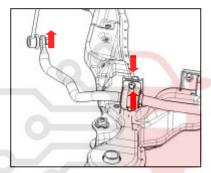
Tightening torque of the stabilizer bar installation bracket locking

nut: 45 N·m~55N·m;

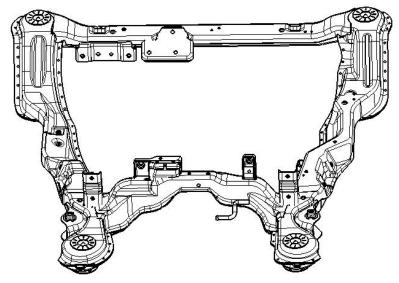
■ Fix the stay bolt of anti-roll bar tie rod first to avoid rotation when the lock nut is locked.

### Note:

- Please do not use the non-reusable parts.
- Pay attention to the installation direction when installing the stabilizer bushing and stabilizer holder.
- Conduct the final tightening of each component removed from the disassembled anti-roll bar under no-load condition.



### **IV. Front Subframe Component:**



Component Diagram of Front Subframe

### Removal and Installation:

- 1) Disassemble
- 1) Lift the vehicle and remove the tires.
- 2 Remove the steering column assembly and steering shaft joint bolt.
- 3 Remove the fixed bolt between the rear suspension of engine and front subframe.
  - 4 Remove the fixed bolt between subframe and front body.
  - Tightening Torque: 160 N·m~180N·m
  - ⑤ Remove the fixed bolt between subframe and rear body.
  - Tightening Torque: 160 N·m~180N·m

Take down the front subframe assembly.

2)Inspection After Removal

Check if sub frame has crack or deformation, if any, please replace.

### V. Fault Diagnosis

### Common Malfunction Diagnosis Table

Malfunction Symptom	Malfunction Symptom Possible Causes of Malfunction	
	Improper Front Wheel Alignment	Adjustment
	Rotation surpasses the ball head of lower suspension arm	Replacement
Steering hard	Lower Tire Pressure	Air Inflation
	No Power Steering	repair or replace

©The copy right is owned by Jianghuai Automobile Co., Ltd. Unauthorized copying is prohibited 9/119

, , , , , , , , , , , , , , , , , , ,		
	Improper Front Wheel Alignment	Adjustment
	Shock Absorber Malfunction	Repair or Replacement
Bad Return	Anti-Roll Bar Wear or Damage	Replacement
	Spiral Spring Wear or Damage	Replacement
	Lower Suspension Arm Bushing Wear	Replacement
	Improper Front Wheel Alignment	Adjustment
Abnormal Tire Wear	Lower or Higher Tire Pressure	Pressure Adjustment
	Shock Absorber Malfunction	Repair or Replacement
	Improper Front Wheel Alignment	Adjustment
77.11.1 D. 1.1	Insufficient Steering Resistance of Lower Suspension	Replacement
Vehicle Deviation	Arm Ball Joint	
	Lower Suspension Arm Bushing Looseness or Wear	Replacement
	Improper Front Wheel Alignment	Adjustment
	Insufficient Steering Resistance of Lower Suspension	Replacement
	Arm Ball Joint	
the Vehicle	Lower Suspension Arm Bending	Replacement
	Spiral Spring Wear or Damage	Replacement
(مسئولیت مح	Improper Front Wheel Alignment	Adjustment
5	Insufficient Steering Resistance of Lower Suspension	Replacement
اران خودرو در ایر	Arm Ball Joint	
Steering Wheel Wobble	Lower Suspension Arm Bushing Looseness or Wear	Replacement
	Shock Absorber Malfunction	Repair or Replacement
	Anti-Roll Bar Wear or Damage	Replacement
	Spiral Spring Wear or Damage	Replacement
W1:1 G	Spiral Spring Wear or Damage	Replacement
venicle Sagging	Shock Absorber Malfunction	Repair or Replacement
	Bad Return  Abnormal Tire Wear  Vehicle Deviation  One-Way Deviation of the Vehicle	Shock Absorber Malfunction  Anti-Roll Bar Wear or Damage  Spiral Spring Wear or Damage  Lower Suspension Arm Bushing Wear  Improper Front Wheel Alignment  Lower or Higher Tire Pressure  Shock Absorber Malfunction  Improper Front Wheel Alignment  Insufficient Steering Resistance of Lower Suspension  Arm Ball Joint  Lower Suspension Arm Bushing Looseness or Wear  Improper Front Wheel Alignment  Insufficient Steering Resistance of Lower Suspension  Arm Ball Joint  Insufficient Steering Resistance of Lower Suspension  Arm Ball Joint  Lower Suspension Arm Bending  Spiral Spring Wear or Damage  Lower Suspension Arm Bushing Looseness or Wear  Insufficient Steering Resistance of Lower Suspension  Arm Ball Joint  Lower Suspension Arm Bushing Looseness or Wear  Shock Absorber Malfunction  Anti-Roll Bar Wear or Damage  Spiral Spring Wear or Damage  Spiral Spring Wear or Damage  Spiral Spring Wear or Damage

# VI. Repair Data and Specification

# **Technical Specification Table**

	Project		Parameter and Specification
Front Suspension Type			McPherson independent suspension with spiral spring
Items		tems	Two-way hydraulic cylinder
Shock	Stroke		172mm
Absorber	Damping	Stretch	1630N±232N (0.3m/s)

	Force	Compression	260N:	±61N (0.3m/s)
Spiral Spring		Free Height:391.5mm (Reference)	Color Tags: A white or a yellow	
	Wheel Toe-In(Front)		<u>0'±3'</u>	
Wheel	1 Camber Angle			8'±30'
Alignmen	n Kingpin inclination angle			14°±30′
t	Kingpin caster angle			3.5°±30′
	Kingpin Offset			-12.5mm

# Tightening Torque Table

Items	Torque(N·m)
The fixed bolt between the mounting bracket of front anti-roll bar and subframe	45~55
Front shock absorber and body assembling bolt	40~50
Self-Locking Nut On Front Shock Absorber	60~80
The connecting bolt between front shock absorber and steering knuckle	160~180
The connecting bolt between lower suspension arm ball pin and steering knuckle	100~120
Stabilizer bar pull rod and front shock absorber bolt	100~120
Stabilizer bar pull rod and stabilizer bar connecting nut	100~120
The connecting bolt between lower suspension front bushing and subframe	120~140
The connecting bolt between lower suspension arm rear bushing and subframe	130~150
Front sub frame front mounting bolts	160~180
Rear fixed bolt of front subframe	160~180

# **Rear Suspension System**

#### **Notes**

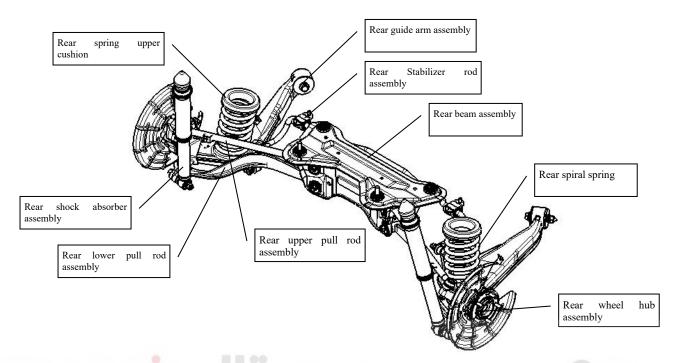
- When installing the suspension, the final tightening of rear upper and lower pull rod and sub frame must be carried out under tire grounding and no-load conditions.
  - It is necessary to check the wheel alignment after repairing the suspension components.
  - The oil will shorten the service life of rubber bushing, make sure to clean the leaking oil.
- The no-load condition means that the fuel, engine coolant and lubricating agent have been filled normally and the spare tires, jacks, tools and foot pads are placed in the designated position.
- The lock nut is not reusable. Always use the new bolt during installation. Please do not wipe the anti-rust oil on the lock nut before tightening up the lock nut during replacement.

### **Preparation**

Common and special repair tools used are shown in the diagram

		Common Tool List	
No.	Tool	Outside View	Description
یت محدود) ۱ رو در ایران	Power Tool		Installation and removal of bolts and nuts

### I. Rear Suspension System



Component Diagram of Rear Suspension Assembly

# Vehicle receiving inspection

1) Ensure fixed condition (loosenness, clearance) of each part and part condition (abrasion,

# damage) ولين سامانه ديجيتال تعميركاران خودرو در

2) Check the installation position of shock absorber for oil leakage or damage.

### **Rear Wheel Alignment Inspection:**

#### **Attention:**

■ After the relevant components of rear suspension have been worn or changed, check whether the location parameters of rear wheel meet the requirements or not.

If there is a difference between them, please replace the deformed and worn parts.

■Standard Value:

Rear Wheel front Toe-In  $6'\pm3'$  rear caster angle:  $-30'\pm30'$ 

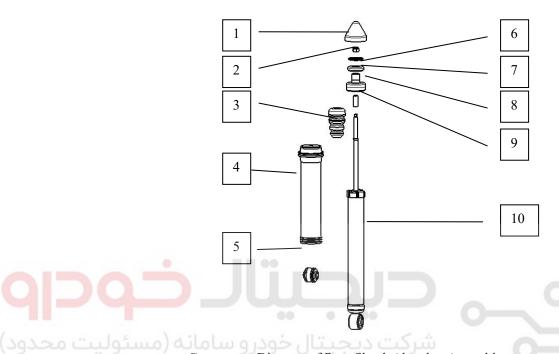
Note: 1) Check the wheel alignment when the vehicle is under no-load condition.

- 2) Check the following items:
  - (1) Check the tire pressure for standard value, check the tire for wear.
  - 2 Check the tire for runout.
  - (3) Check the wheel bearing shaft for end clearance
  - 4 Check each component clearance of suspension and each fixed point for looseness.

©The copy right is owned by Jianghuai Automobile Co., Ltd. Unauthorized copying is prohibited 13/119

- ⑤ Check the shock absorber for maneuvering capability
- (6) Check the cantilever for crack, deformation and other damage.
- 7 Check the height of vehicle body.

### II. Rear Shock Absorber Component:



Component Diagram of Rear Shock Absorber Assembly

1-Rubber protective sleeve

2-Lock nut

3-Dumper block

4-Dust guard

5-Lower lifting lug bushing

6-Washer

7-Upper vibration insulation pad

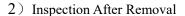
8-Lower vibration insulation pad

9-Metal sleeve

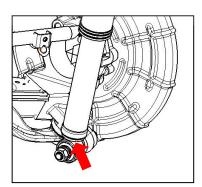
10-Shock absorber body

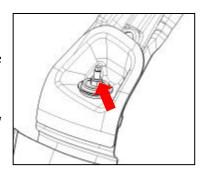
### Removal and Installation:

- 1) Dismantling
- (1) Lift the vehicle and remove the wheel tires.
- 2 Remove the connecting bolts between shock absorber and rear wheel assembly
- (3) Remove the shock absorber and body connection nut.



- (1) Shock Absorber
- Check the shock absorber for oil leakage. If any, please replace it.
- Check the piston push rod for damage, wear or deformation If any, please replace it.





- 2 Bumper Block, Dust-Proof Boot
- Check the bumper block and dust-proof boot for wear or damage. If any, please replace it.
- ③ Vibration insulating pad support/ Upper and lower vibration insulating pad/ Lower lifting lug bushing
- ■Check the if the vibration insulating pad support/ upper and lower vibration insulating pad/ lower lifting lug bushing is worn or damaged. If any,please replace it.
  - 3) Installation: Install in the reverse order of disassembly.

**Tightening Torque List** 

Tightening torque of the connecting nuts of rear shock absorber and rear wheel hub: 120 N·m  $\sim$ 140 N·m

Tightening torque of the connecting nuts of rear suspension shock absorber and rear wheel hub:  $80 \text{ N} \cdot \text{m} \sim 100 \text{ N} \cdot \text{m}$ 

Tightening torque of the bolts/ nuts between rear shock absorber and body: 20 N·m  $\sim$  40 N·m

### Note:

- Please do not use the damaged parts.
- Conduct the final tightening of each component removed from the disassembled shock absorber under no-load condition.
  - Check the wheel alignment

### 3.Disassembly of the rear transverse stabilizer bar and pull rod

### **Removal and Installation:**

### 1) Disassemble

① Disassemble the nuts of the rear guide arm stabilizer bar pull rod (left / right)

Use the wrench fix the stabilizer pull rod lower ball head to avoid turning, the self-lock nut can not be repeated using.

- ② Disassemble the fixing bolts between left/right stabilizer rod and vehicle body lower plate fixing bracket(left/right, total 4).
  - ③ Remove the stabilizer bar assembly

### 2)Inspection After Removal

Check if the stabilizer bar, stabilizer bar pull rod assembly, stabilizer bar fastening bracket and stabilizer bar bushings have deformation, wear or other damages.

If any, please replace it.

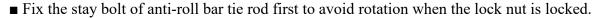
- 3) installation
- Install in the reverse order of removal.

Bolt tightening torque table during installation

Tightening torque of the stabilizer bar pull rod locking nut: 100

 $N \cdot m \sim 120 N \cdot m$ ;

Tightening torque of the stabilizer bar installation bracket locking nut: 45 N·m~55N·m;



#### Note:

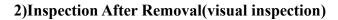
- Please do not use the non-reusable parts.
- Pay attention to the installation direction when installing the stabilizer bushing and stabilizer holder.
- Conduct the final tightening of each component removed from the disassembled anti-roll bar under no-load condition.



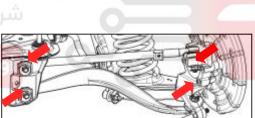
IV. Rear upper and lower pull rod assembly

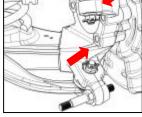
Removal and Installation:

- 1) Disassembly(right side for example)
  - (1) Lift the vehicle and remove the wheel tires.
- 2 Remove the shock absorber assembly according to the step 2.
- 3 Pull out the split pin and remove the fixing slot nuts of the lower swing arm ball pin and the lower pull rod.
- 4 Remove the fixing nut, eccentric bolt and washer of lower pull rod and rear beam.
  - (5) Take down the lower pull rod assembly
  - (6) Removal sequences of the rear upper pull rod are the same with the rear lower pull rod.



- ① Check if the upper and lower pull rod bushing is worn or damaged, replace if it is.
- ② Check if the upper and lower pull rod dust cover is damaged or not. if yes, please replace.
- (3) Check if there is damage in bar, if any, please replace.





4 Check all the fixing bolts and nuts for damage, if any, please replace.

### 3) Installation

Install in the reverse order of removal.

Tightening Torque of each mounting point

- 1 Ball pin lock nut: 100 N·m~120N·m
- ② When installing, keep the split direction of ball pin left and right;
- ③ Fixing nut of upper pull rod and rear beam: 16N·m~180N·m
- ④ Fixing nut of lower pull rod and rear beam: 16N·m~180N·m

#### Attention:

- Please do not use the damaged parts.
- The sleeve of upper and lower pull bar and rear beam nut shall be pre-tightened in order to prevent deformation of sleeve.
  - Adjust the rear wheel alignment under no-load conditions.
  - Tighten again according to the standard torque of each components after the 4 wheel

alignment

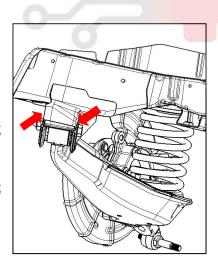


#### Removal and Installation:

- 1) Disassembly(right side for example)
  - (1) Lift the vehicle and remove the wheel tires.
  - ② Disassemble relevant components according to the step 4.
- 3 Use the opening spanner to lock the vehicle body opening outer nut.
- 4) Remove the rear guide arm and the vehicle body fastening nut.
  - (5) Use jack to support wheel assembly.
  - (6) Slowly take down the rear guide arm assembly.

### 2)Inspection After Removal(visual inspection)

- (1) Check if the rear guide arm bushing is worn or damaged, replace if it is.
- ② Check if the rear guide arm has deformation or other damage, if any, please replace.
- ③ Check all the fixing bolts and nuts for damage, if any, please replace.



### 3) Installation

Install in the reverse order of removal.

Tightening Torque of each mounting point

Guide arm tightening bolt: 180 N·m~200N·m

### **Attention:**

- Please do not use the damaged parts.
- The guide arm and body locking nuts shall be pre-tightened in order to prevent deformation of sleeve.
  - Pay attention to the rebound of the spring, avoid the spring eject and harm people;
  - Check the wheel alignment

### VI. Rear spiral spring

- 1) Disassemble
- (1) Remove the connecting bolt of rear guide arm and vehicle body (see five).
- 2 Take down the rear spring upper polyurethane cushion and rear spiral spring.

# شرکت دیچیتال خودرو سامانه (مسئولی:Noteحدود

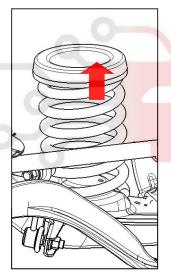
Pay attention to the sudden spring drop during removal to avoid personal injury!

- 2)Inspection After Removal
- 1) Rear spring upper polyurethane cushion
- Check the spring backing for wear or damage. If any,please replace it.
- 2 Spiral Spring
- Check the spiral spring for wear or damage. Replace it if necessary.
- 3) Installation

Install in the reverse order of removal.

### Attention:

- Please do not use the damaged parts.
- Caution: When installing spring upper rubber cushion pad, the spring should be fitted with vibration insulating cushion well.
  - ■Install spiral spring with its lower split backward.
  - Check whether the assembly mark is correct or not.



- Conduct the final tightening of each component in condition of no-load
- Check the wheel alignment.

### VII. Rear wheel hub assembly

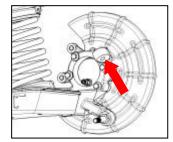
- 1) Disassemble
- 1) Remove the tire and brake system (include pipeline, wiring harness, brake disc and so on).
- ② Remove the 4 fixing bolts of rear wheel hub.
- ③ Remove the 3 fixing bolts of the fender.
- 2)Inspection After Removal
- (1) Rear wheel hub
- Check if the wheel hub has clamping, abnormal sound, grease leakage. If any,please replace it.
- 2 Rear mudguard
- Check if the rear mudguard has wear or deformation. If any,please replace it.
- ③ Tighten the bolts
  - Check all the fixing bolts for damage. If any,please replace it.
  - 3) Installation
  - Install in the reverse order of removal.
  - Tightening torque:

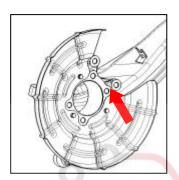
Bearing fixing bolt:  $70 \text{ N} \cdot \text{m} \sim 90 \text{ N} \cdot \text{m}$ 

Mudguard fixing bolt:  $8 \text{ N} \cdot \text{m} \sim 12 \text{ N} \cdot \text{m}$ 

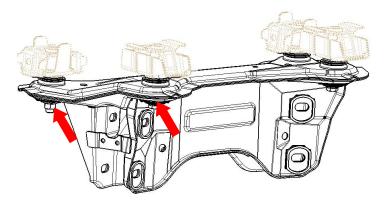
#### **Attention:**

■ Tighten wheel hub assembly bolts intersectantly, re-tighten the front 2 bolts.





### VIII. Rear beam assembly



Component diagram of rear beam assembly

### **Removal and Installation:**

- 1) Disassemble
- ① Remove the tire, rear guide arm, brake pipeline, wiring harness, upper and lower pull rod and other sub-assembly.
  - ② Support the rear beam assembly with jack.
  - ③ Remove the connecting nuts of the rear beam assembly and vehicle body.
  - 4 Remove the fixing nuts of the rear beam assembly and vehicle body.
  - ⑤ Take down the rear beam assembly slowly.

### 2)Inspection After Removal

- (1) Rear beam
- Check if the rear beam is deformed or cracked. If any,please replace it.
- (2) Rear beam related rubber sleeve
- Check if the rear beam rubber sleeve has wear or deformation. If any,please replace it.
- ③ Tighten the bolts and nuts
- Check all the fixing bolts and nuts for damage. If any,please replace it.
- 3) Installation

Install in the reverse order of removal.

Tightening torque of fixing bolts and nuts:

- (1) Connecting nut of the rear beam and vehicle body:  $160 \text{ N} \cdot \text{m} \sim 180 \text{ N} \cdot \text{m}$
- ② Connecting bolt of the rear beam and vehicle body:  $160 \text{ N} \cdot \text{m} \sim 180 \text{ N} \cdot \text{m}$

### Note:

- Please do not use the damaged parts.
- It is not allowed to let the jack slip off.

©The copy right is owned by Jianghuai Automobile Co., Ltd. Unauthorized copying is prohibited 20/119

# IX. Malfunction Diagnosis

Common Malfunction Diagnosis Table

Malfunction	Possible Causes of Malfunction	Solution	
Symptom			
	Loose assembly	Tightening	
Abnormal sound	Wheel Bearing Fatigue or Damage	Replacement	
Automiai sound	Shock Absorber Assembly Damage	Replace the damaged parts	
	Tire Quality Defect	Replacement	
	Tire pressure over foot	Pressure Adjustment	
	Shock Absorber Assembly Damage	Replace the damaged parts	
Vibration	Tire Nut Looseness	Tightening	
	The spiral spring gets shorter or	Replacement	
	broken		
Tire Quality Defect		Replacement	
Body Tilt	The coil spring becomes short or	Replacement	
Doug III	broken		

# **Repair Data and Specifications**

**Technical Specification Table** 

Project			Parameter and Specification	
Rear Suspension Form			Connecting rod	
	Items		Two-way hydraulic cylinder	
Shock	St	roke	195mm	
Absorber	Damping	Stretch	910N±138.3N (0.3m/s)	
	Force	Compression	230N±56.8N (0.3m/s)	
G : 1	It	ems	Helical Spring	
Spiral Spring	Free	Height	299.3mm (Reference)	
Spring	Colo	or Mark	The same color on both sides	
wheel	Toe-	Total Front n(Rear)	12'±6'	
alignment	Camb	er Angle	-30'±30'	

Tightening Torque Table

Project	Tightening Torque(N·m)
Rear Shock Absorber and Body Assembling Bolt	20~40
Rear shock absorbers and rear guide arm connecting bolts	120~140
Rear suspension shock absorber and rear guide arm connecting nut	80~100
Rear crossbeam and body front mounting nut	160~180
Beams and rear body mounting bolts	160~180
Rear up and rear beam	160~180
Rear pull rod and rear beam	160~180
Rear upper lever and rear guide arm	100~120
Rear lower lever and rear guide arm	100~120
Rear guide arm and vehicle body	180~200
Rear stabilizer bar and the body	45~55
Rear stabilizer bar and stabilizer bar rod	100~120
Rear stabilizer bar rod and rear guide arm	100~120
Rear hub unit and rear guide arm	70~90
Rear fender and rear guide arm	8~12