



SAS-10029

Front Left Air Strut

**GENERAL WARNINGS:**

CAUTION: Damage to the vehicle and air suspension system can be incurred if work is carried out in a manner other than specified in the instructions or in a different sequence.

The air suspension system under pressure(max 10 bar, or 150lbf/in; before Disassembly, confirm that the pressure has been released and disconnect the power supply of the air suspension system.

Do not let dust or grease enter the system.

Always wear standard hand, ear and eye protection device when servicing the air suspension system.

Do not store struts below 5°F (-15°C) or above 122°F (50°C)

Avoid damages to air lines and wires

Must be disassembled and installed by a fully qualified professional at a specialist garage

Use car manufacturer's diagnostic software

Use car manufacturer's documentation for correct tightening torques

To avoid the possibility of short circuits while working with electric components consult your owner's manual on how to disconnect your battery.

For the correct Jack fulcrum and other maintenance, safety and maintenance instructions of the vehicle, please refer to your user manual, service manual, or consult your car dealer. In any case, do not work under the vehicle without sufficient support, because it may cause serious casualties.

WARNING:

Never lower the vehicle from the lifting platform with an unpressurised air suspension /air suspension module! Use a diagnostics device for filling!

Disassembly the Air Strut

The ignition must remain off during work on the pneumatic spring module.

1. Adjust the steering wheel to face the front.
2. Open the hood, then raise the vehicle, check whether the chassis parts are loose, remove the tire (Figure 1,2)



Figure 1



Figure 2

3. Unscrew the large nut of the axle shaft first (Figure 3)
4. Remove the tie rod (Figure 4)



Figure 3



Figure 4

5. Disconnect the balance rod (Figure 5)



Figure 5

6. Disconnect the brake hose, remove the fixing bolts connecting the lower fork arm of the air suspension. (Figure 6,7,8)

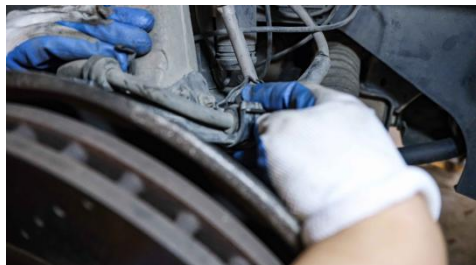


Figure 6



Figure 7



Figure 8

7. Remove the steering knuckle stub shaft from the upper lateral control arm, then disconnect the half shaft (Figure 9,10)



Figure 9



Figure 10

8. Remove the fender and disconnect the solenoid valve wire (Figure 11,12)



Figure 11



Figure 12

9. Remove the HVAC(Heating Ventilation and Air Conditioning) intake cover. (Figure 13)



Figure 13

10. Carefully loosen the air pipe, and then remove the 3 nuts on the top of the air suspension strut (Figure 14,15)

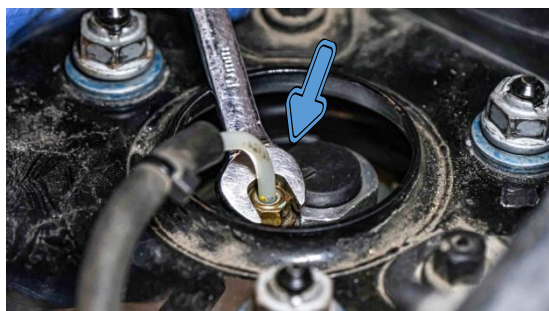


Figure 14

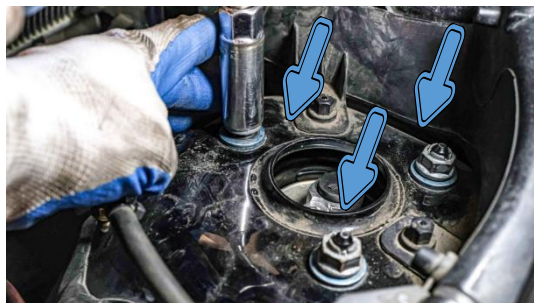


Figure 15

11. Remove air suspension Strut (Figure 16)

12. Compare the old and new air suspension struts for consistency (Figure 17)



Figure 16



Figure 17

Installation of Air Strut :



Tighten all bolts and nuts according to the manufacturer's specifications during installation.

Installation steps:

1. Install the air suspension strut into the vehicle and tighten the 3 nuts at the upper end of the upper air suspension strut. (tighten to manufacturer's specification torque). (Figure 1, Figure 2)



Figure 1



Figure2

2. Insert the axle into the hub. (Figure 3)

3. Hydraulically jack up the lower swing arm and install the bolts at the bottom of the air suspension strut.(Figure 4,5)



Figure 3

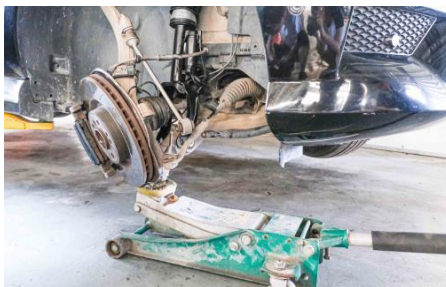


Figure 4



Figure 5

4. Install the steering knuckle stub shaft on the upper lateral control arm and tighten the retaining nut (tighten to the manufacturer's specification torque). (Figure 6,7)



Figure 6



Figure 7

5. Install and tighten the lower fixing nut (according to the manufacturer's specification Torque tightening). (Figure 8)

6. Install the brake hose. (Figure 9)



Figure 8



Figure 9

7. Install the balance rod and tighten the nut (tighten according to the manufacturer's specification torque). (Figure 10,11)



Figure10



Figure 11

8. Install the tie rod and tighten the nut. (tighten to manufacturer's specification torque) (Figure 12,13)

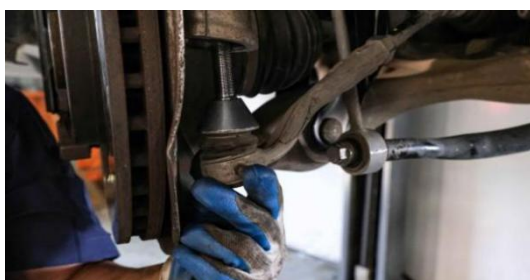


Figure 12



Figure13

9. Install the axle shaft big nut and tighten the nut. (Torque to Manufacturer's specifications)(Figure 14)



Figure 14

10. Install the air suspension strut solenoid valve connecting wire. (Figure 15)



Figure 15

11. Install the leaf plate lining. (Figure 16)



Figure 16

12. Install car tires. (Figure 17)



Figure 17

13. Install the intake pipe. (Figure 18)

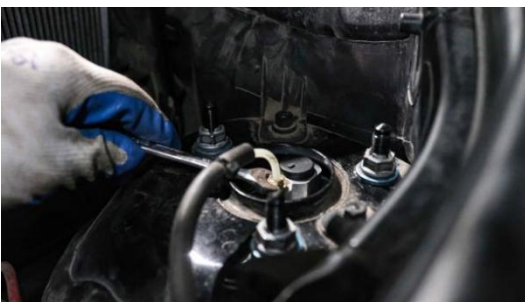


Figure 18

14. Start the vehicle for inflation, and test the air tightness with foam water. (Figure 19)



Figure 19

15. Special diagnostic equipment establishes connection and detects fault codes.

16. Reinstall the HVAC intake cover.

17. Close the engine hood.

18. Installation is completed.

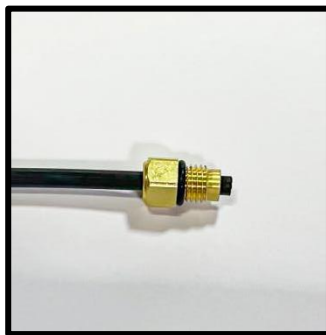


Attention:

1. Do not lower the car from the lift when there is no pressure on the air suspension / air suspension module.
2. Precautions for installing air pipe:

Remove the original air line before inserting it into the new air pipe connector

Remove the old factory air line connector.



Remove and dispose of shipping pins



Insert the air line into the connector and press until it is felt to engage



After entering the air line, pull the air line outward to lock and ensure a secure connection

