

Marks	Designations	Informations
1	Shock absorber upper cup	
2	Filter block	
3	Rotating stop	
4	Impact stop	
5	Spring	(see 31A, Front axle components, Front shock absorber and spring: Removal - Refitting)
6	Shock absorber gaiter	
7	Front shock absorber	(see 31A, Front axle components, Front shock absorber and spring: Removal - Refitting)
8	Flexible brake pipe support bracket	
9	Front driveshaft hub carrier	(see 31A, Front axle components, Front hub carrier assembly: Exploded view)
10	Lower ball joint	(see 31A, Front axle components, Front driveshaft lower arm ball joint: Removal - Refitting)
11	Lower ball joint protector	
12	Front driveshaft lower arm	Ball-joint uncoupling tool : Use
13	Subframe tie-rod	
14	Radiator mounting cross member tie-rod	
15	Subframe rear cross member	
16	Front anti-roll bar tie-rod	
17	Anti-roll bar bush	
18	Anti-roll bar clamp	
19	Front anti-roll bar	
20	Front axle subframe	
21	Front side member	
22	Radiator mounting cross member	



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FRONT AXLE COMPONENTS: PRECAUTIONS FOR THE REPAIR



Note, one or more warnings are present in this procedure



1. SAFETY

1- ADVICE TO BE FOLLOWED BEFORE ANY OPERATION

For an operation requiring the use of a lift, follow the safety advice [Vehicle: Towing and lifting](#) (02A, Lifting equipment).

2- INSTRUCTIONS TO BE FOLLOWED DURING THE OPERATION

Do not press on the brake pedal during work on the brake system.

If, during work on the brake system, any damage on any part is observed, it must be repaired before driving the vehicle again.

Brake fluid is highly corrosive. Ensure any brake fluid spilt on parts of the vehicle is cleaned off.

In case of incorrect handling, the brake fluid can cause serious injury and damage. Follow the manufacturer's instructions for brake fluid.

2. CLEANLINESS

1- ADVICE TO BE FOLLOWED BEFORE ANY OPERATION

Protect any bodywork components that risk being damaged by brake fluid with a cover.

2- INSTRUCTIONS TO BE FOLLOWED DURING THE OPERATION

Clean around the braking system with brake cleaner [Vehicle: Parts and consumables for the repair](#) (04B, Consumables - Products).



CAUTION

Prepare for the flow of fluid, and protect the surrounding components.

Do not allow friction materials to come into contact with grease, oil or other lubricants and cleaning products which are mineral oil based.

3. GENERAL RECOMMENDATIONS

1- BEARING, HUB CARRIER

CAUTION



In order to prevent irreversible damage to the front hub bearing:



Do not loosen or tighten the driveshaft nut when the wheels are on the ground.



Do not place the vehicle with its wheels on the ground when the driveshaft has been loosened or removed.



CAUTION

To ensure that the wheel speed sensor works properly, do not mark the sensor target on the bearing.

When removing a hub, it is essential to replace the bearing with a new one.



CAUTION

Do not press the bearing's internal bush so as to avoid damaging the bearing (very high shrink-fitting force).

It is essential to check the condition of the hub and bearing surface and the hub carrier bore before refitting the bearing.



Use surface cleaner [Vehicle: Parts and consumables for the repair](#) (04B, Consumables - Products) to clean:



- the new bearing's internal and external surfaces which are in contact with the hub carrier and the hub,
- the hub carrier surfaces in contact with the new bearing,
- the hub surfaces in contact with the new bearing.

Always check the surface condition of the hub carrier before refitting the "hub - bearing" assembly.

Clean the surfaces of the hub carrier that are in contact with the "hub - bearing" assembly using surface cleaner [Vehicle: Parts and consumables for the repair](#) (04B, Consumables - Products)

Replace any component whose contact surfaces have deep scratches or cracks.

2-SUSPENSIONSPRING

When replacing the spring, ensure that the positioning and orientation of the spring and the tool cups are correct.

When replacing a spring, always replace the spring on the opposite side.

If a shock absorber is replaced, the shock absorber on the opposite side must also be replaced.

Check that the spring compressor tool is operating correctly.

In the interests of safety, do not leave a spring compressed in the spring compressor tool.

During assembly and removing operations, the surface and the protection paint must not be damaged.

There must be no impacts during operations. Any handling hooks and tightening or positioning clamps should be equipped with rubber or plastic in order to avoid damage on the springs.



It is recommended to replace springs if:

- the paint is damaged,
- there are dents on the spring.

They are not usually symmetrical in shape and care should be taken to assemble them the right way round. This can be done using the position of the coloured markings.



CAUTION

To prevent the suspension spring from prematurely breaking, do not damage the anti-corrosion protection.

3- ANTI-ROLL BAR

During assembly and removing operations, the surface and the protection paint must not be damaged.

There must be no impacts during operations. Any handling hooks, tightening or positioning clamps should be equipped with rubber or plastic parts so as to avoid damaging the anti roll bar.



It is recommended to replace the anti-roll bar if:

- the paint is damaged,
- the anti-roll bar has dents in it.



Note:

the most critical and sensitive zones are in the elbows.

4- FRONT AXLE



CAUTION

To prevent any damage, do not use the lower arm as support for the lifting system.

Check the condition of all the gaiters before refitting. Always replace any damaged components with new ones.

