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FRONT SUSPENSION



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1. Front Suspension

A: GENERAL

The front suspension is a strut-type independent suspension, with cylindrical double-acting, low-pressure-gas-filled dampers and coil springs. The top of each strut assembly is attached to the body through a rubber cushion. Used in combination with other rubber cushions, this rubber cushion effectively insulate vibration and shock and thus improves ride comfort.

The transverse link is an L shaped arm design to increase steering stability and reduce road noise. The transverse link has a maintenance-free ball joint fitted by a castle nut at its outer end. The front of the link's inner end is fitted to the front crossmember through a rubber cushion and the rear of the inner end is bolted to the vehicle body through a rubber cushion.

The front crossmember is bolted to the vehicle body.

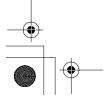
The stabilizer for wagon models is attached to the front crossmember through rubber cushions and its right and left ends are connected to the stabilizer links through rubber bushings. The lower end of the stabilizer link is connected to the transverse link through rubber bushings.

The stabilizer for sedan models is attached to the front crossmember through rubber cushions and its right and left ends are connected to the stabilizer links through ball joints. The lower end of the stabilizer link is connected to the transverse link through a ball joint.

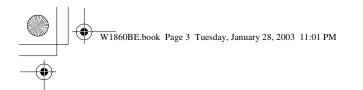
A camber angle adjustment mechanism, which uses eccentric bolts, is provided at the joint of the damper strut and axle housing.

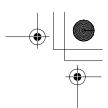


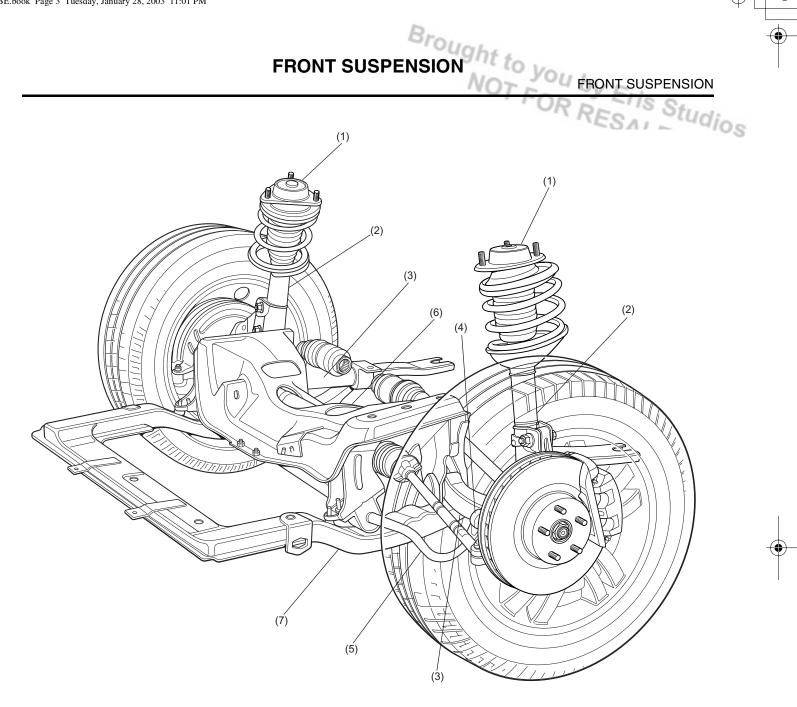








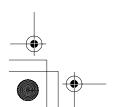




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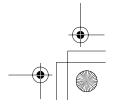
- (1) Strut mount
- (2) Strut
- (3) Transverse link
- (4) Stabilizer link

- (5) Stabilizer
- (6) Front crossmember
- (7) Subframe

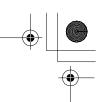








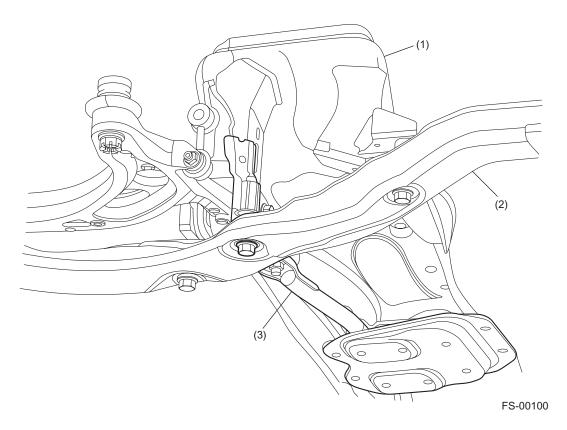




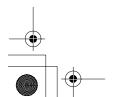
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On the STi model, the shape of the front crossmember is changed and the number of fastening points to the sub frame is increased to improve steering stability.

Also, a reinforcement part (front support arm) has been added to the front suspension crossmember.

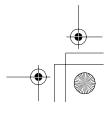


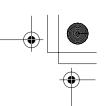
- (1) Front crossmember
- (2) Subframe
- (3) Front support arm











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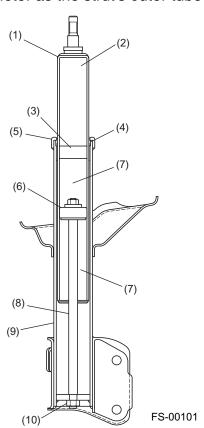
B: CONSTRUCTION

1. TRANSVERSE LINK

- All the sedans have a wider transverse link than wagons for enhanced handling stability. This contributes to increased tread.
- The STi model's "L" shaped transverse link are made of an aluminum alloy forging. The caster angle is increased and solid hard-type rear bushings are used. Reducing the unsprung weight, they help improve both handling stability and riding comfort.

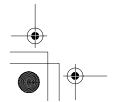
2. STRUT

- All models except STi use struts with low-pressure-gas-filled dampers that feature stable shock attenuating performance. They improve ride quality and reduce vibration and noise.
- On the STi model, upside-down type struts with its shock absorber's top and bottom ends reversed are used. This arrangement is advantageous in increasing rigidity as it allows the diameter of the damping tube (which corresponds to the piston rod in the conventional arrangement) to be increased to an almost same diameter as the strut's outer tube diameter.



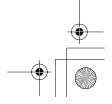
- (1) Damping tube
- (2) Gas
- (3) Free piston
- (4) Oil seal
- (5) Cap

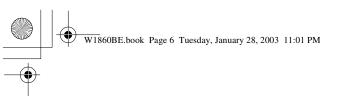
- (6) Piston
- (7) Oil
- (8) Piston rod
- (9) Outer tube
- (10) Nut

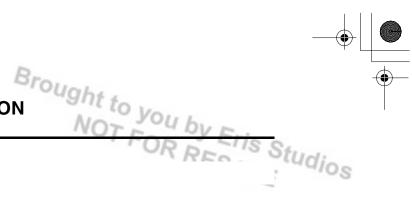












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