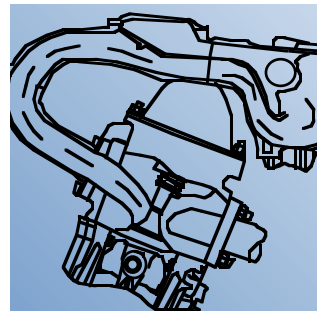
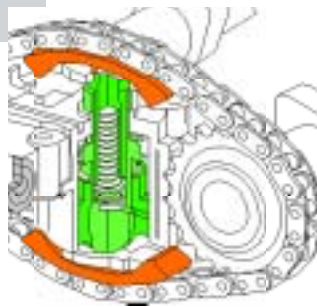
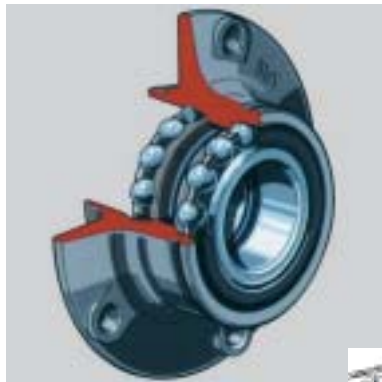
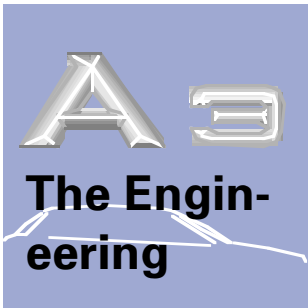
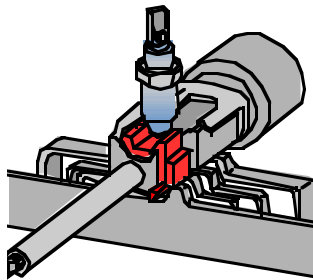


# Audi A3 - The Engineering

## Self Study Programme





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**The Self Study Programme  
is not a Workshop Manual!**



**New**

Please refer to the relevant Service Literature for all inspection, adjustment and repair instructions.



**Important/Note**

# Audi A3

## New models New engineering

### Safety

- Side padding
- Seats with high transverse rigidity
- Easy Entry
- Seat occupied recognition (SOR)

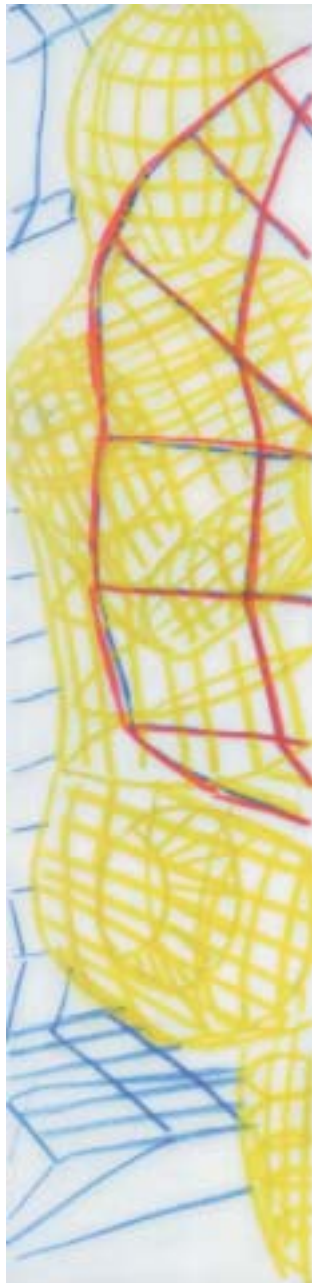
### Body

- Side members
- Concertina principle
- Side reinforcement in doors
- Flush fitting between B pillar and sill
- Footwell cross member

### Engines / Gearbox

- Engine lubrication
- Engine cooling
- Engine electrics
- System overviews
- Self-diagnosis
- Functional diagrams
- Reversing brake

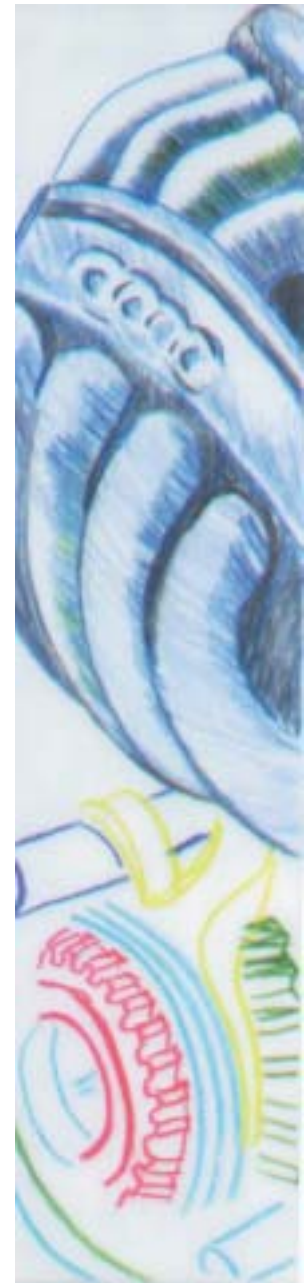
In this SSP we will explain the technical details of the Audi A3 to you.



SSP 182/81



SSP 182/82



SSP 182/83

### Running gear

- Cast wheel bearing housing with single-bolt clamp
- Caster
- Self-aligning double ball bearing
- Oblique rear axle mounting

### Steering

- Locking teeth and clamp
- Lock
- Crash concept

### Brake

- Disc brakes at front and rear
- Dacrometised bolts



SSP 182/84



SSP 182/85



SSP 182/86

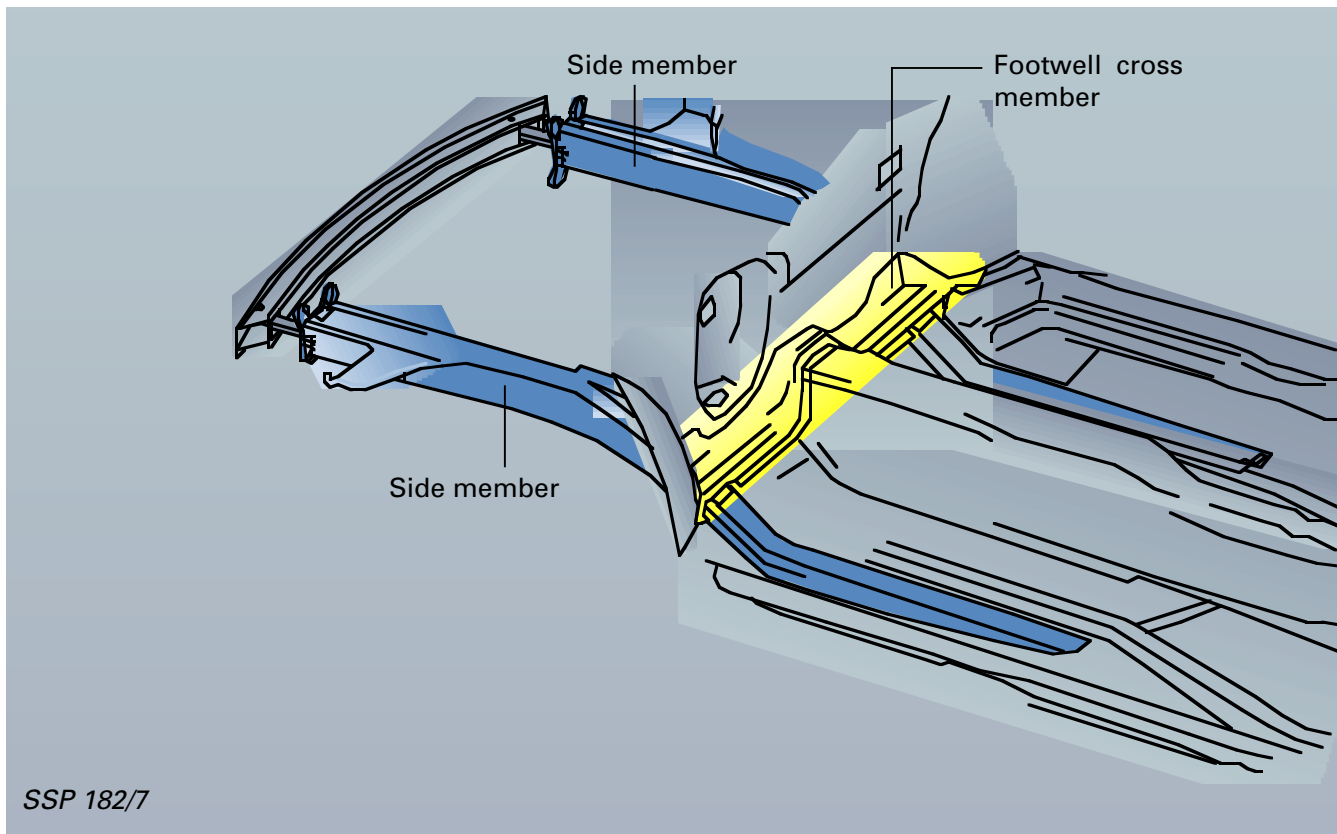
**Above all,  
new, special construction and operation features.**

# Body

**Safety is ...  
programmed crumple zones**

**In other words:**

When the car is designed, every effort is made to minimise deceleration forces acting on the occupants. To achieve this aim, the body must be deformable, because this enables it to absorb energy.

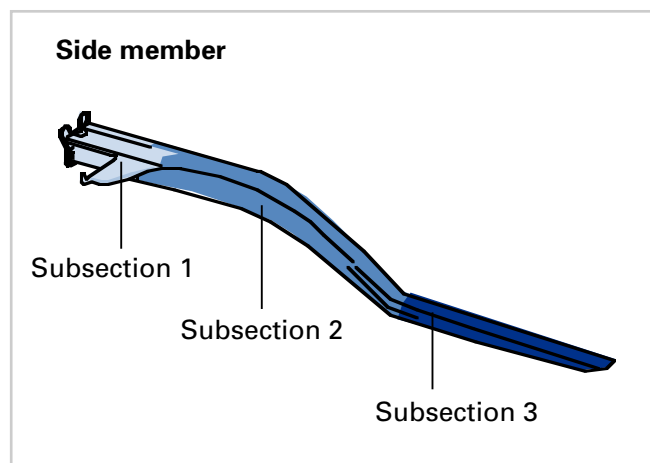


To ensure the occupant cell remains intact during a collision, the entire front section of the car is designed to deform in a predefined manner.

The specific deformation behaviour of the car's front section is mainly determined by the body side members.

### Full extension side members

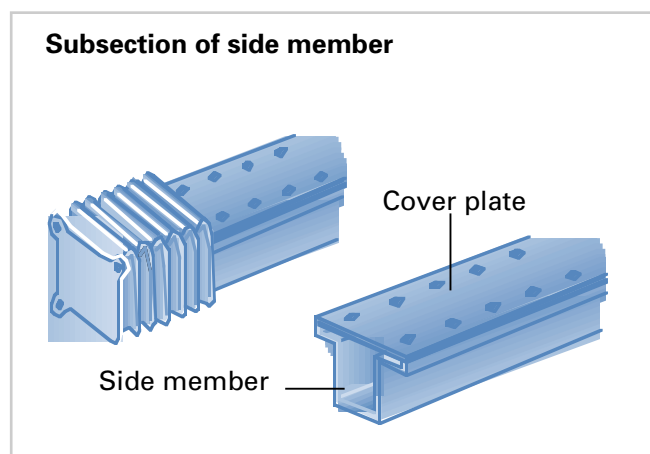
The front side members each consist of three mash seam welded panels with thicknesses of 2 mm, 3 mm and 1.5 mm. The different material thicknesses are calculated depending on the strength they require and their location.



SSP 182/8

### Crumpling principle of the side members

The side members fold up when compressed and therefore absorb a maximum of impact energy. We refer to this as the concertina principle.



SSP 182/10