## Wheel alignment specifications - Audi A4

## Front-wheel drive and four-wheel drive

These specifications are applicable to all engines.

On right-hand drive vehicles with standard running gear (1BA), the camber setting at the front wheels must be calculated as a function of the vehicle height and adjusted accordingly  $\rightarrow$  Anchor.

| Front axle  | Standard running<br>gear (1BA) | China city<br>running gear<br>(1BB) | Sports running<br>gear (1BE/1BD) | Running gear<br>with electronic<br>damping control<br>(1BL) |
|---|--------------------------------|-------------------------------------|----------------------------------|---|
| Camber  | - 43′ ± 23′<br>→ Remark        | - 43' ± 23'                         | - 1°5′ ± 23′                     | - 1°5′ ± 23′  |
| Maximum permissible difference between left and right               | 30′                            | 30′                                 | 30′                              | 30′   |
| Toe setting for each wheel (specification when making adjustment)   | + 10′ ± 5′                     | + 10′ ± 5′                          | + 10′ ± 5′                       | + 10′ ± 5′  |
| Toe setting for each wheel (specification when checking adjustment) | + 10′ ± 7′                     | + 10′ ± 7′                          | + 10′ ± 7′                       | + 10′ ± 7′  |
| Toe-out on turns at 20 degrees steering angle → Remark              | 1° 49′ ± 30′                   | 1° 49′ ± 30′                        | 1° 49′ ± 30′                     | 1° 49′ ± 30′  |
| Outer wheel steering angle at full lock                             | 33° 12' + 1° 30'<br>- 2°       | 33° 12′ + 1° 30′<br>- 2°            | 33° 12' + 1° 30'<br>- 2°         | 33° 12' + 1° 30'<br>- 2°                                    |
| Inner wheel steering angle at full lock                             | 39° 36′ + 1° 30′<br>- 2°       | 39° 36′ + 1° 30′<br>- 2°            | 39° 36′ + 1° 30′<br>- 2°         | 39° 36′ + 1° 30′<br>- 2°                                    |

The wheel on the outside of a curve is turned in less than the inside wheel. This value shows the difference in the steering angles. It can be displayed as a negative value on the wheel alignment computer, depending on the manufacturer.

On right-hand drive vehicles with standard running gear (1BA), the camber setting at the front wheels must be calculated as a function of the vehicle height and adjusted accordingly — Anchor.

| Front axle  | Steel spring<br>running gear,<br>allroad (1BP) | Heavy-duty<br>running gear<br>(1BR) | China heavy-duty<br>running gear<br>(1BR) | Sports running gear, S line (1BV) |
|---|--|-------------------------------------|---|-----------------------------------|
| Camber  | - 20' ± 23'                                    | - 30' ± 23'                         | - 31' ± 23'                               | - 1°13′ ± 23′                     |
| Maximum permissible difference between left and right             | 30′  | 30′                                 | 30′                                       | 30′                               |
| Toe setting for each wheel (specification when making adjustment) | + 10′ ± 5′                                     | + 10′ ± 5′                          | + 10′ ± 5′                                | + 10′ ± 5′                        |

| Toe setting for each wheel (specification when checking adjustment) | + 10′ ± 7′       | + 10′ ± 7′       | + 10′ ± 7′       | + 10′ ± 7′       |
|---|------------------|------------------|------------------|------------------|
| Toe-out on turns at 20 degrees steering angle → Remark              | 1° 49′ ± 30′     | 1° 49′ ± 30′     | 1° 49′ ± 30′     | 1° 49′ ± 30′     |
| Outer wheel steering angle at full lock                             | 33° 12′ + 1° 30′ | 33° 12′ + 1° 30′ | 33° 12′ + 1° 30′ | 33° 12′ + 1° 30′ |
|   | - 2°             | - 2°             | - 2°             | - 2°             |
| Inner wheel steering angle at full lock                             | 39° 36′ + 1° 30′ | 39° 36′ + 1° 30′ | 39° 36′ + 1° 30′ | 39° 36′ + 1° 30′ |
|   | - 2°             | - 2°             | - 2°             | - 2°             |

The wheel on the outside of a curve is turned in less than the inside wheel. This value shows the difference in the steering angles. It can be displayed as a negative value on the wheel alignment computer, depending on the manufacturer.

| Front axle  | Standard running<br>gear RS 4 (2MS)<br>Variable damping<br>RS 4 (2MC) |  |  |
|---|---|--|--|
| Camber  | - 1°14′ ± 23′   |  |  |
| Maximum permissible difference between left and right               | 30′   |  |  |
| Toe setting for each wheel (specification when making adjustment)   | + 10′ ± 5′  |  |  |
| Toe setting for each wheel (specification when checking adjustment) | + 10′ ± 7′  |  |  |
| Toe-out on turns at 20 degrees steering angle → Remark              | 1° 49′ ± 30′  |  |  |
| Outer wheel steering angle at full lock                             | 33° 12' + 1° 30'<br>- 2°  |  |  |
| Inner wheel steering angle at full lock                             | 39° 36′ + 1° 30′<br>- 2°  |  |  |

The wheel on the outside of a curve is turned in less than the inside wheel. This value shows the difference in the steering angles. It can be displayed as a negative value on the wheel alignment computer, depending on the manufacturer.

| Rear axle   | Standard running<br>gear (1BA) | China city running<br>gear (1BB) | Sports running<br>gear (1BE/1BD) | Running gear<br>with electronic<br>damping control<br>(1BL) |
|---|--------------------------------|----------------------------------|----------------------------------|---|
| Camber  | - 1°20′ ± 25′                  | - 1°20′ ± 25′                    | - 1°20′ ± 25′                    | - 1°20′ ± 25′   |
| Maximum permissible difference between left and right | 30′                            | 30′                              | 30′                              | 30′   |

| Toe setting for each wheel (specification when making adjustment)                             | + 10′ ± 5′ | + 10′ ± 5′ | + 10′ ± 5′ | + 10′ ± 5′ |
|---|------------|------------|------------|------------|
| Toe setting for each wheel (specification when checking adjustment)                           | + 10′ ± 5′ | + 10′ ± 5′ | + 10′ ± 5′ | + 10′ ± 5′ |
| Maximum permissible deviation in direction of travel relative to longitudinal axis of vehicle | 10′        | 10′        | 10′        | 10'        |

| Rear axle   | Steel spring<br>running gear,<br>allroad (1BP) | Heavy-duty<br>running gear<br>(1BR) | Sports running<br>gear, S line (1BV) | Standard running<br>gear RS 4 (2MS)<br>Variable damping<br>RS 4 (2MC) |
|---|--|-------------------------------------|--------------------------------------|---|
| Camber  | - 1°20′ ± 25′                                  | - 1°20′ ± 25′                       | - 1°20′ ± 25′                        | - 1°20′ ± 25′   |
| Maximum permissible difference between left and right   | 30′  | 30′                                 | 30′                                  | 30′   |
| Toe setting for each wheel (specification when making adjustment)                             | + 10′ ± 5′                                     | + 10′ ± 5′                          | + 10′ ± 5′                           | + 10′ ± 5′  |
| Toe setting for each wheel (specification when checking adjustment)                           | + 10′ ± 5′                                     | + 10′ ± 5′                          | + 10′ ± 5′                           | + 10′ ± 5′  |
| Maximum permissible deviation in direction of travel relative to longitudinal axis of vehicle | 10′  | 10′                                 | 10'                                  | 10'   |

Camber settings at front wheels for right-hand drive vehicles with standard running gear (1BA)

On right-hand drive vehicles with standard running gear (1BA), the camber setting at the front wheels must be calculated as a function of the vehicle height and adjusted accordingly.

- Measure height of vehicle -a- at both front wheels between centre of wheel and bottom edge of wing panel.
- Maximum permissible difference in height between right and left ≤ 10 mm

## **Determine camber setting:**

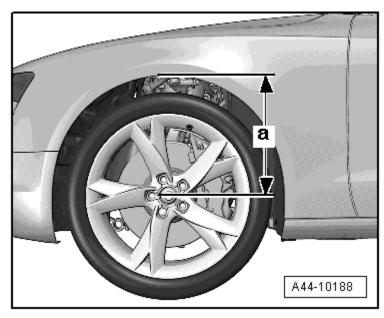
Camber setting = -43' + [(vehicle height left + vehicle height right) : 2] - 391



Note

1' camber = 1 mm vehicle height

The camber settings are specified again in the following table as a function of the mean vehicle height measurement at the front wheels.



| Camber s    | settings at fror                               | nt wheels for r  | ight-hand drive vehic       | les with stanc | lard running g  | ear (1BA)                                 |
|-------------|--|--|-----------------------------|----------------|---|---|
|             | Vehicle height                                 |  |                             |                | Max. perm.  |   |
| Trend       | Absolute<br>mean of left<br>and right<br>wheel | Mean delta<br>in rel. to<br>specified<br>vhcl. height<br>in mm | Checking/adjustment setting | Tolerance      | Maximum<br>permissible<br>difference<br>between left<br>and right | height diff.<br>between<br>right and left |
|             | 401  | 10   | -33′                        |                |   |   |
|             | 400  | 9  | -34′                        |                |   |   |
|             | 399  | 8  | -35′                        |                |   |   |
|             | 398  | 7  | -36′                        |                |   |   |
| Ta a latada | 397  | 6  | -37′                        |                |   |   |
| Too high    | 396  | 5  | -38′                        |                |   |   |
|             | 395  | 4  | -39′                        |                |   |   |
|             | 394  | 3  | -40'                        | ± 23′          | 30′   | ≤ 10 mm                                   |
|             | 393  | 2  | -41′                        |                |   |   |
|             | 392  | 1  | -42'                        |                |   |   |
| Spec.       | 391  | 0  | -43'                        |                |   |   |
|             | 390  | -1   | -44'                        |                |   |   |
| Taalaw      | 389  | -2   | -45′                        |                |   |   |
| Too low     | 388  | -3   | -46′                        |                |   |   |
|             | 387  | -4   | -47'                        |                |   |   |

| 386 | -5  | -48′ |  |
|-----|-----|------|--|
| 385 | -6  | -49′ |  |
| 384 | -7  | -50′ |  |
| 383 | -8  | -51' |  |
| 382 | -9  | -52′ |  |
| 381 | -10 | -53′ |  |

## Additional data for vehicles with front-wheel drive and fourwheel drive:

The additional data listed here are intended only to facilitate diagnosis after an accident.

Table → Chapter

These specifications are applicable to all engines.