

# Component Procedures: Alignment

## Table of Contents

1. Parts and Labor (itype\_189)
2. Front Wheel Alignment (Article 1361649)
3. Rear Wheel Alignment (Article 1361651)
4. Front Wheel Alignment (Article 1413151)
5. Rear Wheel Alignment (Article 1413152)
6. All Technical Service Bulletins (itype\_100)
7. Customer Interest Bulletins (itype\_109)
8. Improper Alignment (itype\_145)

# Component Procedures: Alignment

## Parts and Labor (itype\_189)

### Labor

| Operation | Qualifier Path        | Skill | Std Hrs | Wty Hrs |
|-----------|-----------------------|-------|---------|---------|
| Align     | Four Wheel Alignment  | B     | 2.0     | 0.0     |
| Align     | Front Toe-In, Adjust  | B     | 0.8     | 0.6     |
| Align     | Front Wheel Alignment | B     | 1.0     | 0.0     |
| Align     | Rear Wheel Alignment  | B     | 1.2     | 0.0     |

### Front Wheel Alignment (Article 1361649)

#### Non Standards

- Wheel Alignment Pre-Inspection (1416840)
- Steering Angle Adjustment (1416759)
- Camber and Caster Angle Adjustment (1416841)
- Total Toe-In Adjustment (1416761)

### Rear Wheel Alignment (Article 1361651)

#### Non Standards

- Total Toe-In Adjustment (1416787)

### Front Wheel Alignment (Article 1413151)

#### Front wheel alignment [LF and L3] (Unloaded)\*1

| Item   |  | Fuel gauge indication |                 |       |        |       |
|--|--|-----------------------|-----------------|-------|--------|-------|
|  |  | Empty                 | 1/4             | 1/2   | 3/4    | Full  |
| Maximum steering angle<br>[Tolerance $\pm 3^\circ$ ] | Inner                                      | 39°48'                |                 |       |        |       |
|  | Outer                                      | 32°48'                |                 |       |        |       |
| Total toe-in   | Tire<br>[Tolerance $\pm 4$ { $\pm 0.16$ }] | (mm {in})             | 2 {0.08}        |       |        |       |
|  | Rim inner                                  |                       | 1±3 {0.04±0.12} |       |        |       |
|  | (degree)                                   | 0°11'±0°22'           |                 |       |        |       |
| Caster angle*2<br>[Tolerance $\pm 1^\circ$ ]         |  | 2°54'                 | 2°56'           | 2°58' | 3°00'  | 3°02' |
| Camber angle*2<br>[Tolerance $\pm 1^\circ$ ]         |  | -0°39'                | -0°40'          |       | -0°41' |       |
| Steering axis inclination (Reference value)          |  | 13°52'                | 13°53'          |       | 13°55' |       |

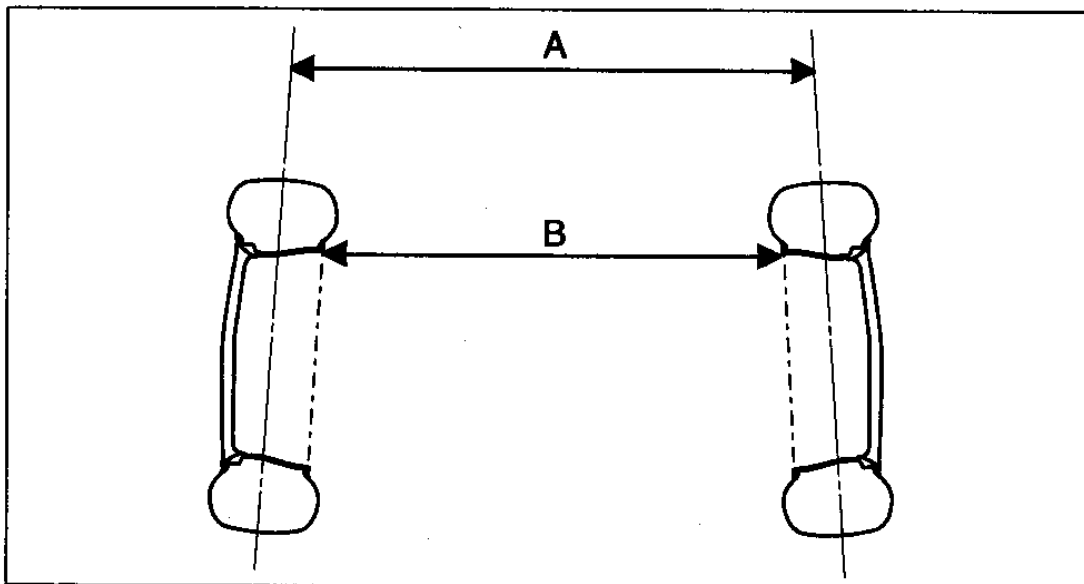
\*1 : Engine coolant and engine oil are at specified level. Spare tire, jack and tools are in designated position.

\*2 : Difference between left and right must not exceed 1°30'.

**Front wheel alignment [L3 WITH TC] (Unloaded)\*1**

| Item   |  | Fuel gauge indication |                             |       |       |        |
|--|--|-----------------------|-----------------------------|-------|-------|--------|
|  |  | Empty                 | 1/4                         | 1/2   | 3/4   | Full   |
| Maximum steering angle<br>[Tolerance $\pm 3^\circ$ ] | Inner                                      | 36°00'                |                             |       |       |        |
|  | Outer                                      | 30°12'                |                             |       |       |        |
| Total toe-in   | Tire<br>[Tolerance $\pm 4$ { $\pm 0.16$ }] | (mm {in})             | 2 {0.08}                    |       |       |        |
|  | Rim inner                                  |                       | 1 $\pm$ 3 {0.04 $\pm$ 0.12} |       |       |        |
|  |  | (degree)              | 0°11' $\pm$ 0°22'           |       |       |        |
| Caster angle*2<br>[Tolerance $\pm 1^\circ$ ]         |  | 3°01'                 | 3°02'                       | 3°04' | 3°06' | 3°08'  |
| Camber angle*2<br>[Tolerance $\pm 1^\circ$ ]         |  | -0°55'                | -0°56'                      |       |       | -0°57' |
| Steering axis inclination (Reference value)          |  | 14°18'                | 14°20'                      |       |       | 14°21' |

\*1 : Engine coolant and engine oil are at specified level. Spare tire, jack and tools are in designated position.  
 \*2 : Difference between left and right must not exceed 1°30'.



am3uuw0000035

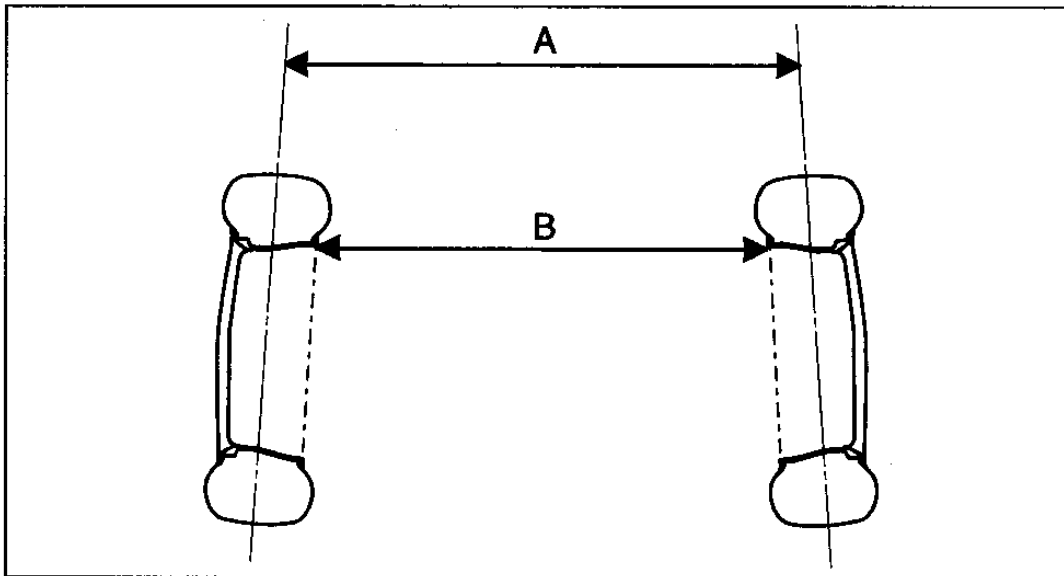
**Rear Wheel Alignment (Article 1413152)**

**Rear wheel alignment [LF and L3] (Unloaded)\*1**

| Item   |  | Fuel gauge indication |                             |        |        |        |
|--|--|-----------------------|-----------------------------|--------|--------|--------|
|  |  | Empty                 | 1/4                         | 1/2    | 3/4    | Full   |
| Total toe-in   | Tire<br>[Tolerance $\pm 4$ { $\pm 0.16$ }] | (mm {in})             | 2 {0.08}                    |        |        |        |
|  | Rim inner                                  |                       | 1 $\pm$ 3 {0.04 $\pm$ 0.12} |        |        |        |
|  |  | (degree)              | 0°11' $\pm$ 0°22'           |        |        |        |
| Camber angle*2 (Reference value)<br>[Tolerance $\pm 1^\circ$ ] |  | -1°20'                | -1°21'                      | -1°23' | -1°25' | -1°27' |
| Thrust angle (Reference value) [Tolerance $\pm 0^\circ 48'$ ]  |  | 0°                    |                             |        |        |        |

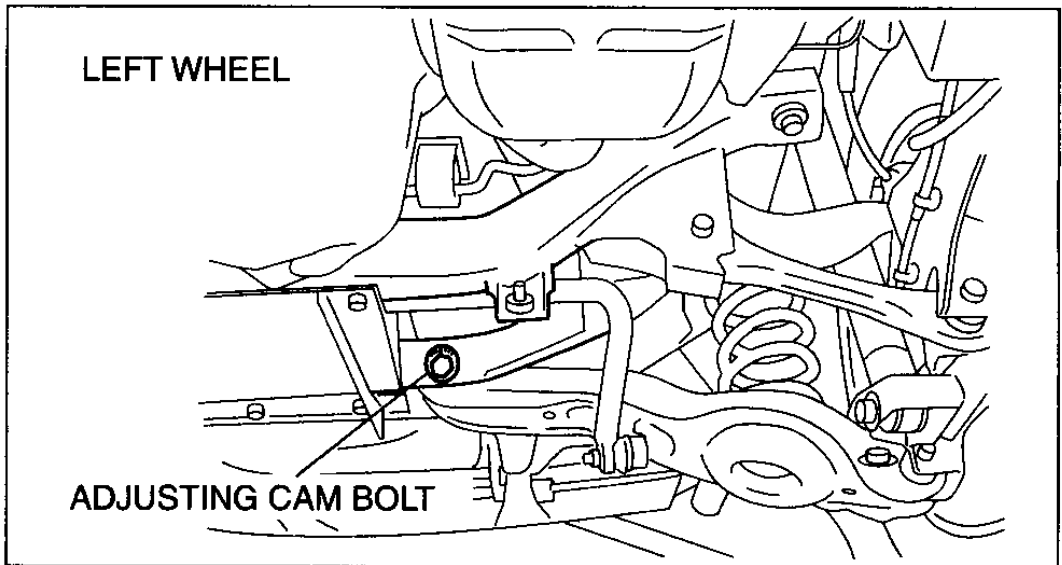
**Rear wheel alignment [L3 WITH TC] (Unloaded)\*1**

| Item   |  |           | Fuel gauge indication |        |        |        |        |
|--|--|-----------|-----------------------|--------|--------|--------|--------|
|  |  |           | Empty                 | 1/4    | 1/2    | 3/4    | Full   |
| Total toe-in   | Tire<br>[Tolerance $\pm 4$ { $\pm 0.16$ }] | (mm {in}) | 2 {0.08}              |        |        |        |        |
|  | Rim inner                                  |           | 1±3 {0.04±0.12}       |        |        |        |        |
|  |  | (degree)  | 0°11'±0°22'           |        |        |        |        |
| Camber angle*2 (Reference value)<br>[Tolerance $\pm 1^\circ$ ] |  |           | -1°36'                | -1°37' | -1°39' | -1°40' | -1°42' |
| Thrust angle (Reference value) [Tolerance $\pm 0^\circ 48'$ ]  |  |           | 0°                    |        |        |        |        |



am3uuw0000035

|                   | <b>Left wheel</b> | <b>Right wheel</b> |
|-------------------|-------------------|--------------------|
| Toe-out direction | Clockwise         | Counterclockwise   |
| Toe-in direction  | Counterclockwise  | Clockwise          |



am3uuw0000035

### **All Technical Service Bulletins (itype\_100)**

Tsbs

- Steering/Suspension - Steering Wheel Off-Center (0200510R, 2011/11/05)

### **Customer Interest Bulletins (itype\_109)**

Tsbs

- Steering/Suspension - Steering Wheel Off-Center (0200510R, 2011/11/05)

### **Improper Alignment (itype\_145)**

Tsbs

- Steering/Suspension - Steering Wheel Off-Center (0200510R, 2011/11/05)