

## (Front Wheel Alignment)

### INSPECT AND ADJUSTMENT OF FRONT WHEEL ALIGNMENT

#### 1. INSTALL WHEEL ALIGNMENT EQUIPMENT

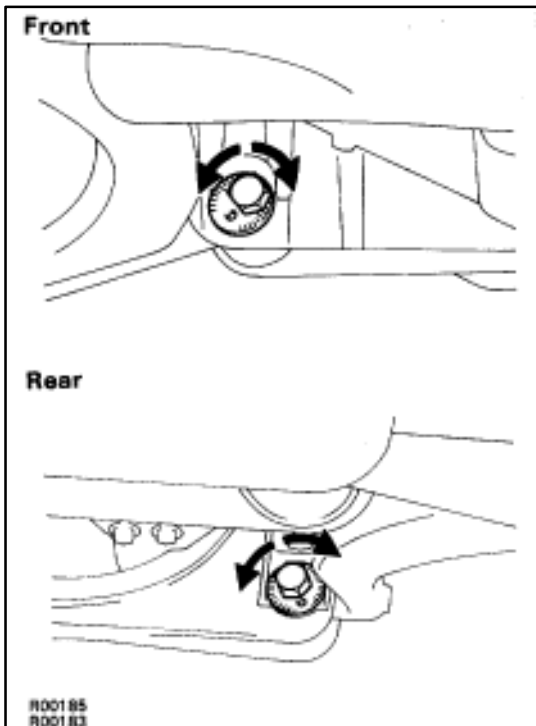
Follow the specific instructions of the equipment manufacturer.

#### 2. CHECK CAMBER, CASTER AND STEERING AXIS INCLINATION

Inspection standard:

| Camber                 | Caster                 | Steering axis inclination |
|------------------------|------------------------|---------------------------|
| $1^{\circ}00' \pm 45'$ | $2^{\circ}56' \pm 45'$ | $8^{\circ}58' \pm 45'$    |

If the measurement is not within the specification, adjust it by the following procedure.



#### 3. ADJUST CAMBER

- Loosen the camber adjusting cam nut.
- Turn the camber adjusting cam and adjust camber.

Adjustment standard:

Left-right error 30' or less

**NOTICE:** If the camber has been adjusted, inspect the caster and toe-in.

HINT: Camber changes about 7'30" with each graduation of the cam.

#### 4. ADJUST CASTER

Loosen one of the two nuts on the strut bar cushion and tighten the nut on the opposite side by the same amount to change the length of the strut bar and adjust the caster.

Adjustment standard:

Left-right error 30' or less

**NOTICE:** Nuts should not be turned more than one rotation in one turn.

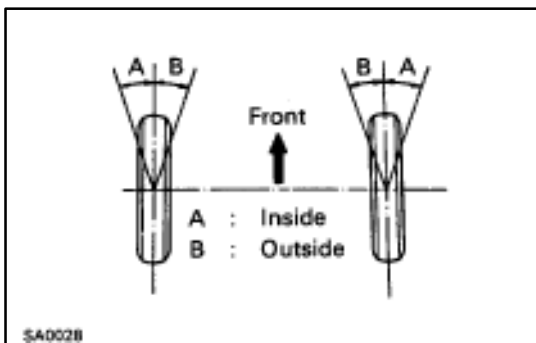
HINT: The caster changes approximately 10' for every rotation of the nut.

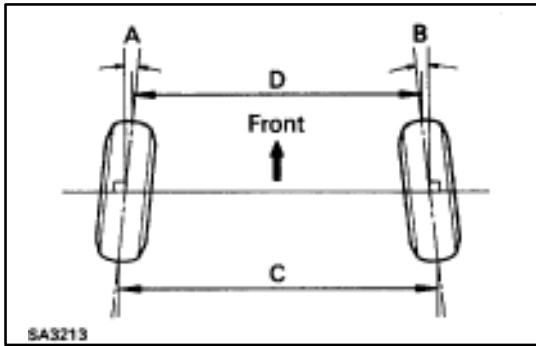
#### 5. INSPECT WHEEL ANGLE

Wheel angle:

| Inside wheel   | Outside wheel (reference) |
|--|---------------------------|
| $37^{\circ}04' \begin{matrix} +1^{\circ} \\ -2^{\circ} \end{matrix}$ | $32^{\circ}33'$           |

If the wheel angles differ from the standard specification, inspect the toe-in.





## 6. INSPECT TOE-IN

Toe-in (total):

$$A + B \ 0.1^\circ \pm 0.2^\circ$$

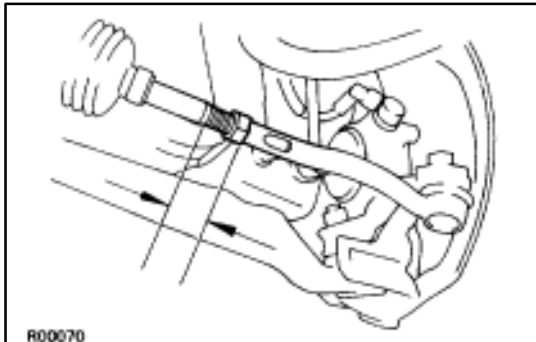
$$(C-D \ 1 \pm 2 \text{ mm}, 0.04 \pm 0.08 \text{ in.})$$

If toe-in is not within specification adjust by the tie rod end.



## 7. ADJUST TOE-IN

- (a) Remove the boot clamp.
- (b) Loosen the tie rod end lock nuts.

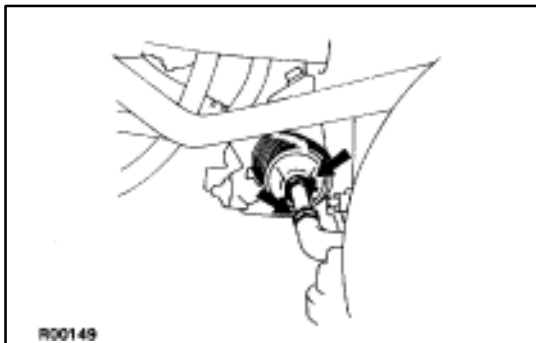


- (c) Turn the left and right tie rod ends an amount to adjust the toe-in.

HINT: Insure that the lengths of the left and right tie rods are the same.

Tie rod end length left-right error:

$$\text{Less than } 1.5 \text{ mm } (0.059 \text{ in.})$$

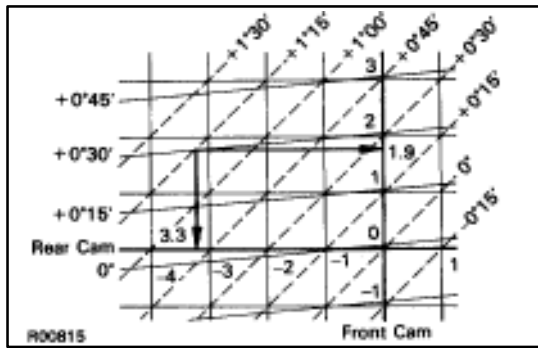


- (d) Tighten the tie rod end lock nut.

**Torque: 56 N·m (570 kgf·cm, 41 ft·lbf)**

- (e) Place the boot clamp.

HINT: Insure that the boots are not twisted.



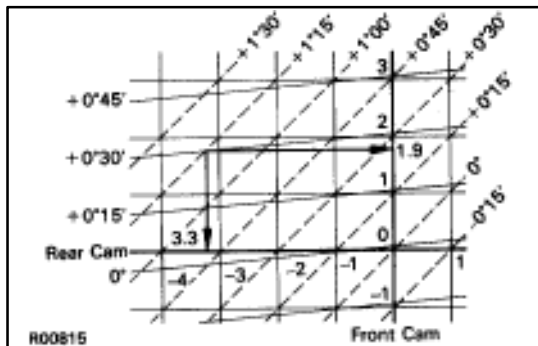
## ADJUSTMENT CHART

### HOW TO READ ADJUSTMENT CHART

- (a) Mark on the graph the measurements taken from the vehicle.

**Example: Camber + 0°30'**

**Caster + 1°15'**



- (b) As shown the illustration, read from the graph the amounts by which the front and/or rear cams are to be adjusted.

**Example: Front cam Increase 1.9**

**Rear cam Decrease 3.3**

- (c) Loosen and adjust the front and/or rear cams.

- (d) Torque the front and/or rear cam nuts.

**Torque: 226 N·m (2,300 kgf·cm, 166 ft·lbf)**

