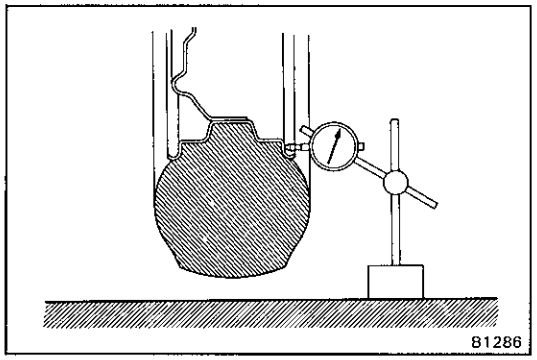
WHEEL ALIGNMENT

1. **MAKE FOLLOWING CHECKS AND CORRECT ANY PROBLEMS**

   (a) Check the tires for wear, size and proper inflation pressure.

   Cold tire inflation pressure: See page A-15



   (b) Check the wheel runout.

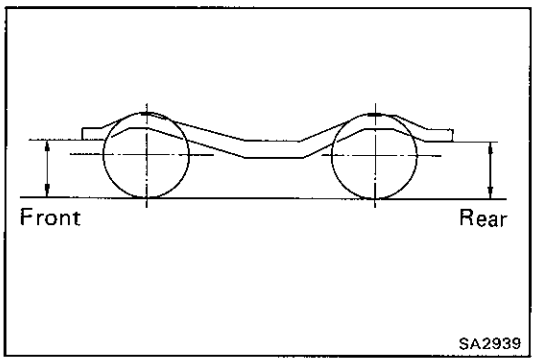
   Lateral runout: 1.2 mm (0.047 in.)

   (c) Check the front wheel bearings for looseness.

   (d) Check the front suspension for looseness.

   (e) Check the steering linkage for looseness.

   (f) Use the standard bounce test to check that the front absorbers work properly.



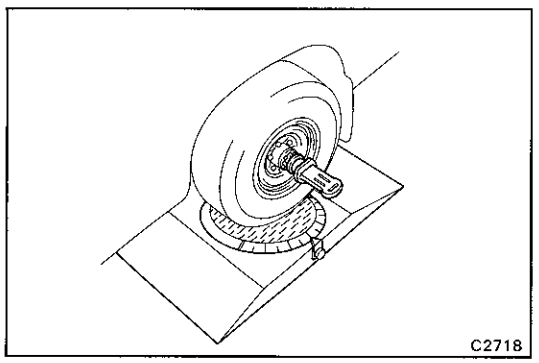
2. **MEASURE CHASSIS GROUND CLEARANCE**

   Chassis ground clearance: See page A-16

   If the clearance of the vehicle is not standard, try to level the vehicle by rocking it down.

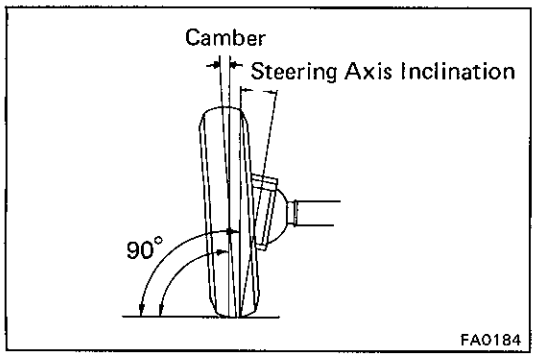
   If still not correct, check for bad springs or suspension parts.

   HINT: When measuring the chassis ground clearance, measure from the ground to the center of the lower suspension arm front mounting bolt.



3. **INSTALL WHEEL ALIGNMENT EQUIPMENT**

   Follow the specific instructions of the equipment manufacture.

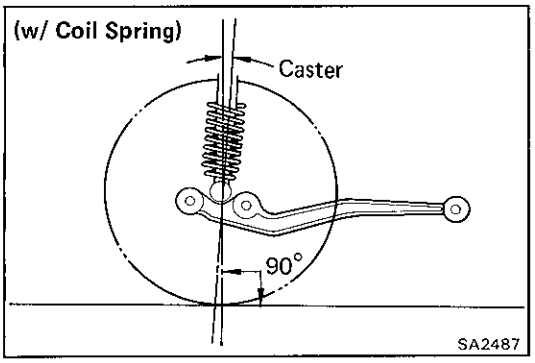


4. **CHECK CAMBER AND STEERING AXIS INCLINATION**

   Camber: 1°00′ ± 45′ (1° ± 0.75°)

   Steering axis inclination: 12°00′ ± 45′ (12° ± 0.75°)

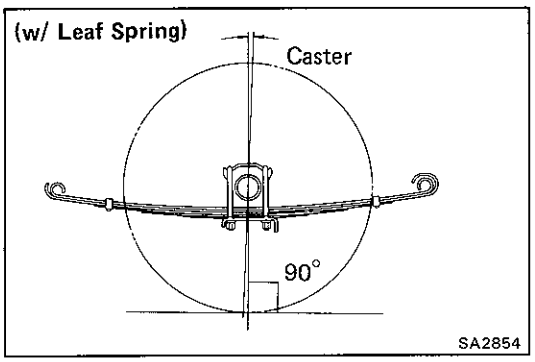
   If the steering axis inclination is not as specified after camber have been correctly adjusted, recheck the steering knuckle and front wheel for bending or looseness.



5. **(w/ COIL SPRING)**
CHECK CASTER

Caster: 4°05′ ± 1° (4.08° ± 1°)

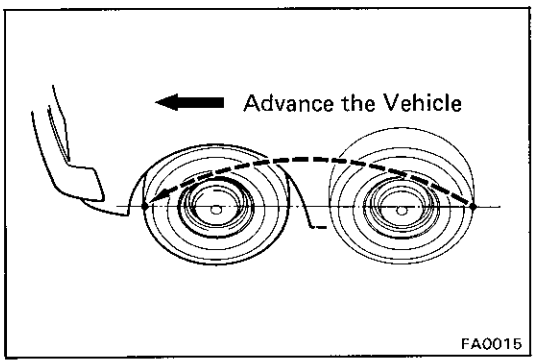
If caster is not as specified, inspect and replace damaged or worn suspension parts.



6. **(w/ LEAF SPRING)**
CHECK CASTER

Short Middle series	**1°15′ ± 1° (1.25° ± 1°)**
Long (Van) series	**0°50′ ± 1° (0.83° ± 1°)**
Long (Pickup) series	**0°30′ ± 1° (0.5° ± 1°)**

If caster is not as specified, inspect and replace damaged or worn parts.



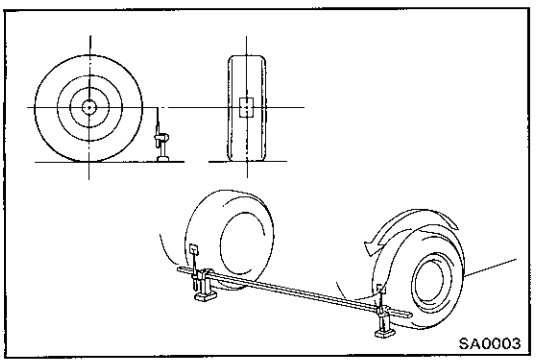
7. **ADJUST TOE-IN**

(a) Make sure the wheels are positioned straight ahead.

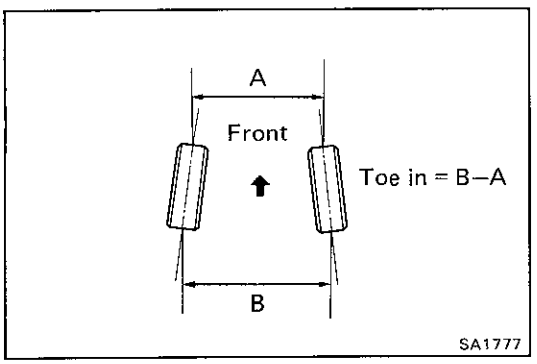
(b) Mark the center of each rear tread at spindle height and measure the distance between the marks of the right and left tires.

(c) Advance the vehicle until the marks on the rear side of the tires come to the front.

HINT: The toe-in should be measured at the same point on the tire at the same level.



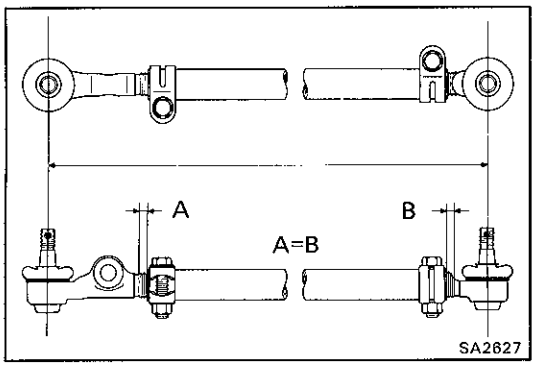
(d) Measure the distance between the marks on the front side of the tires.



(e) Measure the toe-in.

Toe-in = B — A

Inspection STD: See page A-16



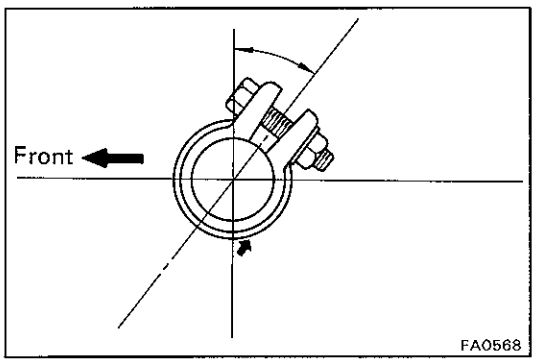
(f) Loosen the nuts holding the clamps to the tie rod.

(g) Adjust toe-in to the correct value by turning the tie rod.

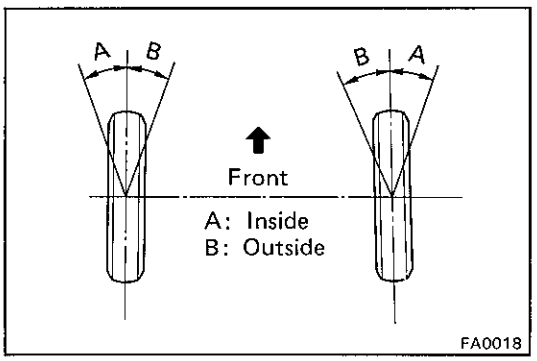
(h) Insure that the lengths of the tie rod ends are the same.

(i) Torque the nuts holding the clamps.

Torque: 375 kg-cm (27 ft-lb, 37 N·m)



HINT: The clamps opening must be positioned at the rear of the tie rod and face within 45° from the verticle axis.



8. ADJUST WHEEL ANGLE

Remove the caps of the knuckle stopper bolts and check the steering angles.

Wheel angle: See page A-16

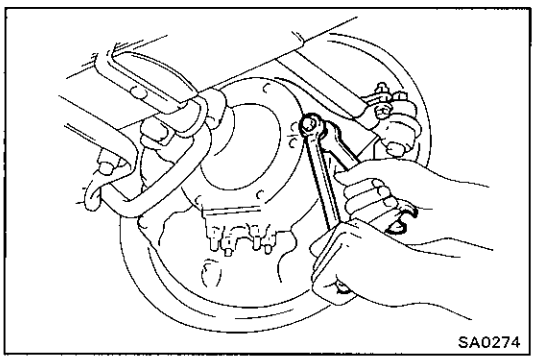
Wheel angle		
Max.	Inside wheel	32° $^{+0°}_{-3°}$
	Outside wheel	30° (Leaf Spring Type)
		28° (Coil Spring Type)

HINT: When the steering wheel is fully turned, make sure that the wheel is not touching the body or brake flexible hose.

If maximum steering angles differ from the standard value, adjust the wheel angle with the knuckle stopper bolts.

Torque: 450 kg-cm (33 ft-lb, 44 N·m)

If the wheel angle still cannot be adjusted within limits, inspect and replace damaged or worn steering parts.



9. INSPECT SIDE SLIP (REFERENCE ONLY)

Side slip or less : 3.0 mm/m (0.018 in/3.3ft)

