

GENERAL INFORMATION

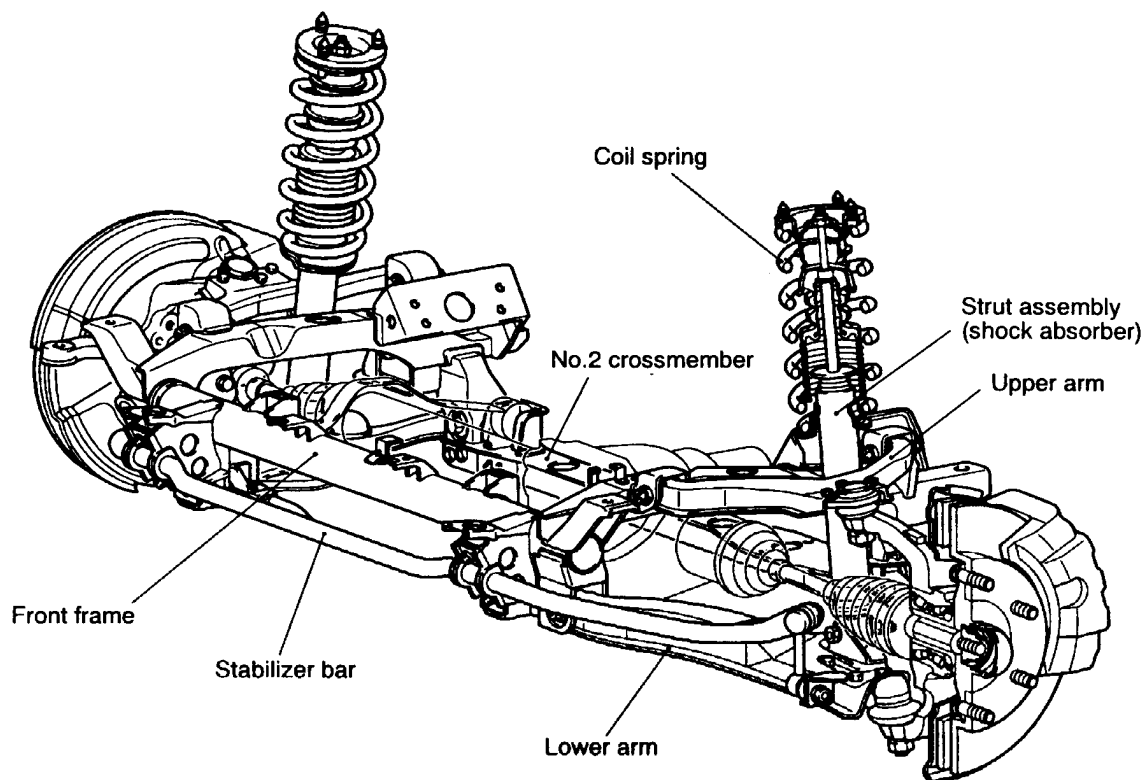
A coil spring-type double wishbone independent-type suspension has been adopted as the front suspension. This type of suspension is rigid, has

very little variation in roll centre height and provides excellent riding comfort, making it ideal for cross-country vehicles.

COIL SPRING

Item	Short wheelbase-2500,3500, Long wheelbase -2500 (GL, GLX),3500 (GLX)	Short wheelbase-3200, Long wheelbase -2500 (GLS),3200,3500 (GLS)
Wire diameter × average diameter × free length mm	16 × 109 × 322	16 × 109 × 327

CONSTRUCTION DIAGRAM



AX0120CA

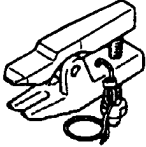
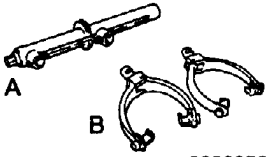
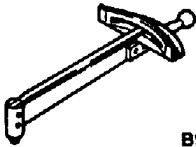
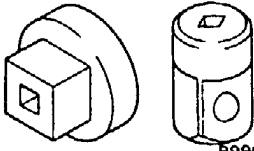
SERVICE SPECIFICATIONS

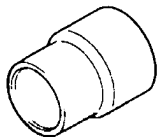
Items		Standard value
Toe-in	At the centre of tyre tread mm	2.5 ± 2.5
	Toe-angle (per wheel)	0° 05' ± 05'
Toe-out angle on turns (inner wheel when outer wheel at 20°)		21° 48'
Camber		0° 30' ± 30'
Caster		3° 50' ± 1°
Side slip mm (per 1 m)		0 ± 3
Kingpin inclination		11° 30'
Upper arm ball joint rotation torque N·m		0.4 – 2.5
Lower arm ball joint rotation torque N·m		0.3 – 4.5
Stabilizer link ball joint turning torque N·m		0.5 – 2.0

NOTE

*: difference between right and left wheels: less than 30'

SPECIAL TOOLS

Tools	Number	Name	Use
 B991113	MB990635, MB991113 MB991406 or	Steering linkage puller	Ball joint and knuckle disconnection
 A B 00003796	A: MB991237 B: MB991238	A: Spring compressor body B: Arm set	Coil spring compression
 B990968	MB990968	Torque wrench	Upper arm ball joint, lower arm ball joint and stabilizer link ball joint rotation starting torque measurement
 B990326	MB990326	Preload socket	

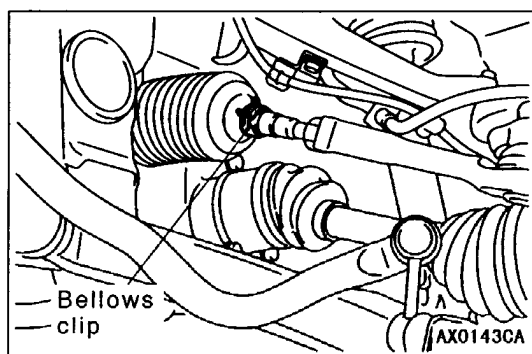
Tools	Number	Name	Use
 8990799	MB990799	Ball joint remover & installer	Lower arm ball joint dust cover press-in

ON-VEHICLE SERVICE

WHEEL ALIGNMENT CHECK AND ADJUSTMENT

Measure the wheel alignment with the vehicle parked on a level surface.

The front suspension, steering system, and wheels should be serviced to normal condition prior to measurement of wheel alignment.



TOE-IN

Standard value:

At the centre of tyre tread 2.5 ± 2.5 mm

Toe angle (per wheel) $0^{\circ}05' \pm 05'$

1. Adjust the toe-in by undoing the clip and turning the left and right tie rod turnbuckles by the same amount (in opposite directions).

NOTE

The toe will move out as the left turnbuckle is turned toward the front of the vehicle and the right turnbuckle is turned toward the rear of the vehicle.

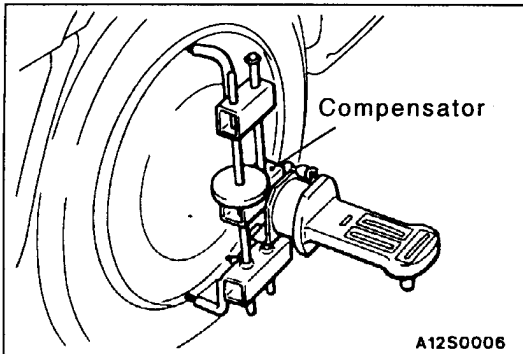
2. Use a turning radius gauge to check that the steering angle is at the standard value.
(Refer to GROUP 37A – On-vehicle Service.)

TOE-OUT ANGLE ON TURNS

To check the steering linkage, especially after the vehicle has been involved in an accident or if an accident is presumed, it is advisable to check the toe-out angle on turns in addition to the wheel alignment.

Conduct this test on the left turn as well as on the right turn.

Standard value (inner wheel when outer wheel at 20°): $21^{\circ}48'$

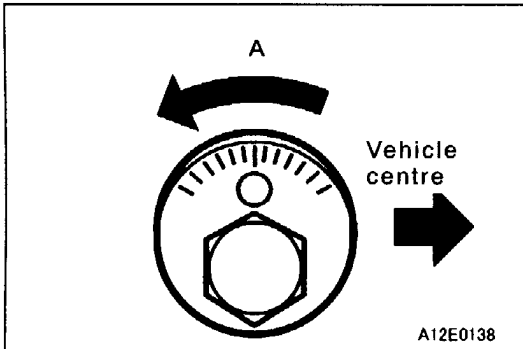


CAMBER, CASTER AND KINGPIN INCLINATION

Standard value:

Camber $0^{\circ}30' \pm 30'$ (difference between right and left wheel: less than $30'$)

Caster $3^{\circ}50' \pm 1^{\circ}$ (difference between right and left wheel: less than $30'$)



If camber or caster are not within the standard value, adjust by following procedures.

1. Adjust the camber and caster by turning the camber adjusting bolt of the lower arm. For the standard value, refer to the camber and caster adjusting table (P.33A-5).
2. After adjusting the camber, the toe should be adjusted.

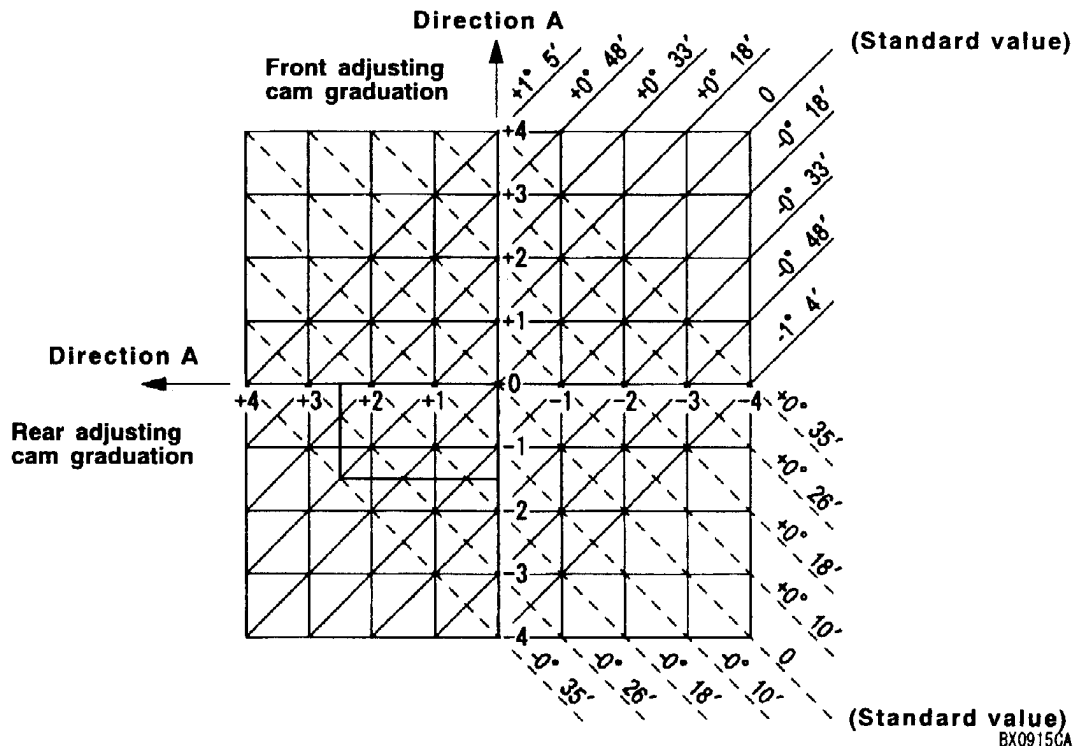
Camber And Caster Adjusting Table

HOW TO READ
(EXAMPLE)

Compare the measurement value with the standard value. When the camber is $-0^{\circ}35'$ and caster is $0^{\circ}18'$, turn the front adjusting cam by 1.5 graduations to the direction opposite to "A" and the rear adjusting cam by 2.5 graduations to the "A" direction.

NOTE

Solid lines show caster, broken lines shows camber.



SIDE SLIP

Measure the side slip with a side slip tester.

Standard value: 0 ± 3 mm

BALL JOINT DUST COVER CHECK

1. Check the dust cover for cracks or damage by pushing it with finger.
2. If the dust cover is cracked or damaged, replace the lower arm assembly or stabilizer link.

NOTE

Cracks or damage of the dust cover may cause damage of the ball joint.