

---

**GROUP 33**

# **FRONT SUSPENSION**

## **CONTENTS**

**GENERAL INFORMATION . . . . . 33-2**

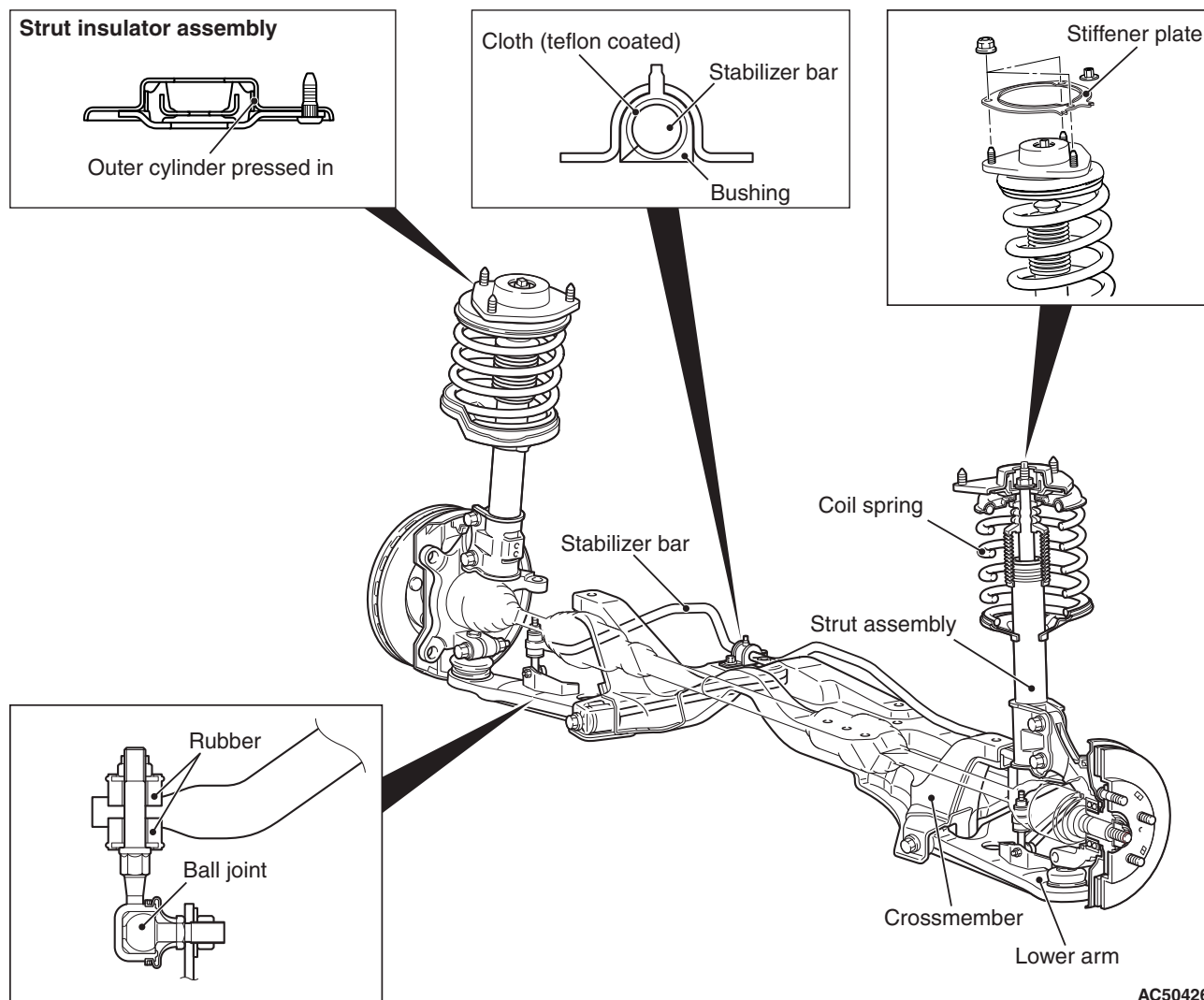
## GENERAL INFORMATION

M2330000100631

A McPherson strut independent type suspension has been adopted as the front suspension. This suspension is basically the same as that of the current LANCER except for the followings:

- The wheel centre is moved forwards and downwards for use with a large size tyre. The suspension is arranged so that optimum toe and camber can be obtained at this wheel position.
- Longer lower arms allow the wheel tread to be extended by 25 mm, improving stability and driveability.
- An increased caster angle improves straight ahead driving ability.
- A reinforcement has been added in the crossmember to enhance the crossmember-to-suspension joint and improve steering ability.
- Friction loss has been reduced by covering the stabilizer bar bushing contact surface with a Teflon™ coated cloth, and more rigid bushings enhance rolling rigidity.
- The stabilizer link arrangement has been tuned, and the stabilizer efficiency has been enhanced, which improves rolling rigidity and vehicle stability.
- The stabilizer link is connected to the lower arm with a ball joint. This reduces initial rolling during cornering and improves driving comfort.
- The damping force of the strut assembly and the coil spring constant are optimised to improve steering ability and riding comfort.
- The strut housing plate is thicker to improve strength and rigidity.
- The strut insulator is of an outer cylinder press-in type, which reduces friction noise and avoids water entry from the lower part of the strut insulator to the engine compartment.
- The stiffener plate has been added on the strut installation side to enhance rigidity of the installation side, causing steering ability to improve.

## CONSTRUCTION DIAGRAM



AC504269AB

## SPECIFICATIONS SUSPENSION SYSTEM

Item	Specification
Suspension method	McPherson strut with coil springs

## WHEEL ALIGNMENT

Item	Specification
Camber	0° 00'
Caster	3° 10'
Kingpin inclination	12° 05'
Toe-in	At the centre of tyre tread mm
	1
	Toe-angle (per wheel)
	0° 03'

## COIL SPRING

Item	2WD	4WD		
		Vehicles for General Export (except for South Africa and Argentina), GCC, Australia (LS, XLS models) and New Zealand (LS, XLS models)	Vehicles for South Africa and Argentina	Vehicles for Australia (VR-X models) and New Zealand (VR-X models)
Wire diameter mm	14	14	14	14
Average diameter mm	155 –160	155 –160	155 –160	155 –160
Free length mm	331	347	305	353