

REAR SUSPENSION

CONTENTS

E34AA--

<COLT, LANCER-Sedan>

SPECIFICATIONS	2
General Specifications	2
Service Specifications	2
SPECIAL TOOL	3
SERVICE ADJUSTMENT PROCEDURES	4
Rear Wheel Alignment Inspection and Adjustment	4
CONTROL LINK, UPPER LINK AND LOWER ARM	6
TRAILING ARM	9
STRUT ASSEMBLY	12
REAR CROSSMEMBER	15
STABILIZER BAR	16

<LANCER-Wagon>

SPECIFICATIONS	19
General Specifications	19
Service Specifications	19
SPECIAL TOOL	20
LATERAL ROD, ABSORBER AND SPRING ..	21
TORSION AXLE AND ARM (2WD)	23
UPPER CONTROL ARM, LOWER ARM (4WD)	25

REAR SUSPENSION <COLT, LANCER-Sedan> SPECIFICATIONS

GENERAL SPECIFICATIONS

E34CA-A

COLT

Items	2WD		4WD
	1300, 1500, 1600	1800	1600
Suspension system	Trailing arm-type multi link	Trailing arm-type multi link	Trailing arm-type multi link
Coil spring Wire dia. × O.D. × free length mm (in.) Identification colour Spring constant N/mm (kg/mm, lbs./in.)	9.5 × 96.5 × 359 (0.37 × 3.80 × 14.13) Light blue 16 (1.60, 90)	9.7 × 95.7 × 361 (0.38 × 3.77 × 14.21) Pink 17.1 (1.71, 96)	9.7 × 95.7 × 379 (0.38 × 3.77 × 14.92) Yellow green 15.8 (1.58, 88)
Shock absorber Type	Hydraulic cylindrical double acting type	<Vehicles built up to June, 1993> Hydraulic cylindrical double acting type (Gas-filled type) <Vehicles built from July, 1993> Hydraulic cylindrical double acting type	Hydraulic cylindrical double acting type
Stroke mm (in.)	175 (6.9), 161 (6.3)*	175 (6.9), 161 (6.3)*	175 (6.9), 161 (6.3)*
Damping force [at 0.3 m/sec. (0.9 ft./sec.)]			
Expansion N (kg, lbs.)	650 (65, 143)	1,000 (100, 220)	650 (65, 143)
Contraction N (kg, lbs.)	250 (25, 55)	450 (45, 99)	250 (25, 55)

NOTE

*: Indicates applicability to the high ground – clearance suspension

REAR SUSPENSION <COLT, LANCER-Sedan> – Specifications 34-2-1

LANCER-Sedan

Items	2WD			
	1300		1600	1800
	SNMEQL6	SNDEQL6/R6		
Suspension system	Trailing arm-type multi link	Trailing arm-type multi link	Trailing arm-type multi link	Trailing arm-type multi link
Coil spring Wire dia. × O.D. × free length mm (in.)	9.5 × 96.5 × 359 (0.37 × 3.80 × 14.13)	9.6 × 96.4 × 369 (0.38 × 3.79 × 14.53)	9.9 × 96.9 × 351.7 (0.39 × 3.81 × 13.85) 9.6 × 96.4 × 369* (0.38 × 3.79 × 14.53)	10.0 × 97.0 × 358.6 (0.39 × 3.82 × 14.12) 9.9 × 96.1 × 370* (0.39 × 3.78 × 14.57)
Spring constant N/mm (kg/mm, lbs./in.)	16 (1.60, 90)	15.9 (1.59, 89)	18.8 (1.88, 105) 15.9 (1.59, 89)*	19.0 (1.90, 106) 17.1 (1.71, 96)*
Identification colour	Light blue	Green	Orange + Pink Green*	Orange + Brown Brown*
Shock absorber Type	Hydraulic cylindrical double acting type	Hydraulic cylindrical double acting type	<Vehicles built up to June, 1993> Hydraulic cylindrical double acting type (Gas-filled type) Hydraulic cylindrical double acting type* <Vehicles built from July, 1993> Hydraulic cylindrical double acting type	Hydraulic cylindrical double acting type
Stroke mm (in.)	175 (6.9), 161 (6.3)*	175 (6.9), 161 (6.3)*	175 (6.9), 161 (6.3)*	175 (6.9), 161 (6.3)*
Damping force [at 0.3 m/sec. (0.9 ft./sec.)]				
Expansion N (kg, lbs.)	800 (80, 176) 650 (65, 143)*	800 (80, 176) 650 (65, 143)*	1,000 (100, 220) 650 (65, 143)*	1,000 (100, 220)
Contraction N (kg, lbs.)	300 (30, 66) 250 (25, 55)*	300 (30, 66) 250 (25, 55)*	450 (45, 99) 250 (25, 55)*	450 (45, 99)
Identification colour	Blue Light green*	Blue Light green*	Yellow Light green*	Yellow Green*

NOTE

*: Indicates high ground-clearance suspension.

34-2-2 REAR SUSPENSION <COLT, LANCER-Sedan> - Specifications

Items	2WD		4WD
	2000D		
	SNMQL6 SNDQL6 SNML6 SNDL6/R6	SNJQL6 SNJL6/R6	
Suspension system	Trailing arm-type multi link	Trailing arm-type multi link	Trailing arm-type multi link
Coil spring Wire dia. x O.D. x free length mm (in.)	9.6 x 96.4 x 369 (0.38 x 3.79 x 14.53)	9.9 x 96.9 x 351.7 (0.39 x 3.81 x 13.85) 9.6 x 96.4 x 369* (0.38 x 3.79 x 14.53)	9.7 x 95.7 x 379 (0.38 x 3.77 x 14.92)
Spring constant N/mm (kg/mm, lbs./in.)	15.9 (1.59, 89)	18.8 (1.88, 105) 15.9 (1.59, 89)*	15.8 (1.58, 88)
Identification colour	Green	Orange + Pink Green*	Yellow green
Shock absorber Type	Hydraulic cylindrical double acting type	<Vehicles built up to June, 1993> Hydraulic cylindrical double acting type (Gas-filled type) Hydraulic cylindrical double acting type* <Vehicles built from July, 1993> Hydraulic cylindrical double acting type	Hydraulic cylindrical double acting type
Stroke mm (in.)	175 (6.9), 161 (6.3)*	175 (6.9), 161 (6.3)*	175 (6.9), 161 (6.3)*
Damping force [at 0.3 m/sec. (0.9 ft./sec.)]			
Expansion N (kg, lbs.)	800 (80, 176) 650 (65, 143)*	1,000 (100, 220) 650 (65, 143)*	800 (80, 176) 650 (65, 143)*
Contraction N (kg, lbs.)	300 (30, 66) 250 (25, 55)*	450 (45, 99) 250 (25, 55)*	300 (30, 66) 250 (25, 55)*
Identification colour	Blue Light green*	Yellow Light green*	Blue Light green*

NOTE

*: Indicates high ground-clearance suspension

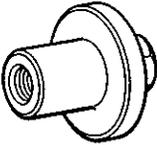
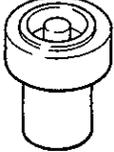
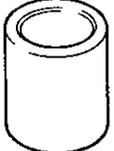
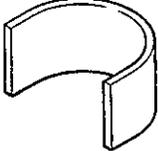
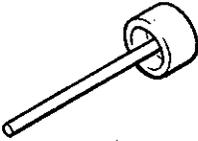
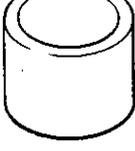
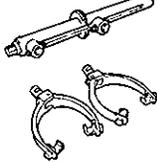
SERVICE SPECIFICATIONS

E34CB-A

Items	Specifications
Standard value	
Toe-in	
At the centre of tyre tread	mm (in.) 1-5 (0.04-0.20)
At the rim of disc wheel	mm (in.) 0.5-2.5 (0.02-0.10)
Toe angle (per wheel)	0°03'-0°15'
Camber (The difference between the left and right wheels should be 30' or less.)	-0°40'±30'
Clearance between the rear speed sensor's pole piece and the rotor's toothed surface	mm (in.) 0.3-0.9 (0.01-0.4)
Stabilizer link ball stud for continuous rotating torque	Nm (kgcm, in.lbs.) 0.6-1.3 (6-13, 5-11)

SPECIAL TOOLS

E34DA--

Tool	Number	Name	Use
	MB991014 <2WD> MB991004 <4WD>	Wheel alignment gauge attachment	Measurement of the wheel alignment (Vehicles with aluminium type wheels)
	MB991447	Bushing remover and installer	Driving out and press-fitting of lower arm bushing
	MB991448	Bushing remover and installer base	
	MB991449	Bushing remover and installer supporter	
	MB991444	Bushing remover and installer arbor	
	MB991445	Bushing remover and installer base	Driving out and press-fitting of trailing arm bushing
	MB991446	Bushing remover and installer spacer	
	MB991237 MB991239	Spring compressor body Arm set	

34-4 REAR SUSPENSION – Special Tools/Service Adjustment Procedures

Tool	Number	Name	Use
	MB990326	Preload socket	Checking of stabilizer link ball stud for continuous rotating torque
	MB990685	Torque wrench	

SERVICE ADJUSTMENT PROCEDURES

E34FAAQ

REAR WHEEL ALIGNMENT INSPECTION AND ADJUSTMENT

Measure the wheel alignment with the vehicle parked on level ground.

The rear suspension and wheels should be serviced to the normal condition prior to measurement of wheel alignment.

CAMBER

Standard value: $-0^{\circ}40' \pm 30'$

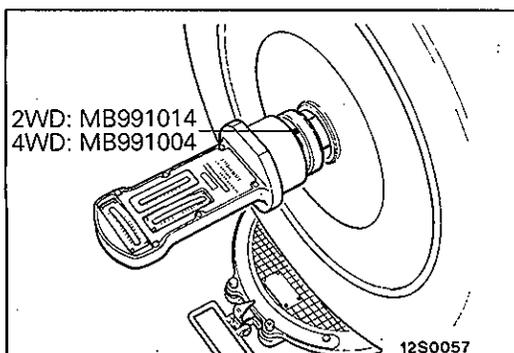
(The difference between the left and right wheels should be 30' or less.)

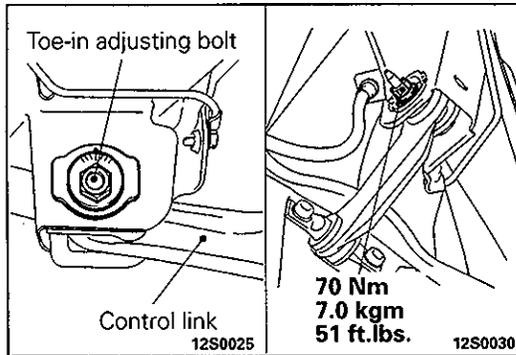
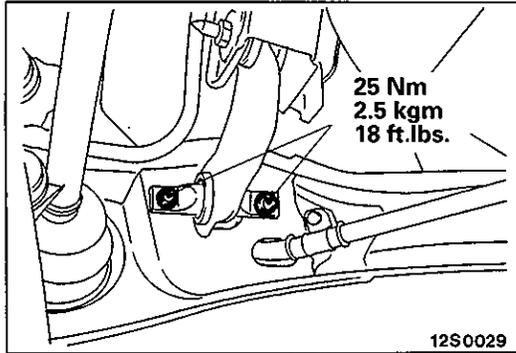
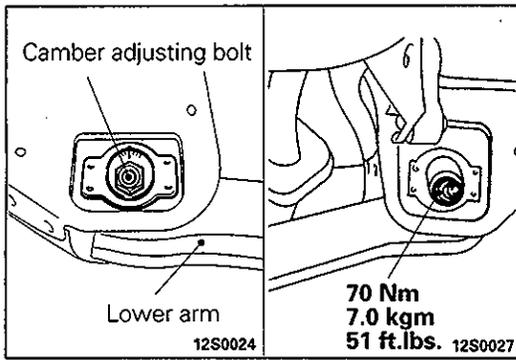
NOTE

For vehicles equipped with aluminium wheels, measure the camber after tightening the special tool (2WD: MB991014, 4WD: MB991004) to the specified torque [2WD: 180 Nm (18 kgm, 130 ft.lbs.); 4WD: 200–260 Nm (20–26 kgm, 145–188 ft.lbs.)].

Caution

Never subject the wheel bearings to the full vehicle load when the flange nuts (2WD) or drive shaft nuts (4WD) are loosened.





- If outside the standard value, adjust by the following procedure.
- (1) Remove the connection between the control link and the trailing arm.
 - (2) Adjust by turning the camber adjusting bolt (mounting bolt for the lower arm and rear crossmember).

Left wheel: clockwise + camber
Right wheel: clockwise – camber
The scale has gradations of approximately 14'

- (3) Tighten the control link to the trailing arm at the specified torque.
- (4) After adjusting the camber, be sure to adjust the toe-in.

TOE-IN

Standard value:

At the centre of tyre tread 1–5 mm (0.04–0.20 in.)
At the rim of disc wheel 0.5–2.5 mm (0.02–0.10 in.)
Toe angle (per wheel) 0°03'–0°15'

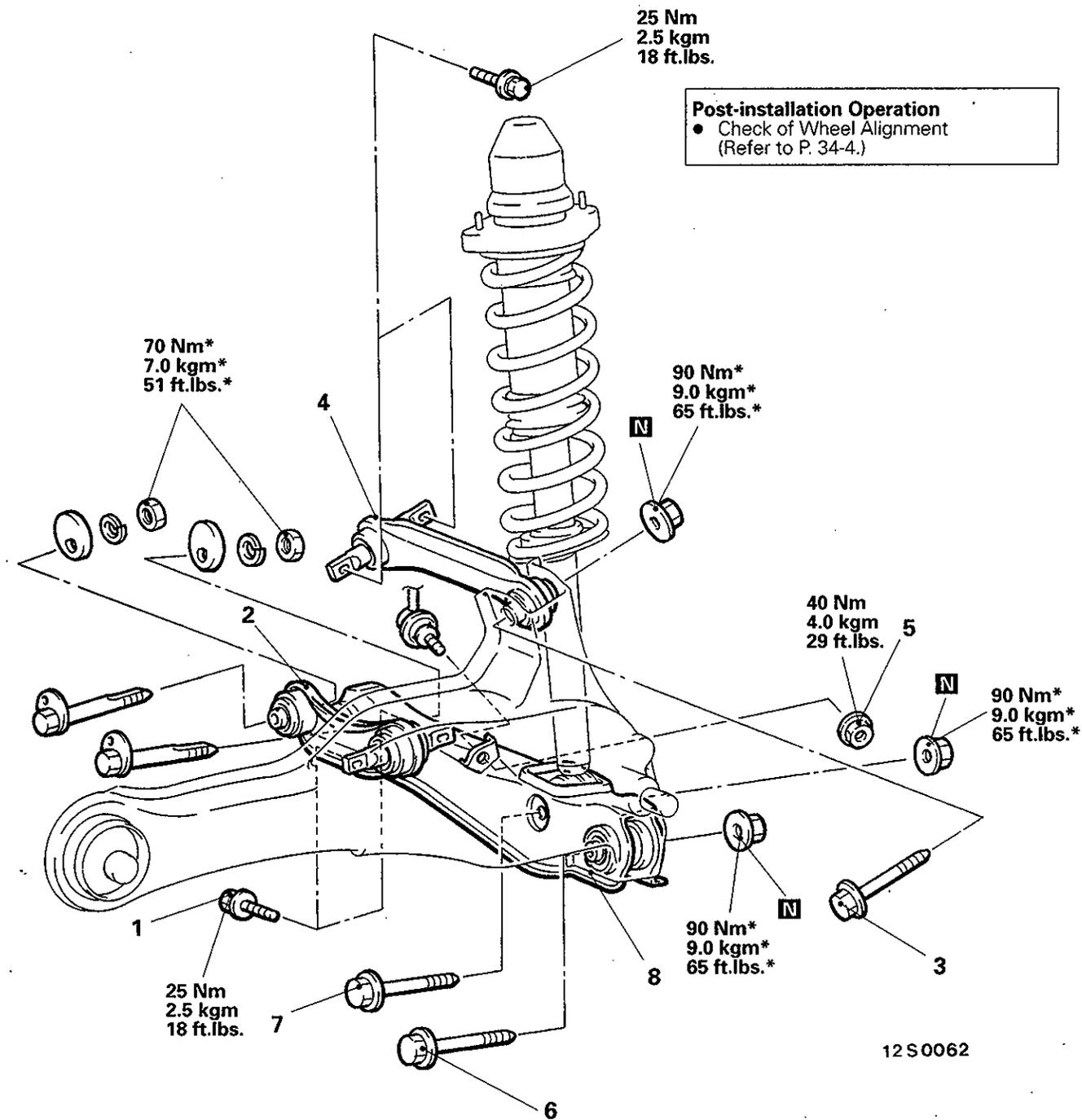
- If outside the standard value, adjust by the following procedure.
- (1) Be sure to adjust the camber before adjusting the toe-in.
 - (2) Adjust by turning the toe adjusting bolt (mounting bolt on the inside of the control link).

LH: Turning clockwise → toe-in direction
RH: Turning clockwise → toe-out direction

The scale has gradations of approximately 2.6 mm (0.102 in.) (single side toe angle equivalent to 16')

**CONTROL LINK, UPPER LINK AND LOWER ARM
REMOVAL AND INSTALLATION**

E34LA-



Post-installation Operation
 • Check of Wheel Alignment
 (Refer to P. 34-4.)

Removal steps of control link

- 1. Control link and trailing arm connection
- 2. Control link

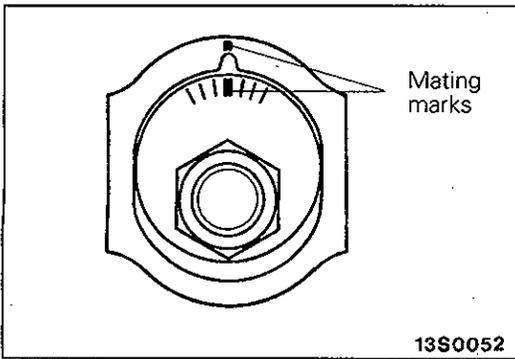
Removal steps of upper link

- 3. Upper link and trailing arm connection
- 4. Upper link

Removal steps of lower arm

- 1. Control link and trailing arm connection
- 5. Stabilizer link and lower arm connection
 <Vehicles with stabilizer bar>
- 6. Lower arm and trailing arm connection
- 7. Shock absorber assembly and lower arm connection
- 8. Lower arm

NOTE
 *Indicates parts which should be temporarily tightened, and then fully tightened with the vehicles in the unladen condition.

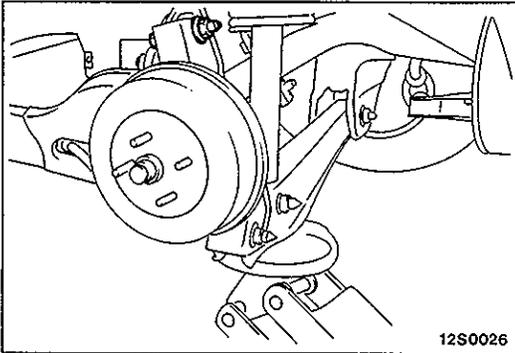


SERVICE POINTS OF REMOVAL

E34LBAD

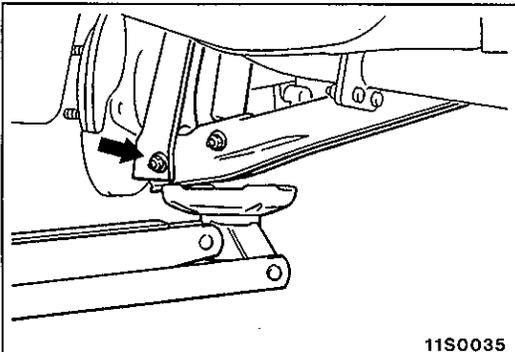
2. REMOVAL OF CONTROL LINK/8. LOWER ARM

After making a mating mark on the toe-in or camber adjusting bolt, remove the control link and lower arm.



3. DISCONNECTION OF UPPER LINK AND TRAILING ARM

After supporting the lower arm with a jack, separate the connection.



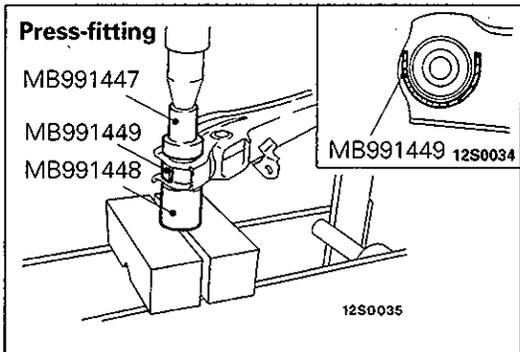
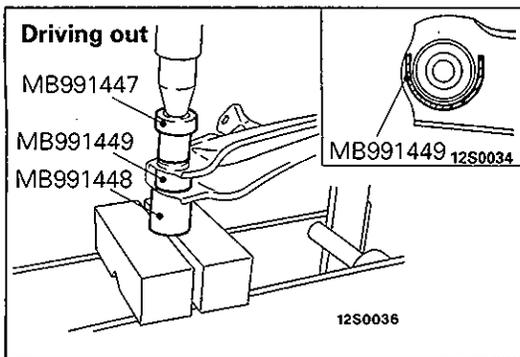
6. DISCONNECTION OF LOWER ARM AND TRAILING ARM

After supporting the lower arm with a jack, separate the connection.

INSPECTION

E34LCAC

- Check the bushing for wear and deterioration.
- Check the control link upper link and lower arm for bend or breakage.
- Check all bolts for condition and straightness.



LOWER ARM BUSHING REPLACEMENT

E34LFAB

Use the special tools to drive out and press-fit the lower arm bushing.

NOTE

If the special tool (MB991449) is hard to install, tap it with a plastic hammer.

Caution

Because the outside diameter of both edges of the bushing are different, be careful not to mistake the direction when driving out and press-fitting.

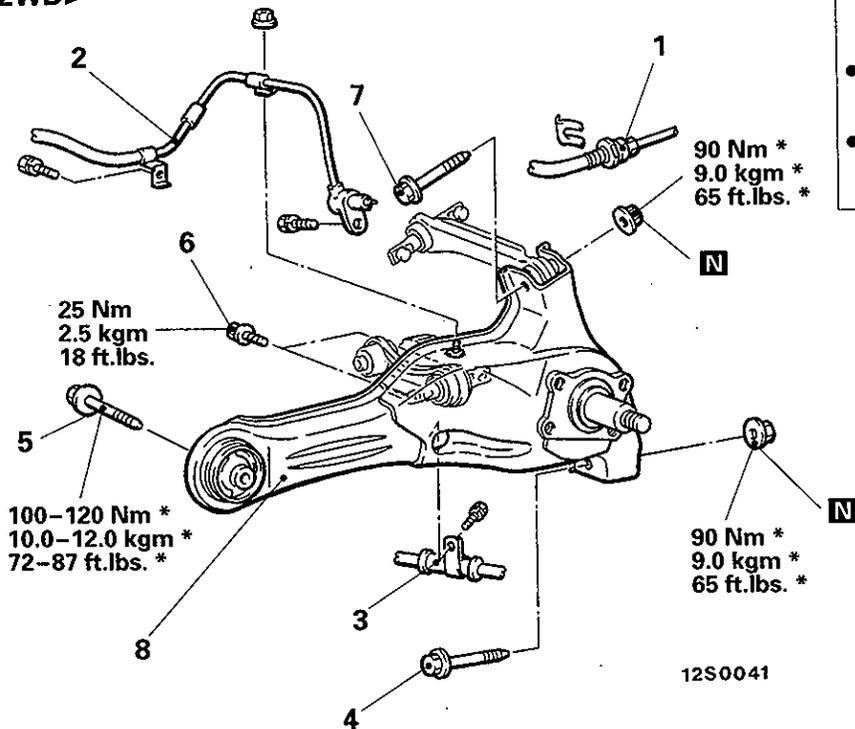
E340A--

**TRAILING ARM
REMOVAL AND INSTALLATION**

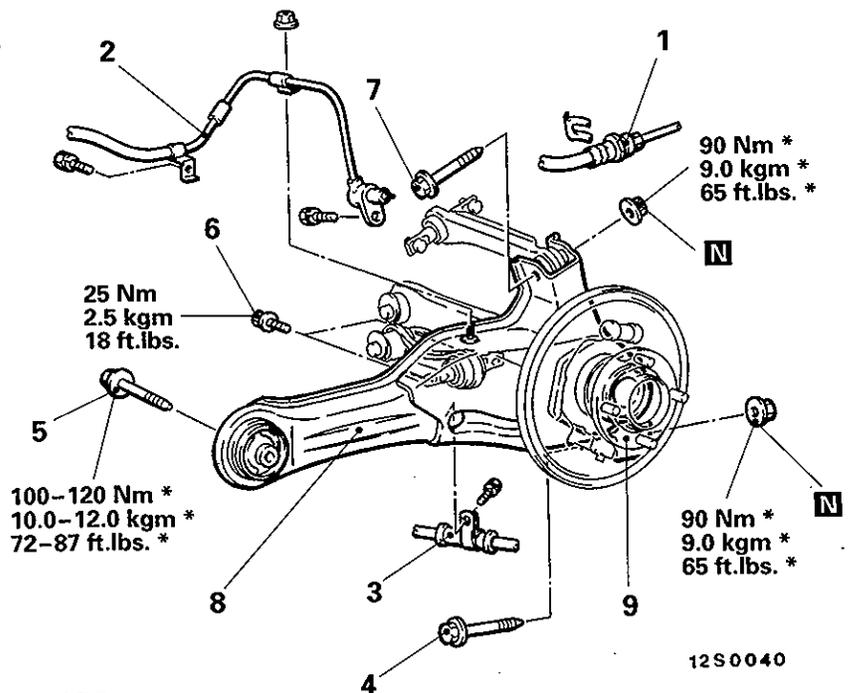
Pre-removal and Post-installation Operation

- Removal and installation of Rear Drum Brake or Rear Disc Brake (Refer to GROUP 35 – Rear Drum Brake or Rear Disc Brake.)
- Removal and Installation of Rear Axle Hub <2WD> (Refer to GROUP 27 – Rear Axle Hub.)
- Removal and Installation of Drive Shaft <4WD> (Refer to GROUP 27 – Drive Shaft.)

<2WD>



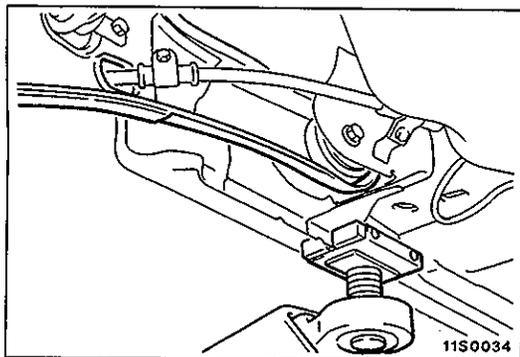
<4WD>



Removal steps

- 1. Brake hose
- ◆◆ ◆◆ 2. Rear speed sensor <Vehicles with ABS>
- ◆◆ 3. Parking brake cable
- ◆◆ 4. Lower arm and trailing arm connection
- 5. Trailing arm and body connection
- 6. Control link and trailing arm connection
- 7. Upper link and trailing arm connection
- 8. Trailing arm
- 9. Rear axle hub <4WD> (Refer to GROUP 27 – Rear Axle Hub.)

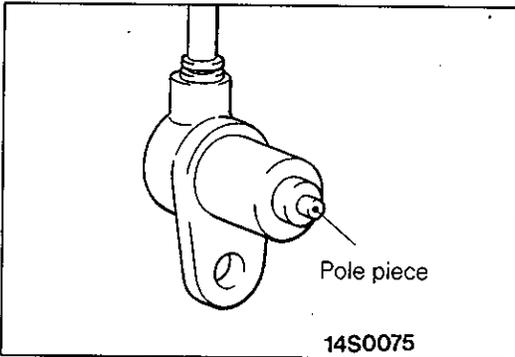
NOTE
*Indicates parts which should be temporarily tightened, and then fully tightened with the vehicles in the unladen condition.

**SERVICE POINTS OF REMOVAL**

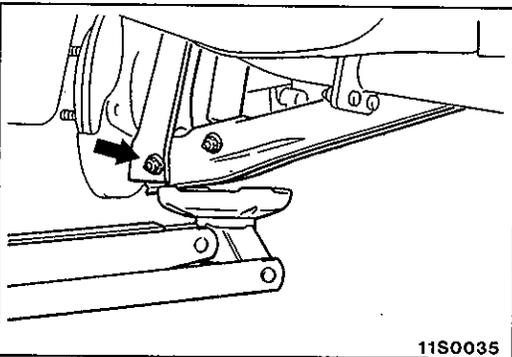
E340BAD

- **LIFTING POINT**

When removing the trailing arm, move the lifting arm slightly towards the front of the vehicle so that it will not be in the way.

**2. REMOVAL OF REAR SPEED SENSOR****Caution**

When removing the speed sensor, be careful that the pole piece at the end does not touch the surface of the rotor teeth or other parts.

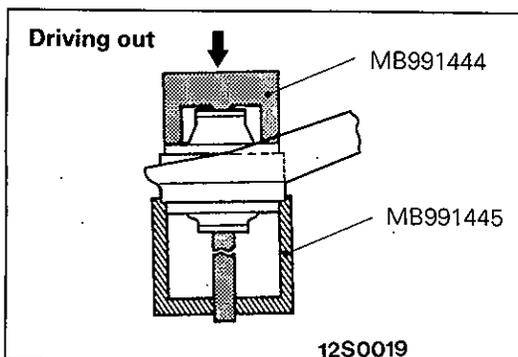
**4. DISCONNECTION OF LOWER ARM AND TRAILING ARM**

After supporting the lower arm with a jack, separate the lower arm and trailing arm connection.

INSPECTION

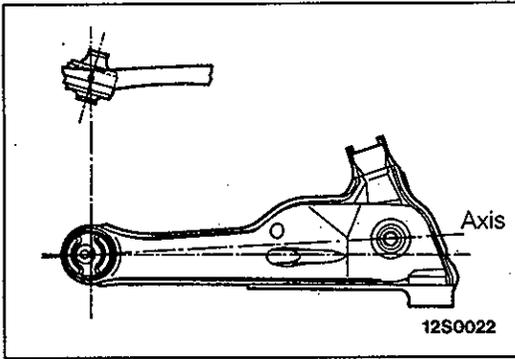
E340CAA

- Check trailing arm for cracks and deformation.
- Check bushing for cracks, deterioration and wear.

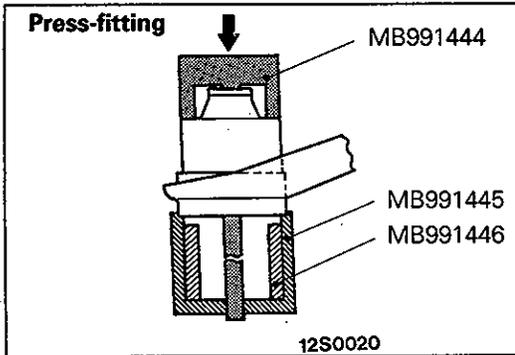
**TRAILING ARM BUSHING REPLACEMENT**

E340EAB

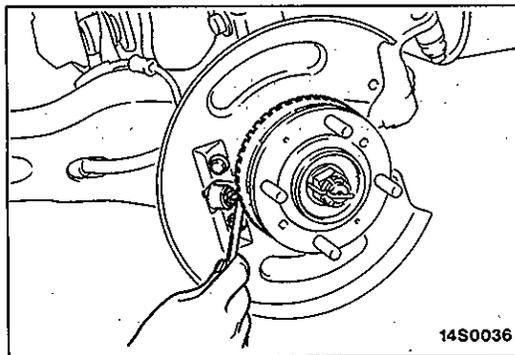
- (1) Use the special tools to drive out the trailing arm bushing.



- (2) Set the installation direction and installation location of the trailing arm bushing
1. Place the long projecting end of the trailing arm bushing inner pipe towards the inside of the vehicle.
 2. Set so that the trailing arm bushing is symmetrical to the axis between the centre of the trailing arm bushing and the centre of the spindle <2WD> or housing <4WD>.



- (3) Use the special tools to press-fit the trailing arm bushing.



SERVICE POINTS OF INSTALLATION

E340DAD

2. INSTALLATION OF REAR SPEED SENSOR

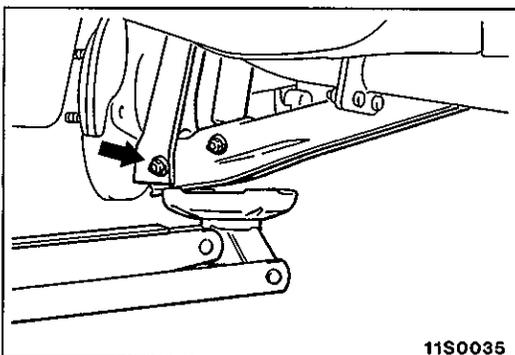
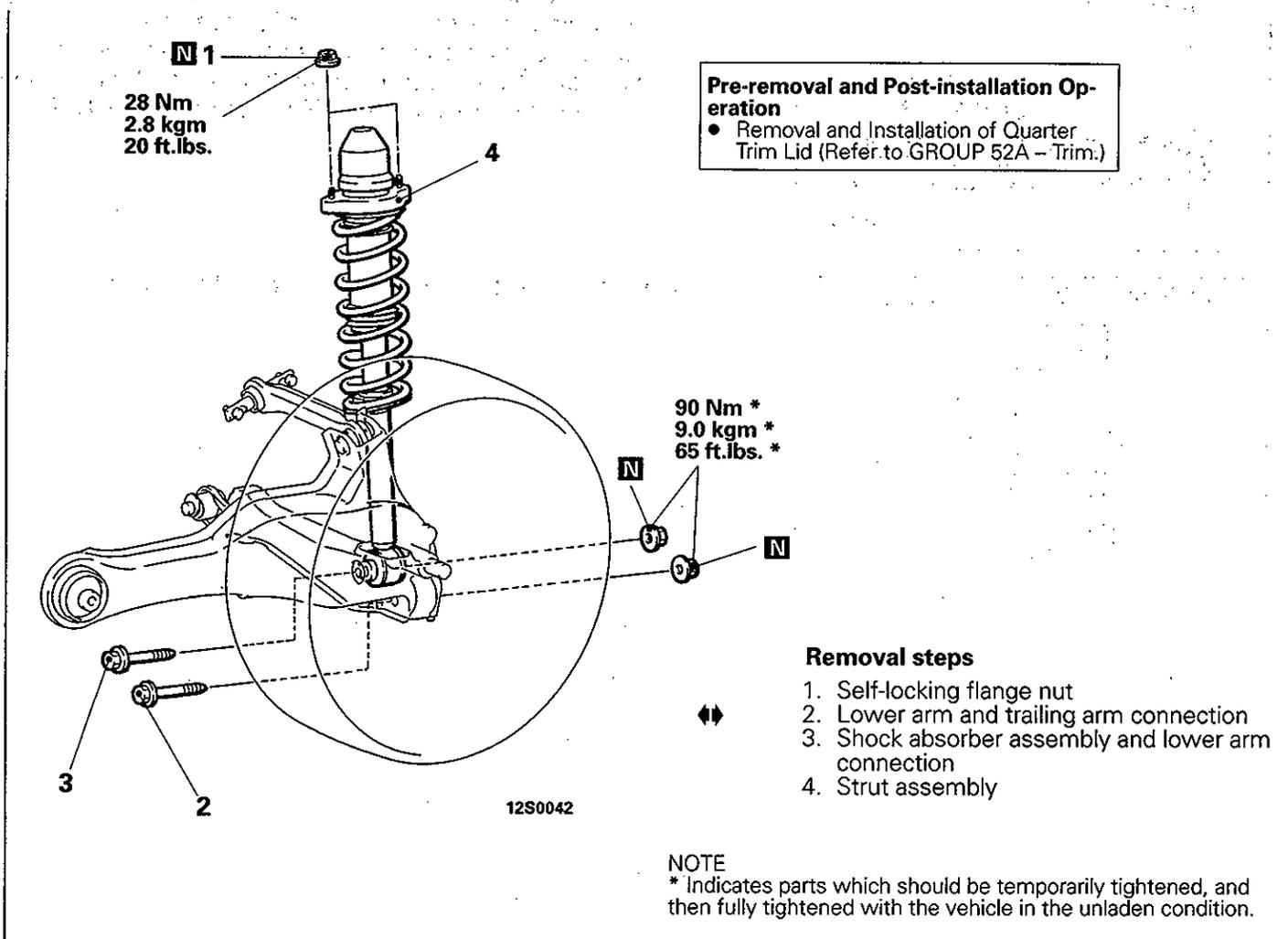
Insert a thickness gauge into the space between the speed sensor's pole piece and the rotor's toothed surface, and then tighten the sensor bracket at the position where the clearance is the standard value all around.

Standard value: 0.3–0.9 mm (0.012–0.035 in.)

Caution

Be careful that the pole piece at the end of the speed sensor and the surface of the rotor teeth do not become damaged by touching metal parts, etc.

STRUT ASSEMBLY REMOVAL AND INSTALLATION



SERVICE POINTS OF REMOVAL

2. DISCONNECTION OF LOWER ARM AND TRAILING ARM

After supporting the lower arm with a jack, separate the lower arm and trailing arm connection.

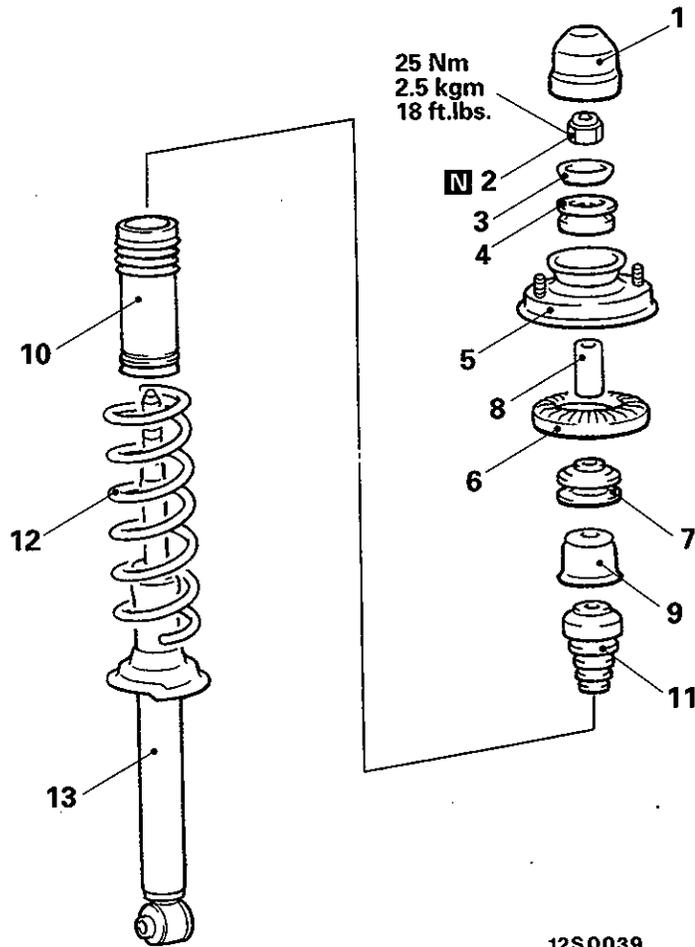
INSPECTION

- Check the rubber parts for cracks and wear.
- Check the shock absorber for malfunctions, oil leakage or abnormal noise.

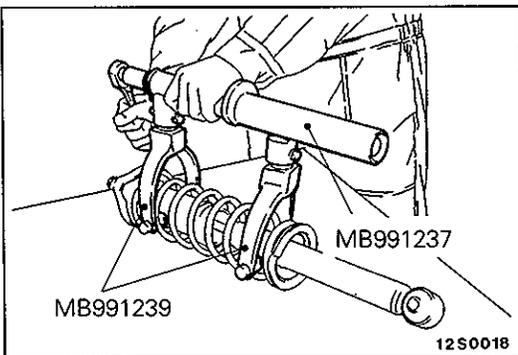
DISASSEMBLY AND REASSEMBLY

E34ME--

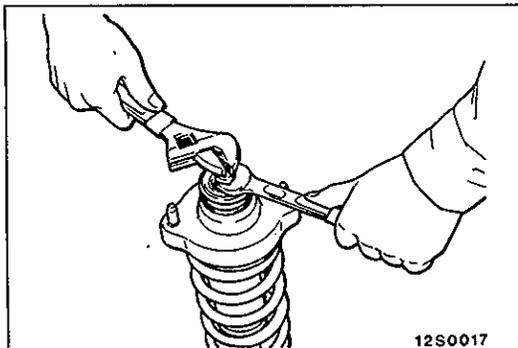
- Disassembly steps**
- ↔ ↔ 1. Cap
 - ↔ ↔ 2. Self-locking nut
 - ↔ ↔ 3. Washer
 - ↔ ↔ 4. Upper bushing B
 - ↔ ↔ 5. Bracket
 - ↔ ↔ 6. Spring pad
 - ↔ ↔ 7. Upper bushing A
 - ↔ ↔ 8. Collar
 - ↔ ↔ 9. Cup
 - ↔ ↔ 10. Dust cover
 - ↔ ↔ 11. Bump rubber
 - ↔ ↔ 12. Coil spring
 - ↔ ↔ 13. Shock absorber



12S0039



12S0018



12S0017

SERVICE POINTS OF DISASSEMBLY

E34MFAF

2. REMOVAL OF SELF-LOCKING NUT

- (1) Using the special tools, compress the coil spring.

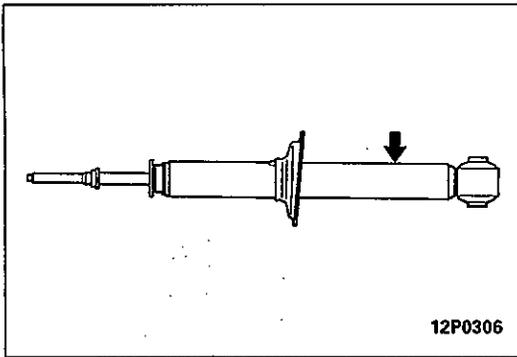
Caution

- (1) Install the special tools evenly, and so that maximum length will be attained within the installation range.
- (2) Do not use an air tool to tighten the bolt of the special tool.

- (2) Holding the piston rod, remove the self-locking nut.

Caution

Do not use an air tool.



13. REMOVAL OF SHOCK ABSORBER

To discard the low pressure gas-filled shock absorber, place the assembly horizontally with its piston rod extended. Then drill a hole approx. 3 mm (0.1 in.) in diameter at the location shown in the illustration and discharge the gas.

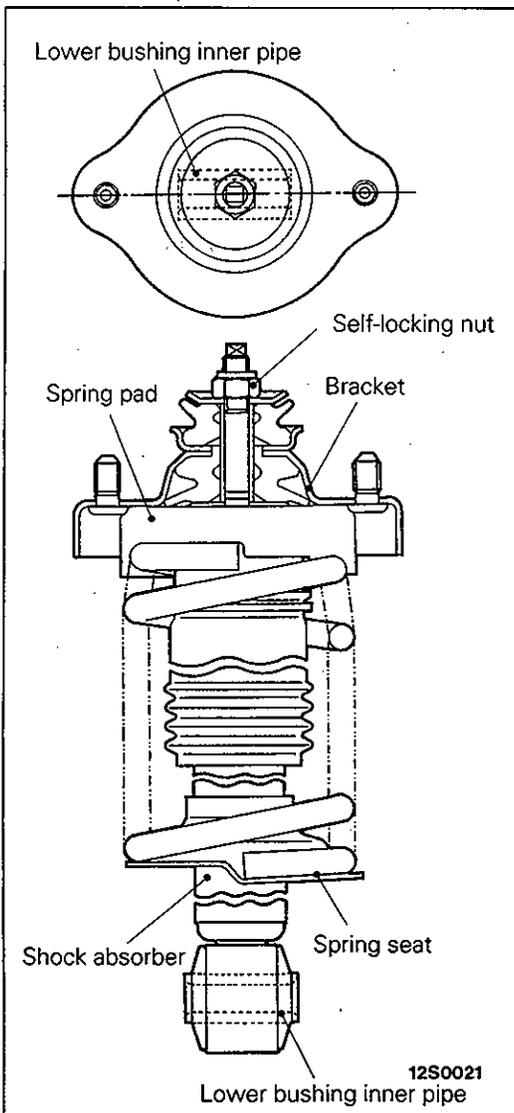
Caution

The gas itself is harmless but it may issue out of the hole together with chips generated by the drill. Therefore, be sure to wear goggles.

INSPECTION

E34MGAC

- Check the rubber parts for damage.
- Check the coil springs for crack; damage or deterioration.



SERVICE POINTS OF REASSEMBLY

E34MHAJ

12. INSTALLATION OF COIL SPRING

- (1) Use the special tools (MB991237, MB991239) to compress the coil spring, and install it to the shock absorber.

Caution

Do not use an air tool to tighten the bolt of the special tool.

- (2) Align the end of the coil spring with the stepped section of the spring seat of the shock absorber.

6. INSTALLATION OF SPRING PAD

Align the stepped section of the spring pad with the end of the coil spring, and install the spring pad.

5. INSTALLATION OF BRACKET

Install the bracket so that the lower bushing inner pipe of the shock absorber and the line between the bracket mounting bolts are straight when looking from above.

2. INSTALLATION OF SELF-LOCKING NUT

- (1) Provisionally tighten the self-locking nut.
- (2) Align the end of the coil spring with the stepped section of the spring seat of the shock absorber.

Caution

Do not use an air tool.

E34RA--

REAR CROSSMEMBER

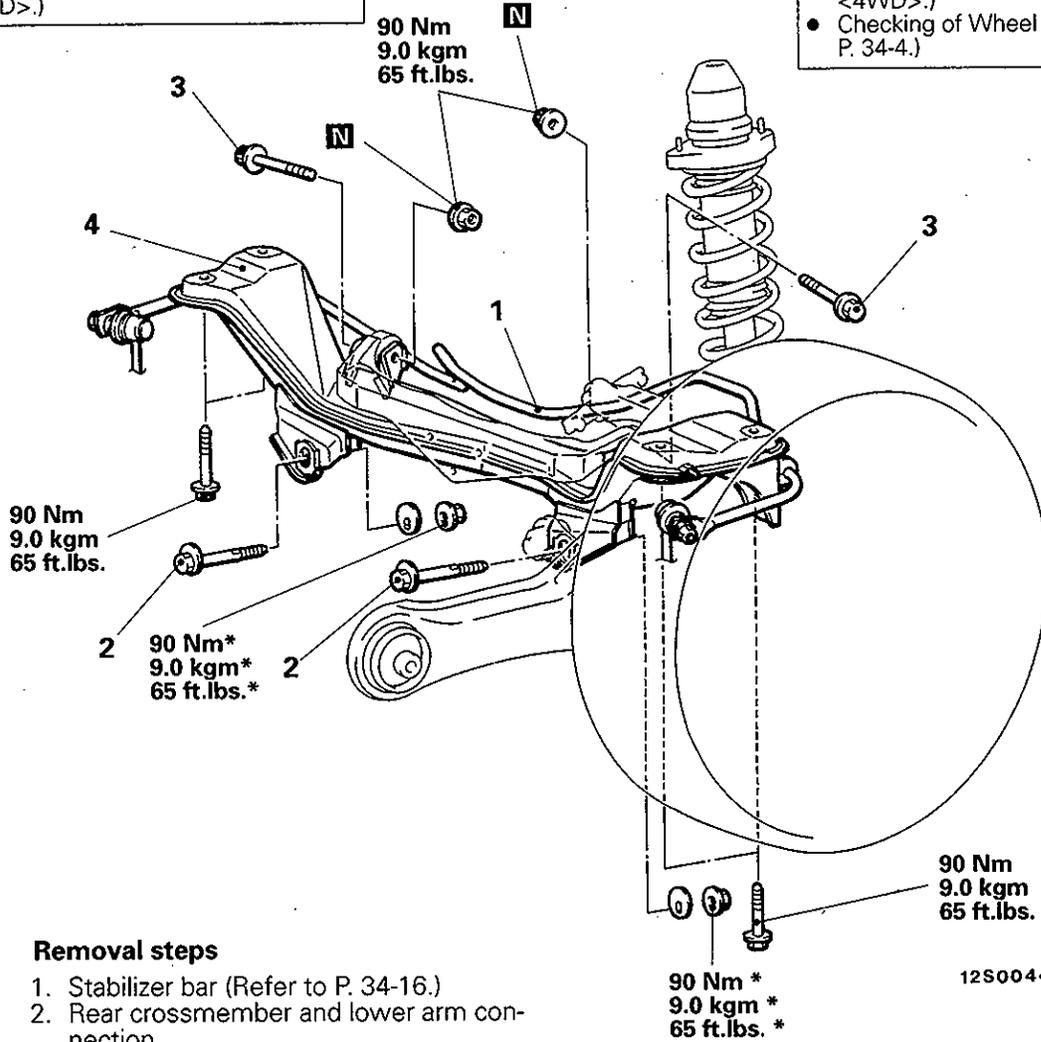
REMOVAL AND INSTALLATION

Pre-removal Operation

- Disconnection of Center Exhaust Pipe and Main Muffler (Refer to GROUP 15 - Exhaust Pipe and Main Muffler <4WD>.)

Post-installation Operation

- Connection of Center Exhaust Pipe and Main Muffler (Refer to GROUP 15 - Exhaust Pipe and Main Muffler <4WD>.)
- Checking of Wheel Alignment (Refer to P. 34-4.)



Removal steps

1. Stabilizer bar (Refer to P. 34-16.)
2. Rear crossmember and lower arm connection
3. Rear crossmember and differential support arm connection
4. Rear crossmember

NOTE

* Indicates parts which should be temporarily tightened, and then fully tightened with the vehicle in the unladen condition.

SERVICE POINTS OF REMOVAL

E34RBAB

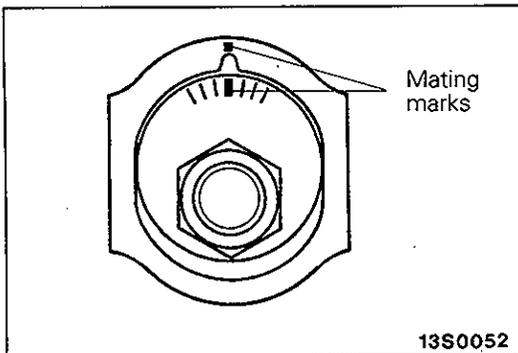
2. DISCONNECTION OF REAR CROSSMEMBER AND LOWER ARM

After making a mating mark on the camber adjusting bolt, separate the rear crossmember and lower arm connection.

INSPECTION

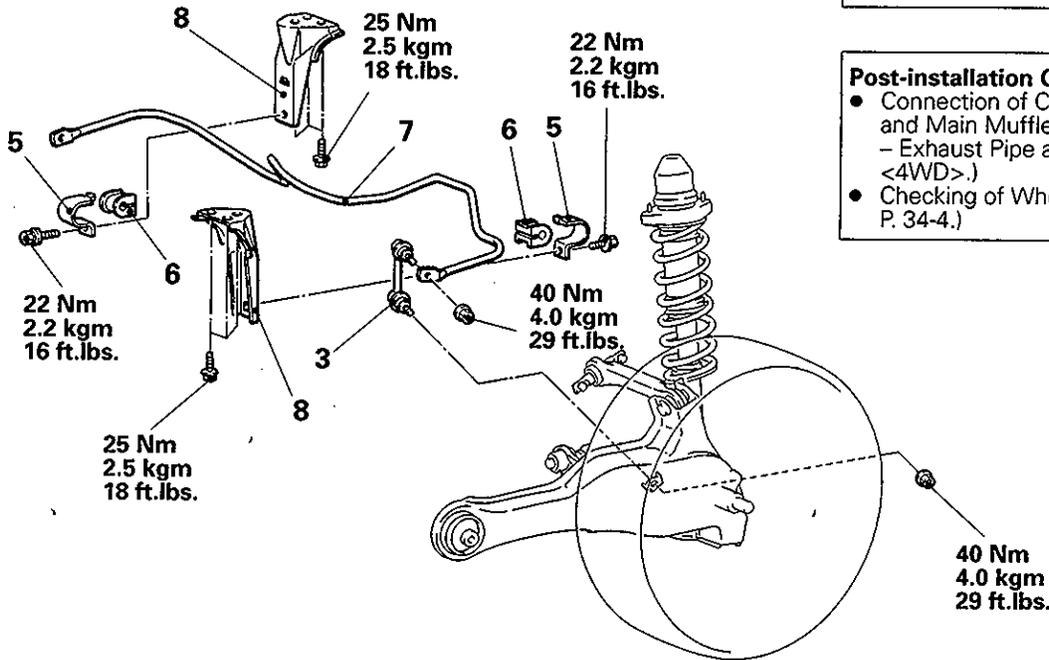
E34RCAA

- Check the crossmember for cracks or deformation.



STABILIZER BAR REMOVAL AND INSTALLATION

<2WD>

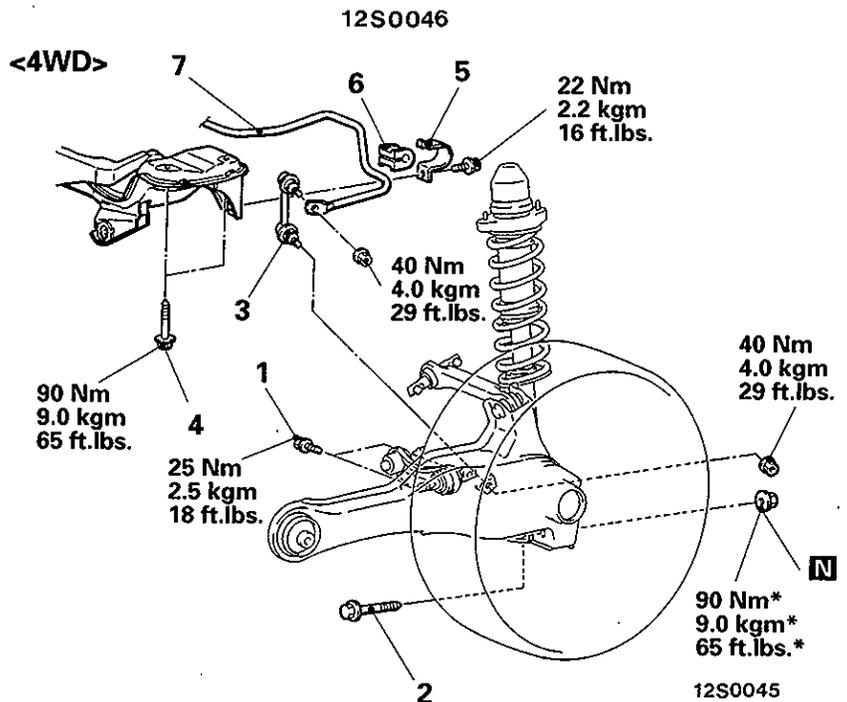
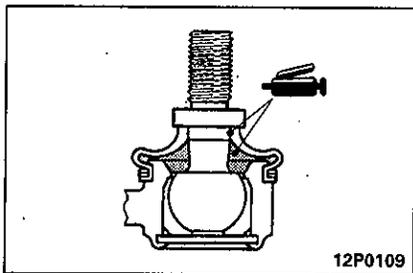


Pre-removal Operation.

- Disconnection of Center Exhaust Pipe and Main Muffler <4WD> (Refer to GROUP 15 – Exhaust Pipe and Main Muffler <4WD>.)

Post-installation Operation

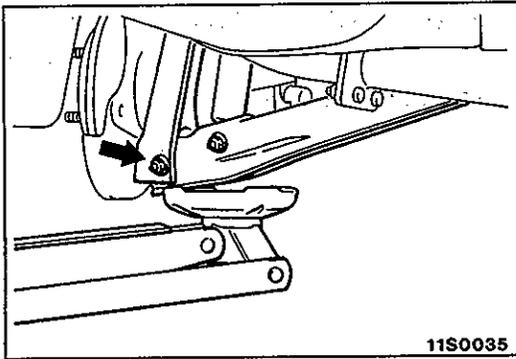
- Connection of Center Exhaust Pipe and Main Muffler (Refer to GROUP 15 – Exhaust Pipe and Main Muffler <4WD>.)
- Checking of Wheel Alignment (Refer to P. 34-4.)



Removal steps

- 1. Control link and trailing arm connection
- 2. Lower arm and trailing arm connection } <4WD>
- 3. Stabilizer link
- 4. Rear crossmember mounting bolt <4WD>
- 5. Fixture
- 6. Bushing
- 7. Stabilizer bar
- 8. Stabilizer bracket <2WD>

NOTE
* Indicates parts which should be temporarily tightened, and then fully tightened with the vehicle in the unladen condition.

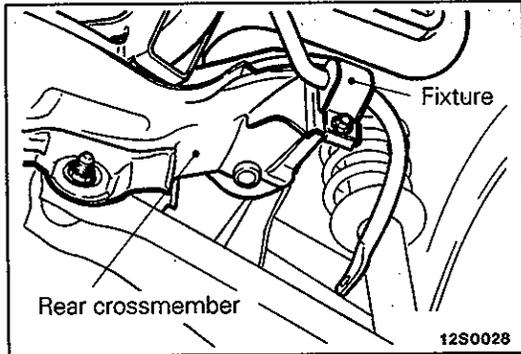


SERVICE POINTS OF REMOVAL

E34KBAE

2. DISCONNECTION OF LOWER ARM AND TRAILING ARM

After supporting the lower arm with a jack, separate the lower arm and trailing arm connection.



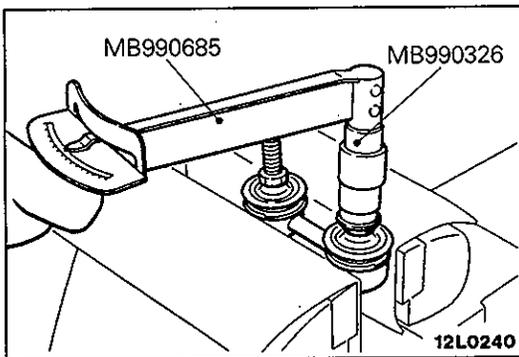
5. REMOVAL OF FIXTURE

Because the fixture on the right side of vehicles with 4WD will touch the fuel filler neck when it is removed, remove the fixture while lowering the rear crossmember.

INSPECTION

E34KCAE

- Check the bushing for wear and deterioration.
- Check the stabilizer bar for deterioration or damage.
- Check the stabilizer link ball joint dust cover for cracks.
- Check all bolts for condition and straightness.

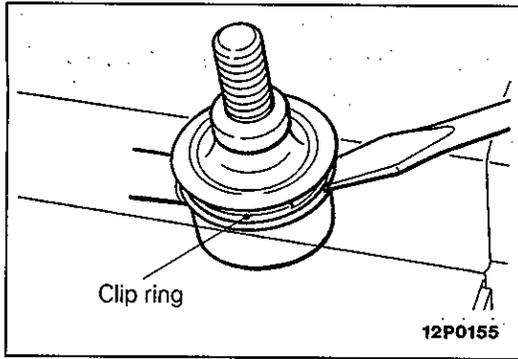


CHECKING OF STABILIZER LINK BALL STUD FOR CONTINUOUS ROTATING TORQUE

- (1) After shaking the stabilizer link ball stud several times, install the nut to the ball stud and use the special tool to measure the continuous rotating torque of the stabilizer link ball stud.

**Standard value: 0.6–1.3 Nm
(6–13 kgcm, 5–11 in.lbs)**

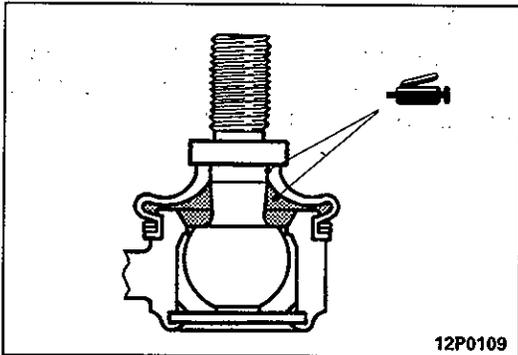
- (2) If the continuous rotating torque exceeds the upper limit of standard value, replace the stabilizer link.
- (3) Even if the continuous rotating torque is below the lower limit of the standard value, the ball joint may be reused unless it has drag and excessive play.



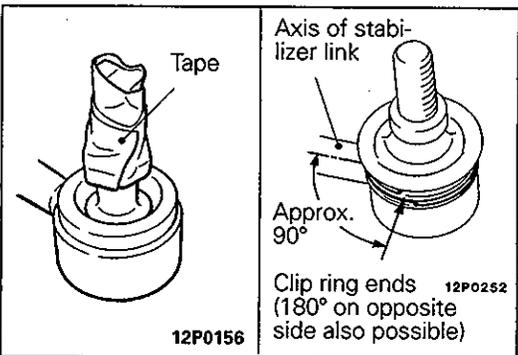
STABILIZER LINK BALL JOINT DUST COVER REPLACEMENT

E34KEAB

(1) Remove the clip ring and the dust cover.



(2) Apply multi-purpose grease to the lip and inside of the dust cover.

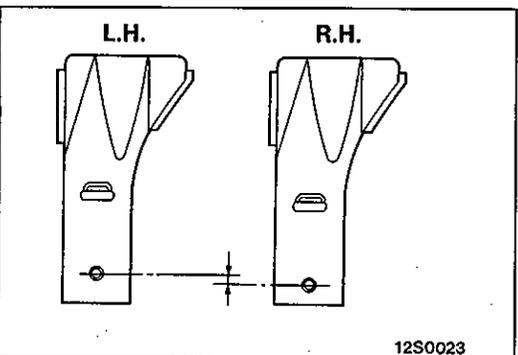


(3) Use vinyl tape to tape the stabilizer link where shown in the illustration, and then install the dust cover to the stabilizer link.

(4) Secure the dust cover with the clip ring.

NOTE

When installing the clip ring, align it so that its ends are located at a 90° angle from the axis of the stabilizer link.

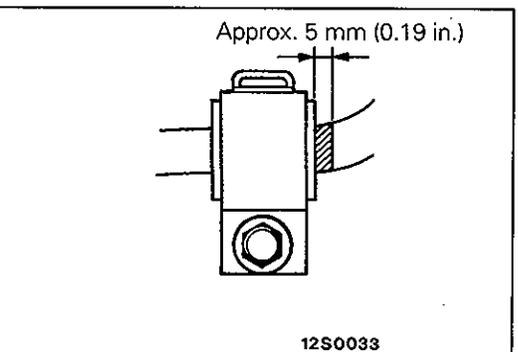


SERVICE POINTS OF INSTALLATION

E34KDAK

8. INSTALLATION OF STABILIZER BRACKET

Because the left and right installation positions of the fixtures are different, be careful not to make a mistake when installing the stabilizer bracket.



7. INSTALLATION OF STABILIZER BAR/6. BUSHING

Place the identification mark of the stabilizer bar to the left, and install the bushing so that the identification mark protrudes approximately 5mm (0.19in.) from the edge of the inside of the bushing.

**REAR SUSPENSION <LANCER-Wagon>
SPECIFICATIONS**

GENERAL SPECIFICATIONS

E34CA-B

Items	2WD	4WD
Suspension system	Torsion axle-type 3 link suspension	Axle-type 5 link suspension
Coil spring		
Wire dia. mm (in.)	12.6 - 14.3 (0.49 - 0.56) 10.2 - 14.9 (0.40 - 0.59)*	12.0 - 14.4 (0.47 - 0.57)
O.D. mm (in.)	93.6 - 116.6 (3.68 - 4.59) 94.8 - 117.8 (3.73 - 4.64)*	93.8 - 116.8 (3.69 - 4.60)
Free length mm (in.)	307.5 (12.11) 311.5 (12.26)*	308.5 (12.15)
Spring constant N/mm (kg/mm, lbs./in.)	34.3 - 80.0 (3.43 - 8.00, 192 - 448) 69.5 - 80.0 (6.95 - 8.00, 389 - 448)*	62.4 - 99.2 (6.24 - 9.92, 349 - 555)
Identification colour	Brown Brown +White*	Orange
Shock absorber		
Type	Hydraulic cylindrical double acting type Hydraulic cylindrical double acting type (Gas-filled type)*	Hydraulic cylindrical double acting type
Stroke mm (in.)	185 (7.3)	185 (7.3)
Damping force [at 0.3 m/sec. (0.9 ft./sec.)]		
Expansion N (kg, lbs.)	800 (80, 176)	1,200 (120, 265)
Contraction N (kg, lbs.)	350 (35, 77)	390 (39, 86)
Identification colour	Blue, Green*	Red

NOTE

*: Indicates high ground-clearance suspension

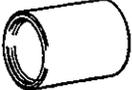
SERVICE SPECIFICATIONS

E34CB-B

Items	Specifications
Standard value	
Lateral rod damper installation position <4WD> mm (in.)	88 - 92 (3.46 - 3.62)

SPECIAL TOOL

E34DA-B

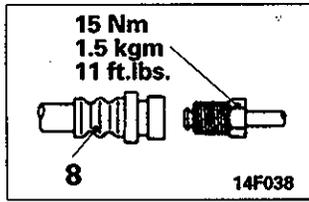
Tool	Number	Name	Use
	MB990651	Bar	Removal and press-fitting of lateral rod bushing
	MB990888	Bushing ring	
	MB990847	Bushing remover and installer base	
	MB991473	Bushing remover and installer	Removal and press-fitting of torsion axle and arm <2WD>
	MB991389	Bushing remover base	
	MB991470	Bushing remover and installer	
	MB991471	Bushing remover and installer base	Removal and press-fitting of lower arm bushing <4WD>
	MB991472	Bushing remover and installer support	

LATERAL ROD, ABSORBER AND SPRING

E34SA-

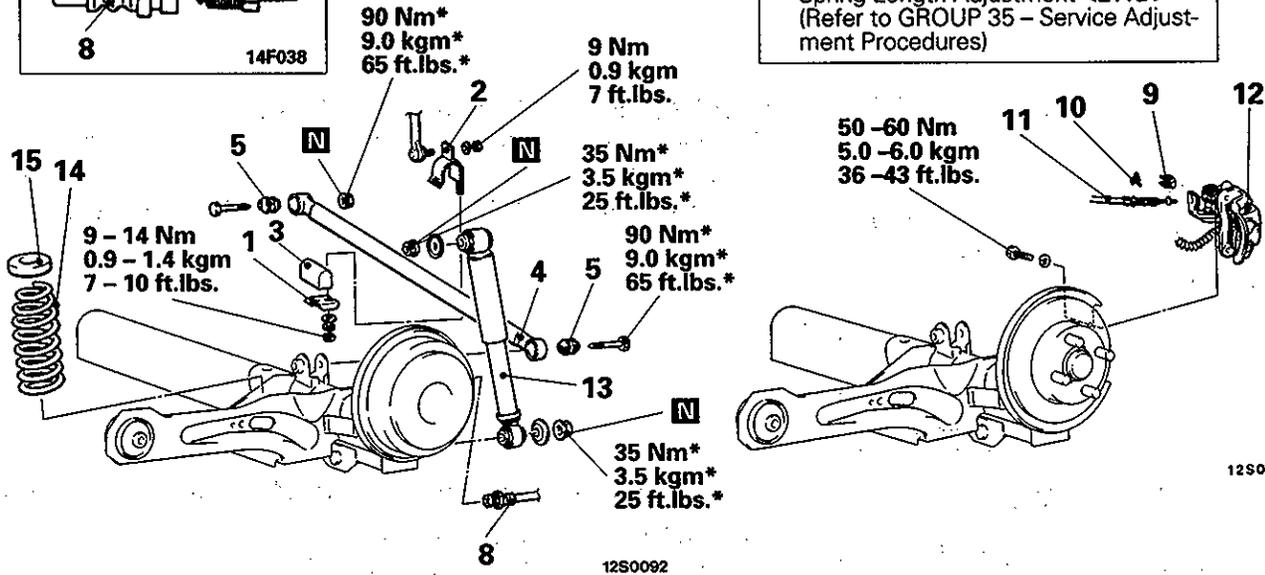
REMOVAL AND INSTALLATION

<2WD>

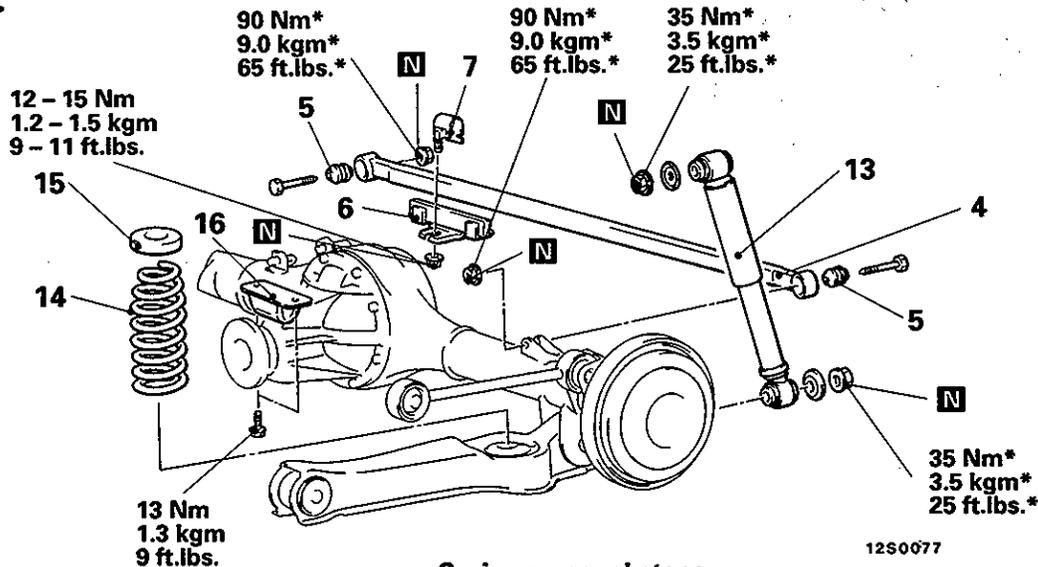


Post-installation Operation

- Supplying Brake Fluid and Bleeding Brake Lines <2WD-Rear Drum Brake> (Refer to GROUP 35-Service Adjustment Procedures)
- Load Sensing Proportioning Valve Spring Length Adjustment <2WD> (Refer to GROUP 35 - Service Adjustment Procedures)



<4WD>



Spring removal steps

- 8. Connection for the brake hose <2WD-Rear drum brake>
- 9. Retainer spring
- 10. Parking clip
- 11. Connection for the parking brake cable } <2WD-Rear disk brake>
- 12. Rear brake assembly
- 13. Absorber
- 14. Spring
- 15. Spring seat

- ◆◆ 1. Bracket
- ◆◆ 2. Link bracket
- ◆◆ 3. Spacer
- ◆◆ 4. Lateral rod assembly
- ◆◆ 5. Bushing
- ◆◆ 6. Damper
- ◆◆ 7. Bracket
- ◆◆ 13. Absorber
- ◆◆ 16. Carrier bumper

NOTE

* Indicates parts which should be temporarily tightened, and then fully tightened with the vehicle in the unladen condition.

SERVICE POINTS OF REMOVAL

E34SBAA

12. REMOVAL OF REAR BRAKE ASSEMBLY

Secure the removed rear brake assembly with wire or similar so that it does not fall.

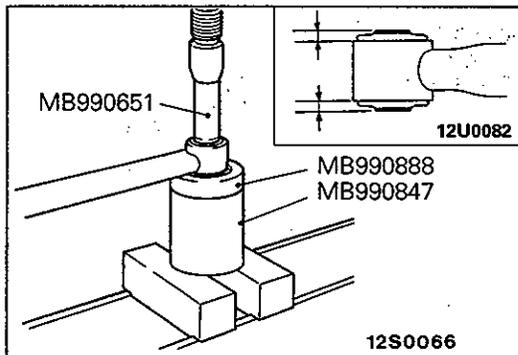
13. REMOVAL OF SHOCK ABSORBER

Before removing the shock absorber, support the axle housing with a jack or similar tool.

LATERAL ROD BUSHING REPLACEMENT

E34SCAA

- (1) Use the special tool to remove and press-fit the lateral rod bushing.
- (2) Install the bushing so that the projection length is uniform.

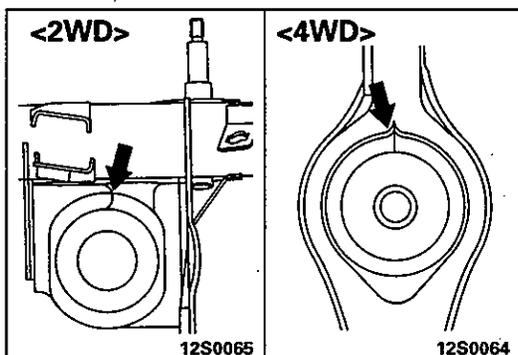


SERVICE POINTS OF INSTALLATION

E34SDAA

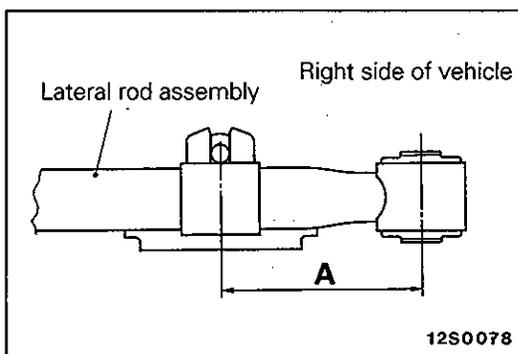
14. INSTALLATION OF SPRING

Align the end of the spring with the stepped section as shown in the illustration.

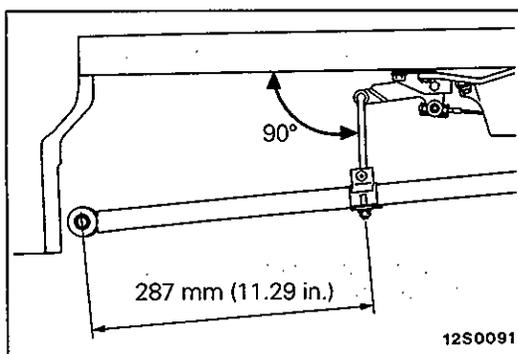


7. INSTALLATION OF BRACKET/6. DAMPER

Standard value (A): 88–92 mm (3.46–3.62 in.)



3. INSTALLATION OF SPACER/2. LINK BRACKET/1. BRACKET

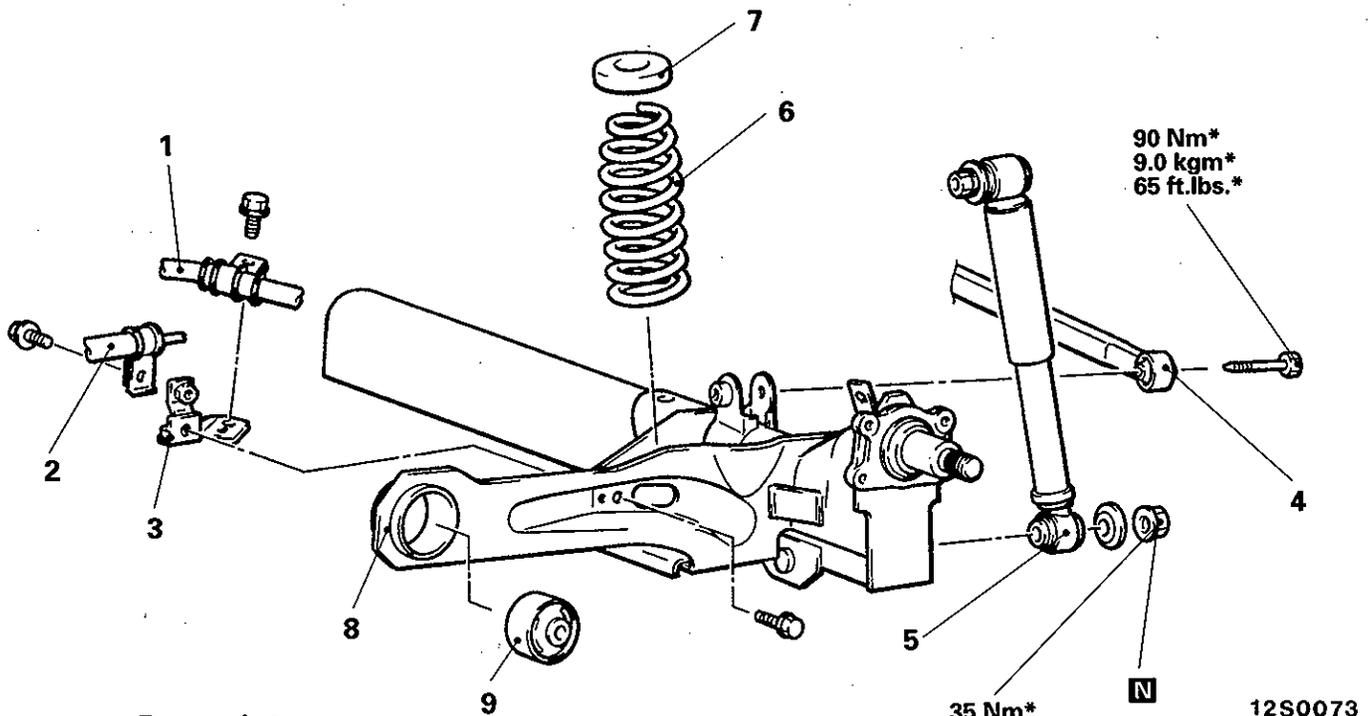


TORSION AXLE AND ARM <2WD>

REMOVAL AND INSTALLATION

Pre-removal and Post-installation Operations

- Removal and Installation of Rear Drum Brakes or Rear Disc Brakes (Refer to GROUP 35 – Rear Drum Brakes or Rear Disc Brakes)
- Removal and Installation of Rear Axle Hub (Refer to GROUP 27 – rear Axle Hub)



Removal steps

1. Parking cable connection
2. Rear speed sensor connection <Vehicles with ABS>
3. Bracket
4. Lateral rod lower section connection
5. Shock absorber lower section connection
6. Spring
7. Spring seat
8. Torsion axle and arm
9. Arm bushing

NOTE

*: Indicates parts which should be provisionally tightened, and then fully tightened with the vehicle lowered to the ground and in the unladen condition.

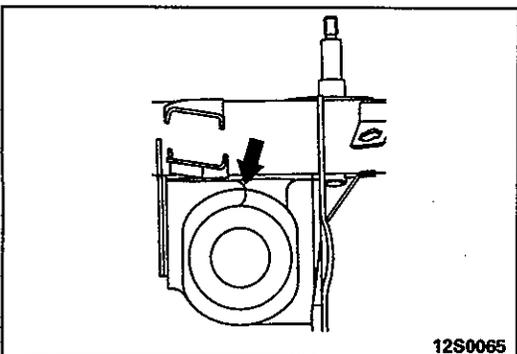
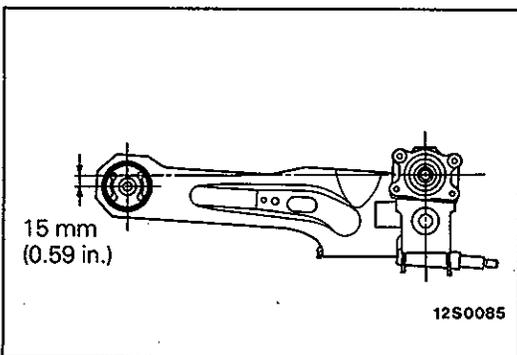
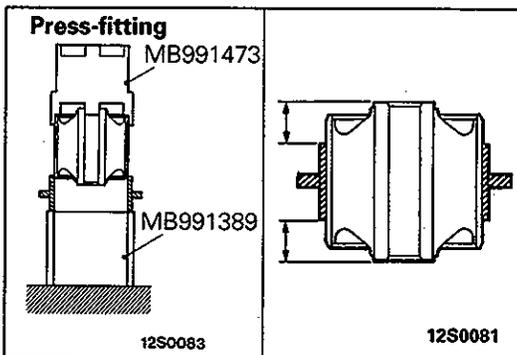
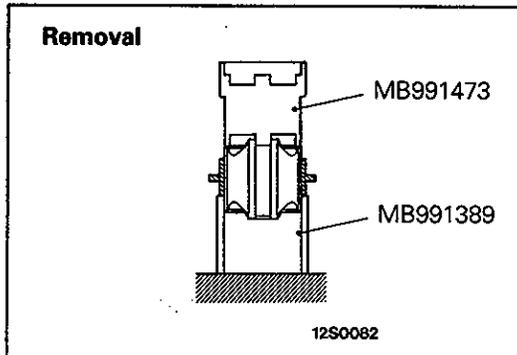
34-24 REAR SUSPENSION <LANCER-Wagon> -- Torsion Axle and Arm <2WD>

SERVICE POINTS OF REMOVAL

E34JBAF

5. REMOVAL OF SHOCK ABSORBER LOWER SECTION

Before removing the shock absorber, support the axle housing with a jack or similar tool.



ARM BUSHING REPLACEMENT

E34JEAB

(1) Use the special tool to remove and press-fit the arm bushing.

(2) Install the bushing so that the projection length is uniform.

(3) Install so that the hollow of the arm bushing is facing as shown in the illustration.

SERVICE POINTS OF INSTALLATION

E34JDAG

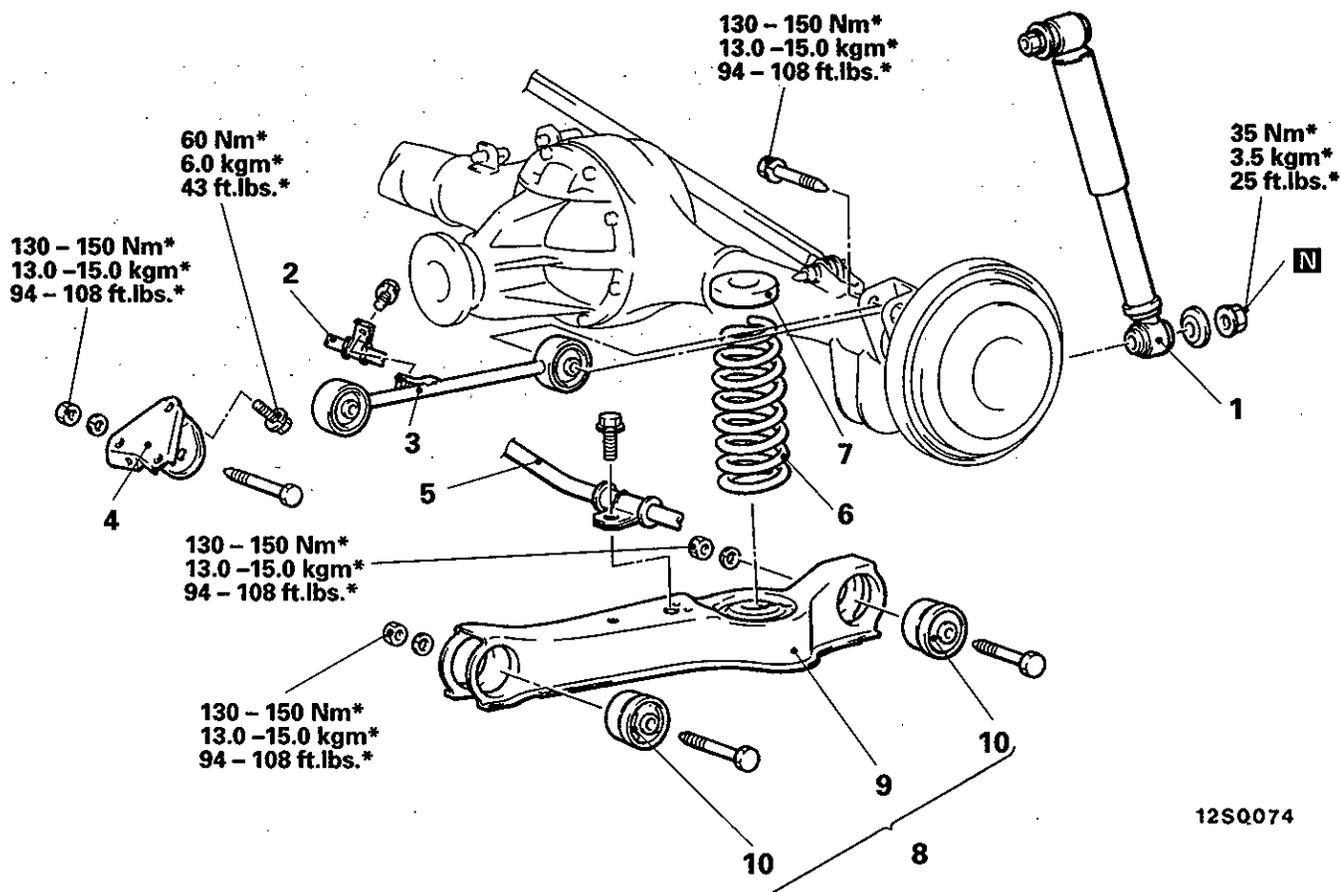
6. INSTALLATION OF SPRING

Align the end of the spring with the stepped section as shown in the illustration.

UPPER CONTROL ARM AND LOWER ARM <4WD>

E34LA-

REMOVAL AND INSTALLATION



12SQ074

Removal steps

- ↔ 1. Shock absorber lower section connection
- 2. Rear speed sensor connection <Vehicles with ABS>
- 3. Upper control arm
- 4. Upper control arm bracket
- 5. Installation of parking brake cable
- ↔ 6. Spring
- 7. Spring seat
- ↔ 8. Lower arm assembly
- 9. Lower control arm
- 10. Lower arm bushing

NOTE

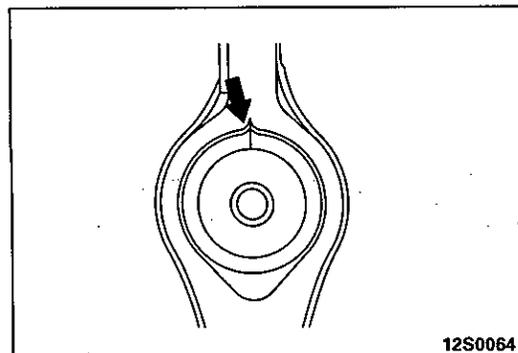
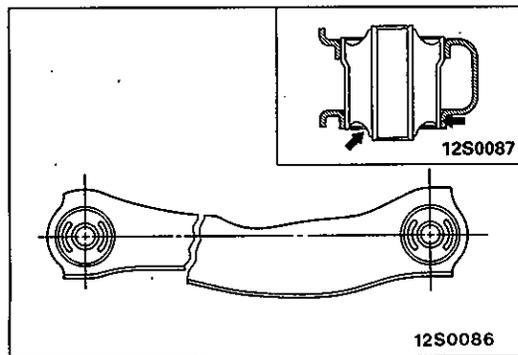
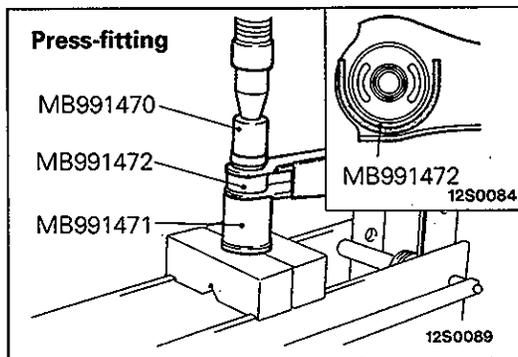
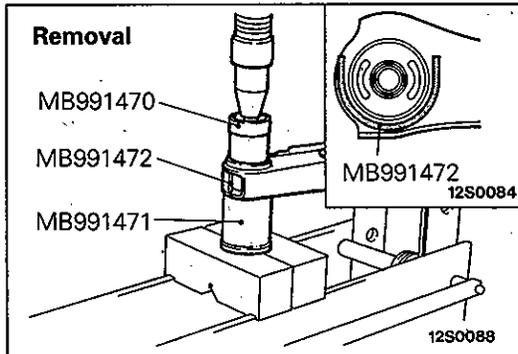
*: Indicates parts which should be provisionally tightened, and then fully tightened with the vehicle lowered to the ground and in the unladen condition.

SERVICE POINTS OF REMOVAL

E34LBAF

- 1. REMOVAL OF SHOCK ABSORBER LOWER SECTION**
Before removing the shock absorber, support the axle housing with a jack or similar tool.

- 8. REMOVAL OF LOWER ARM ASSEMBLY**
After lowering the axle housing as far as the point where the spring is fully extended, remove the lower control arm.



LOWER ARM BUSHING REPLACEMENT

E34LFAC

- (1) Use the special tool to drive out and press-fit the lower arm bushing.

NOTE

If the special tool (MB991472) is hard to install, tap it with a plastic hammer.

Caution

Because the outside diameter of both edges of the bushing are different, be careful not to mistake the direction when driving out and press-fitting.

- (2) Install so that the sections of the lower arm bushing and lower arm shown in the illustration are flush.

- (3) Install so that the hollow of the lower arm bushing is facing as shown in the illustration.

SERVICE POINTS OF INSTALLATION

E34LDAC

- 6. INSTALLATION OF SPRING**
Align the end of the spring with the stepped section as shown in the illustration.