

FRONT SUSPENSION



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SPECIFICATIONS

GENERAL SPECIFICATIONS

N02CA--

Items	1500	
	M/T	A/T
Suspension system	McPherson strut with coil spring and compression rod type	
Coil spring		
Wire dia. x O.D. x free length mm (in.)	12.4 x 170.4 x 389.5 (.49 x 6.71 x 15.33)	12.6 x 172.6 x 394.0 (.50 x 6.80 x 15.51)
Spring constant N/mm (lbs./in.)	16.0 (90)	16.4 (92)
Coil spring identification color	Pink	Brown
Shock absorber		
Type	Hydraulic, cylindrical double-acting type	
Maximum length mm (in.)	478 (18.8)	
Compressed length mm (in.)	320 (12.6)	
Stroke mm (in.)	158 (6.2)	
Damping force [at 0.3 m/sec. (.9ft./sec.)]		
Expansion N (lbs.)	700 (154)	
Contraction N (lbs.)	200 (44)	
Wheel bearing		
Type	Double-row angular-contact ball bearing	
O.D x I.D. mm (in.)	65 x 38 (2.56 x 1.50)	
Drive shaft		
Joint type		
Outer	*1R.J.	
Inner	*2T.J.	
Length mm (in.)		
Right hand shaft	695 (27.4)	
Left hand shaft	368 (14.5)	

NOTE

*1R.J.: Rzeppa joint

*2T.J.: Tripod joint

Items	1600-N/A	
	M/T	A/T
Suspension system	McPherson strut with coil spring and compression rod type	
Coil spring		
Wire dia. x O.D. x free length mm (in.)	13.0 x 171.8 x 370.5 (.51 x 6.76 x 14.59)	13.0 x 171.8 x 378.5 (.51 x 6.76 x 14.90)
Spring constant N/mm (lbs./in.)	19.0 (106)	19.0 (106)
Coil spring identification color	Orange	Gray
Shock absorber		
Type	Hydraulic, cylindrical double-acting type (*1F.T.C. type)	
Maximum length mm (in.)	478 (18.8)	
Compressed length mm (in.)	320 (12.6)	
Stroke mm (in.)	158 (6.2)	
Damping force [at 0.3 m/sec. (.9ft./sec.)]		
Expansion N (lbs.)	700 – 1,300 (154 – 287)	
Contraction N (lbs.)	300 – 450 (73 – 99)	
Wheel bearing		
Type	Double-row angular-contact ball bearing	
O.D x I.D. mm (in.)	65 x 38 (2.56 x 1.50)	
Drive shaft		
Joint type		
Outer	*2B.J.	*2B.J.
Inner	L.H. side: *3T.J. R.H. side: *4D.O.J.	*3T.J.
Length mm (in.)		
Right hand shaft	692 (27.2)	692 (27.2)
Left hand shaft	357 (14.1)	364 (14.3)

NOTE

*1F.T.C.: Frequency travel control

*2B.J.: Birfield joint

*3T.J.: Tripod joint

*4D.O.J.: Double offset joint

Items	.1600-T/C
Suspension system	McPherson strut with coil spring and compression rod type
Coil spring Wire dia. x O.D. x free length mm (in.) Spring constant N/mm (lbs./in.) Coil spring identification color	13.0 x 171.8 x 378.5 (.51 x 6.76 x 14.90) 19.0 (106) Gray
Shock absorber Type Maximum length mm (in.) Compressed length mm (in.) Stroke mm (in.) Damping force [at 0.3 m/sec. (.9 ft./sec.)] Expansion N (lbs.) Contraction N (lbs.)	Hydraulic, cylindrical double-acting type (* ¹ F.T.C. type) 478 (18.8) 320 (12.6) 158 (6.2) 700 – 1,300 (154 – 287) 330 – 450 (73 – 99)
Wheel bearing Type O.D x I.D. mm (in.)	Double-row angular-contact ball bearing 65 x 38 (2.56 x 1.50)
Drive shaft Joint type Outer Inner Length mm (in.) Right hand shaft Left hand shaft	* ² B.J. L.H. side: * ³ T.J. R.H. side: * ⁴ D.O.J. 346 (13.6) 351 (13.8)
Center bearing and inner shaft assembly Center bearing O.D. x I.D. mm (in.) Inner shaft length mm (in.)	62 x 30 (2.44 x 1.18) 419.8 (16.5)

NOTE

*¹F.T.C.: Frequency travel control*²B.J.: Birfield joint*³T.J.: Tripod joint*⁴D.O.J.: Double offset joint

SERVICE SPECIFICATIONS

N02CB--

Items	Specifications
Standard value	
Toe-in mm (in.)	0 ± 3 ($0 \pm .12$)
Camber	$0^{\circ}00' \pm 30'$
Caster	$2^{\circ}20' \pm 30'$
Setting of T.J. boot length mm (in.)	
T.J.-R.J. type	
L.H.	80 ± 3 ($3.15 \pm .12$)
R.H.	85 ± 3 ($3.35 \pm .12$)
T.J.-B.J. type	
<1600-N/A-M/T, 1600-T/C>	80 ± 3 ($3.15 \pm .12$)
<1600-N/A-A/T>	
L.H.	80 ± 3 ($3.15 \pm .12$)
R.H.	85 ± 3 ($3.35 \pm .12$)
Setting of D.O.J. boot length mm (in.)	
<1600-N/A>	75 ± 3 ($2.95 \pm .12$)
<1600-T/C>	80 ± 3 ($3.15 \pm .12$)
Protruding length of stabilizer link mm (in.)	$3 - 5$ ($.12 - .20$)
Lower arm ball joint starting torque Nm (in.lbs.)	5.5 (48) or less
Stabilizer link ball joint starting torque Nm (in.lbs.)	1.7 – 3.2 (15 – 28)
Limit	
Wheel bearing end play mm (in.)	0.2 (.008) or less
Wheel bearing starting torque Nm (in.lbs.)	1.3 (11) or less

TORQUE SPECIFICATIONS

N02CC--

Items	Nm	ft.lbs.
Axle hub		
Drive shaft nut	200 – 260	144 – 188
Lower arm ball joint	60 – 72	43 – 52
Tie rod end ball joint	15 – 34	11 – 25
Caliper to knuckle	80 – 100	58 – 72
Knuckle to strut assembly	110 – 130	80 – 94
Hub to brake disc	50 – 60	36 – 43
Drive shaft		
Drive shaft nut	200 – 260	144 – 188
Lower arm ball joint	60 – 72	43 – 52
Tie rod end ball joint	15 – 34	11 – 25
Center bearing bracket to engine	36 – 46	26 – 33
Strut assembly		
Strut upper mounting nut	35 – 45	25 – 33
Strut assembly to knuckle	110 – 130	80 – 94
Strut top end nut	60 – 70	43 – 51

Items	Nm	ft.lbs.
Lower arm		
Lower arm ball joint	60 – 72	43 – 52
Stabilizer link mounting nut	55 – 70	40 – 51
Lower arm front mounting nut	95 – 120	69 – 87
Lower arm rear mounting bolt	60 – 80	43 – 58
Lower arm bushing (B) mounting nut <1600>	125 – 155	90 – 112
Stabilizer bar		
Tie rod end ball joint	15 – 34	11 – 25
Center member rear mounting bolt	60 – 80	43 – 58
Rear roll stopper mounting nut	45 – 60	33 – 43
Stabilizer link mounting nut	55 – 70	40 – 51
Stabilizer bar mounting bolt	17 – 26	12 – 19

LUBRICANTS

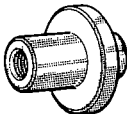
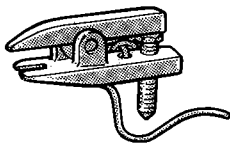
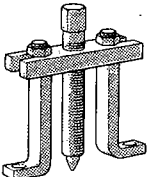
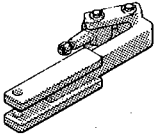
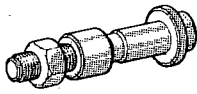
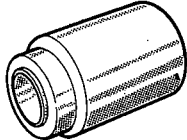
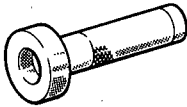
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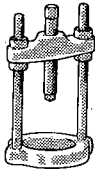
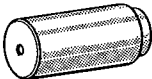
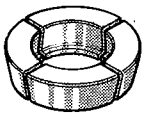
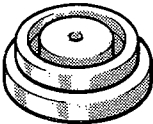
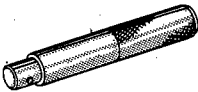
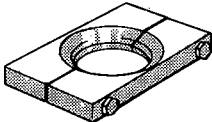

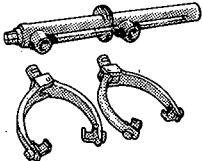
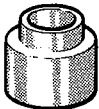
Items	Specified lubricants	Quantity
Outer surface of wheel bearing outer race	MOPAR Multi-mileage Lubricant Part Number 2525035 or equivalent	As required
Wheel bearing inner race	MOPAR Multi-mileage Lubricant Part Number 2525035 or equivalent	As required
Oil seal lip	MOPAR Multi-mileage Lubricant Part Number 2525035 or equivalent	As required
T.J.-R.J. type drive shaft		
R.J. boot grease	Repair kit grease	75 – 95 g (2.7 – 3.4 oz)
T.J. boot grease	Repair kit grease	115 – 135 g (4.1 – 4.8 oz)
Spider assembly	Repair kit grease	As required
T.J.-B.J. type drive shaft		
B.J. boot grease	Repair kit grease	90 g (3.2 oz)
T.J. boot grease	Repair kit grease	110 g (3.9 oz)
Spider assembly	Repair kit grease	As required
D.O.J.-B.J. type drive shaft		
D.O.J. boot grease		
<1600-N/A>	Repair kit grease	90 g (3.2 oz)
<1600-T/C>	Repair kit grease	110 g (3.9 oz)
B.J. boot grease	Repair kit grease	110 g (3.9 oz)
T.J.-B.J. type drive shaft and inner shaft		
B.J. boot grease	Repair kit grease	110 g (3.9 oz)
T.J. boot grease	Repair kit grease	130 g (4.6 oz)
Spider assembly	Repair kit grease	As required
Center bearing and center bearing bracket	MOPAR Multi-mileage Lubricant Part Number 2525035 or equivalent	As required
Dust seal	MOPAR Multi-mileage Lubricant Part Number 2525035 or equivalent	<Differential side> 7 – 10 g (.25 – .35 oz) <Drive shaft side> 4 – 6 g (.14 – .21 oz)
Inner shaft spline part	MOPAR Multi-mileage Lubricant Part Number 2525035 or equivalent	As required

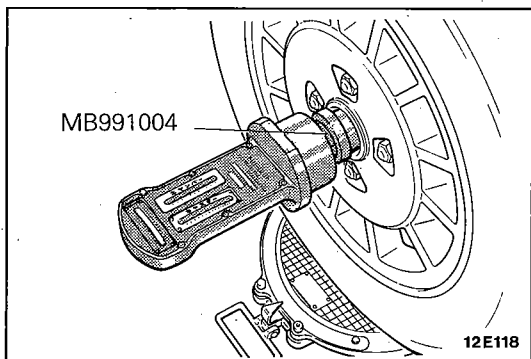
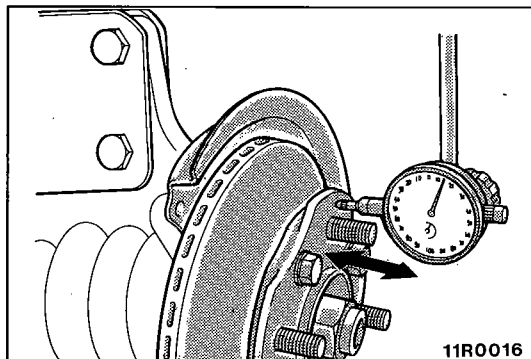
Items	Specified lubricants	Quantity
Strut insulator bearing	MOPAR Multi-mileage Lubricant Part Number 2525035 or equivalent	As required
Lower arm ball joint	MOPAR Multi-mileage Lubricant Part Number 2525035 or equivalent	As required
Stabilizer link	MOPAR Multi-mileage Lubricant Part Number 2525035 or equivalent	As required

SPECIAL TOOLS

N02DA--

Tool	Number	Name	Use
	MB991004	Wheel alignment gauge attachment	Measurement of the wheel alignment for the aluminium type wheel
	MB990635	Steering linkage puller	Removal of the lower arm ball joint and tie rod
	CT-1003	Axle shaft puller	Removal of the drive shaft
	MB991056	Knuckle arm bridge	Removal of the hub
	MB990998	Front hub remover and installer	Removal or press-in of the front hub
	MB990776-A	Front axle base	Press-fitting of the hub bearing outer races
	C-3893	Bearing and oil seal installer set	Installation of wheel bearing outer race

Tool	Number	Name	Use
	C-293-PA	Taper roller bearing puller	Removal of the hub outer bearing inner race
	SP-3183	Cup puller	
	MB990781	Bearing and oil seal remover set	
	MB991015	Oil seal installer	Press-fitting of the hub oil seals
	C-4171	Handle	
	MB991248	Inner shaft remover	Removal of inner shaft
	CT-1112	Special spanner	Disassembly and reassembly of strut assembly
	MB991237 MB991238	Spring compressor body Arm set	Compression of the front coil spring
	MB990800	Ball joint remover and installer	Installation of the dust cover



SERVICE ADJUSTMENT PROCEDURES

N02FAAA

WHEEL BEARING FOR END PLAY INSPECTION

1. Remove the front wheels.
2. Remove the disc brake caliper and suspend it with a wire. (Refer to GROUP 5.)
3. Set the dial indicator with its hand at the right angle as shown in the illustration, and then measure the end play while moving the hub back and forth.

Limit: 0.2 mm (.008 in.) or less

4. If the play exceeds the limit, disassemble and check wheel bearings. (Refer to P.2-12.)

FRONT WHEEL ALIGNMENT

N02FBAB

The front suspension assembly must be free of worn, loose or damaged parts prior to measurement of front wheel alignment. On vehicles with aluminum type wheels, measure wheel alignment using the special tool.

CAMBER AND CASTER

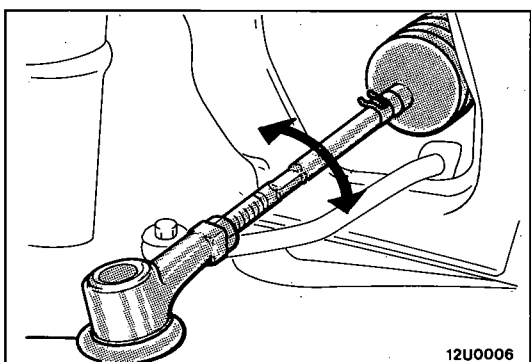
Standard value:

Camber $0^{\circ} \pm 30'$

Caster $2^{\circ}20' \pm 30'$

Camber and caster are pre-set at the factory and cannot be adjusted.

If camber and caster are not within standard value, replace bend of damaged parts.



TOE-IN

Standard value: 0 ± 3 mm ($0 \pm .12$ in.)

1. If the toe-in is not within the standard value, adjust by removing the clips and turning the left and right tie rods by the same amount (in opposite directions).

NOTE

- (1) The toe will move out as the left tie rod is turned in the forward direction and the right tie rod is turned in the reverse direction.
- (2) The toe can be changed approximately 12 mm (.48 in.) by turning both tie rods half a turn each.
2. After making the adjustments, confirm that the steering wheel turning angle is within the standard value. (Refer to GROUP 19.)

WHEEL BEARING ADJUSTMENT

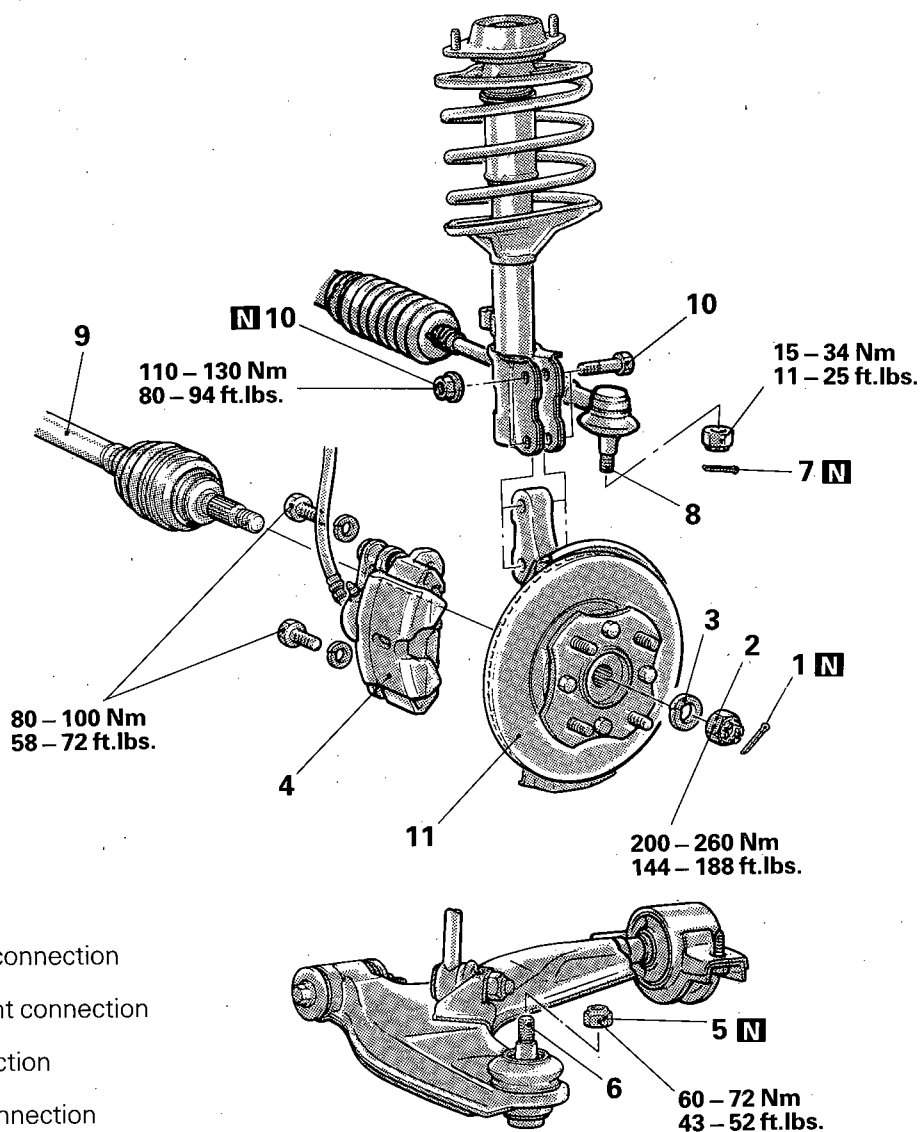
N02FCAA

Bearing preload is pre-set to the specified value by design and therefore can not be adjusted.

AXLE HUB

N02FIA--

REMOVAL AND INSTALLATION



Removal steps

- ◆◆ 1. Cotter pin
- ◆◆◆ 2. Drive shaft
- ◆◆ 3. Washer
- ◆◆ 4. Caliper assembly connection
- ◆◆ 5. Self-locking nut
- ◆◆ 6. Lower arm ball joint connection
- ◆◆ 7. Cotter pin
- ◆◆ 8. Tie rod end connection
- ◆◆ 9. Drive shaft
- ◆◆ 10. Strut assembly connection
- ◆◆ 11. Hub and knuckle

NOTE

- (1) Reverse the removal procedures to reinstall.
- (2) ◆◆: Refer to "Service Points of Removal".
- (3) ◆◆◆: Refer to "Service Points of Installation".
- (4) [N]: Non-reusable parts

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SERVICE POINTS OF REMOVAL

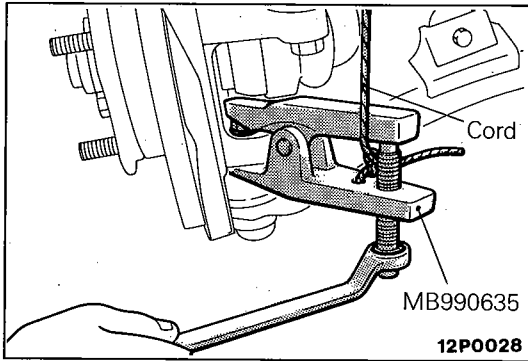
N02IBAF

2. REMOVAL OF DRIVE SHAFT NUT

Loose the drive shaft nut while the vehicles is on the ground with the brakes applied.

4. REMOVAL OF CALIPER ASSEMBLY

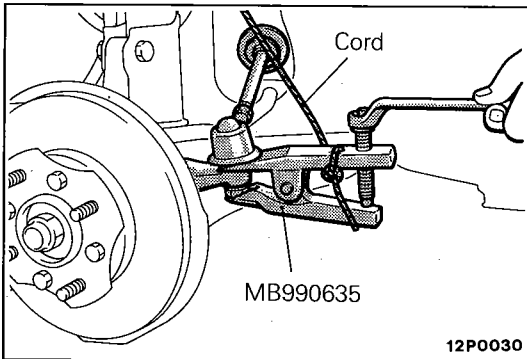
Remove the caliper assembly and suspend it with wires.

**6. DISCONNECTION OF LOWER ARM BALL JOINT**

Using the special tool, disconnect the lower arm ball joint from the knuckle.

Caution

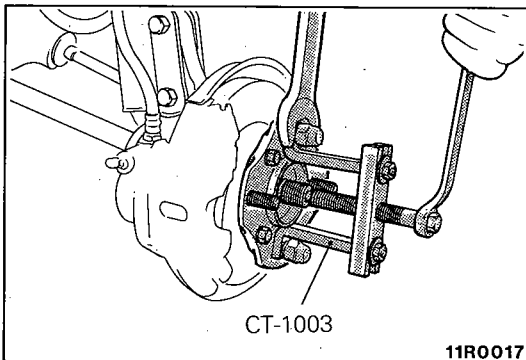
1. Be sure to tie the cord of the special tool to the nearby part.
2. Loose the nut but do not remove it.

**8. DISCONNECTION OF TIE ROD END**

Using the special tool, disconnect the tie rod end from the knuckle.

Caution

1. Be sure to tie the cord of the special tool to the nearby part.
2. Loose the nut but do not remove it.

**9. REMOVAL OF DRIVE SHAFT**

Use the special tool to push out the drive shaft from the front hub.

INSPECTION

N02ICAC

- Check the hub for cracks and spline for wear.
- Check the oil seal for damage.
- Check the knuckle for cracks.
- Check for defective bearing

NOTE

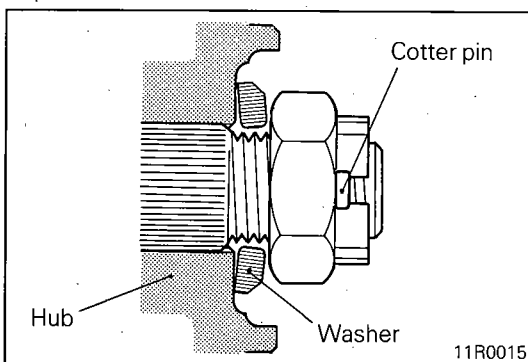
If the meshing of the wheel bearing outer race and the knuckle, or of the wheel bearing inner race and the hub, is loose; replace the bearing.

SERVICE POINTS OF INSTALLATION

N02IDAF

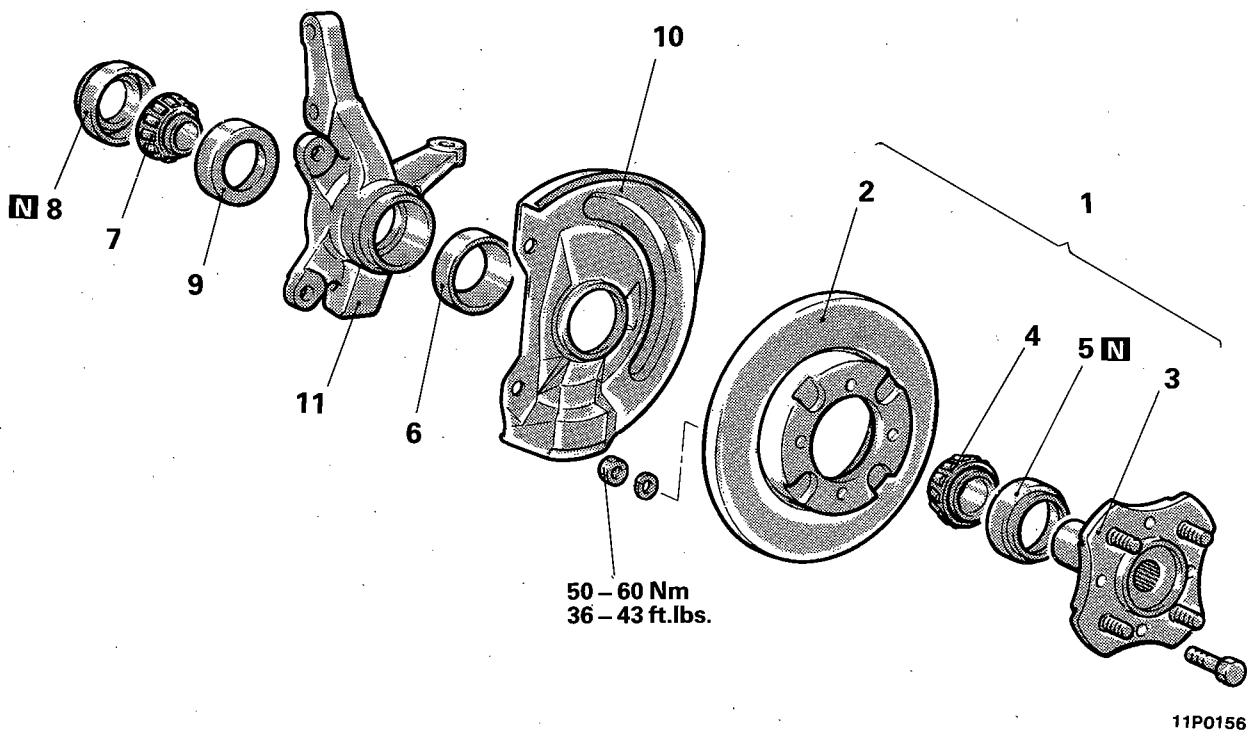
3. INSTALLATION OF WASHER / 2. DRIVE SHAFT NUT / 1. COTTER PIN

- (1) Be sure to install the washer and drive shaft nut in the specified direction.
- (2) After installing the wheel, lower the vehicle to the ground and finally tighten the drive shaft nut.
- (3) If the position of the cotter pin holes does not match, tighten the nut up to 260 Nm (188 ft.lbs.) in maximum.
- (4) Install the cotter pin in the first matching holes and bend it securely.



DISASSEMBLY AND REASSEMBLY

N02IE--



Disassembly steps

1. Hub and brake disc
2. Brake disc
- ↔ 3. Front hub
- ↔ 4. Outer bearing inner race
- ↔ 5. Oil seal (hub side)
- ↔ 6. Outer bearing outer race
7. Inner bearing inner race
- ↔ 8. Oil seal (drive shaft side)
- ↔ 9. Inner bearing outer race
10. Dust cover
11. Knuckle

Reassembly steps

11. Knuckle
10. Dust cover
- ↔ 9. Inner bearing outer race
- ↔ 6. Outer bearing outer race
- ↔ 4. Outer bearing inner race
- ↔ 5. Oil seal (hub side)
7. Inner bearing inner race
2. Brake disc
- ↔ 3. Front hub
- ↔ Adjustment of wheel bearing starting torque
- ↔ 8. Oil seal (drive shaft side)

NOTE

- (1) ↔: Refer to "Service Points of Disassembly".
- (2) ↔: Refer to "Service Points of Reassembly".
- (3) **N**: Non-reusable parts

SERVICE POINTS OF DISASSEMBLY

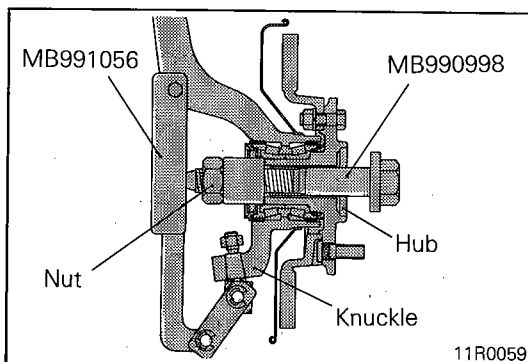
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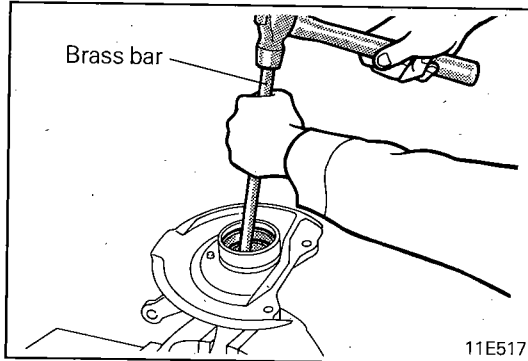
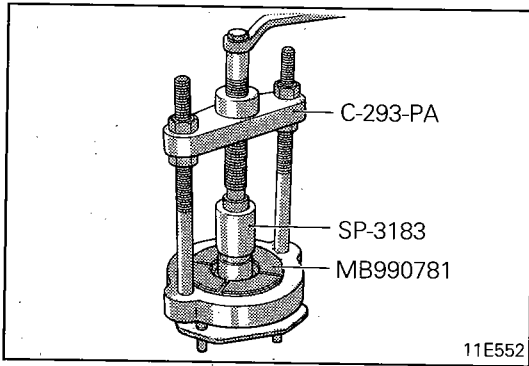
3. REMOVAL OF FRONT HUB

- (1) Attach the special tools to the knuckle and front hub.
- (2) Secure the knuckle in a vise.
- (3) After making sure that the special tools are set up correctly, turn the nut in the tightening direction while holding the bolt to remove the front hub from the knuckle.

Caution

1. Be sure to use the special tools.





2. If the front hub and knuckle are disassembled by striking them with a hammer, the bearing will be damaged.

4. REMOVAL OF OUTER BEARING INNER RACE

Remove the outer bearing inner race from the hub by using the special tools.

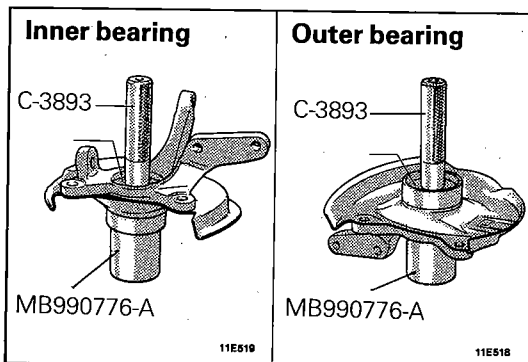
6. 9. REMOVAL OF BEARING OUTER RACES

Drive out the bearing outer races from the knuckle by tapping them uniformly using a brass bar and hammer.

INSPECTION

N02IGABa

- Check the front hub and brake disc mounting surfaces for galling and contamination.
- Check the knuckle inner surface for galling and cracks.
- Check for defective bearing.



SERVICE POINTS OF REASSEMBLY

N02IHAI

9. 6. INSTALLATION OF BEARING OUTER RACES

- (1) Apply multi-purpose grease to the outside surface of the bearing outer races.

**Grease: MOPAR Multi-mileage Lubricant
Part Number 2525035 or equivalent**

- (2) Drive the bearing outer races into the knuckle by using the special tools.

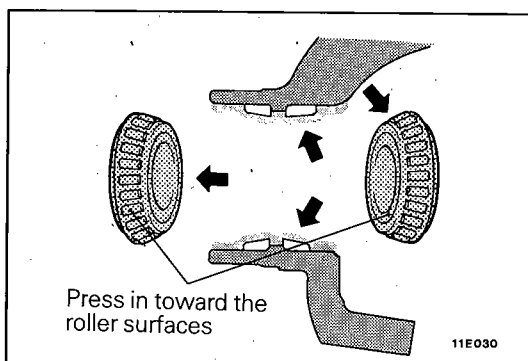
5. INSTALLATION OF OIL SEAL (HUB SIDE)

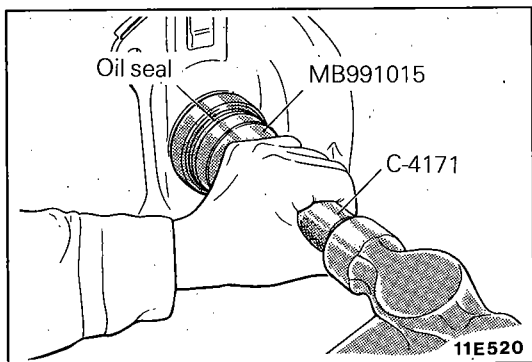
- (1) Apply multi-purpose grease to the bearings and inside surface of the hub.

**Grease: MOPAR Multi-mileage Lubricant
Part Number 2525035 or equivalent**

- (2) Place the outside bearing inner race into the knuckle.
- (3) Apply multi-purpose grease to the lip of the oil seal and to the surfaces of the oil seal which contact the hub.

**Grease: MOPAR Multi-mileage Lubricant
Part Number 2525035 or equivalent**

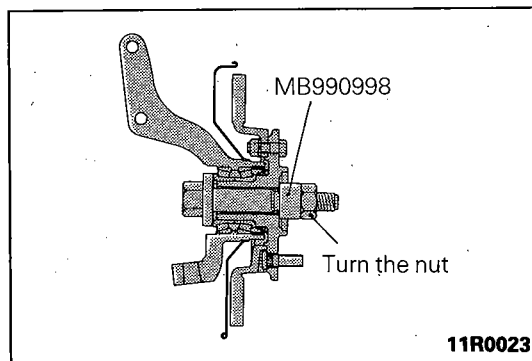




- (4) Drive the oil seal (hub side) into the knuckle by using the special tools.

3. INSTALLATION OF FRONT HUB

- (1) Set up the special tool as illustrated. While holding the bolt, turn the nut in the tightening direction to insert the front hub in the knuckle. After the front hub has been completely inserted, tighten the nut to the 200 – 260 Nm (144 – 188 ft.lbs.) torque.
- (2) Rotate the front hub in order to seat the bearings.



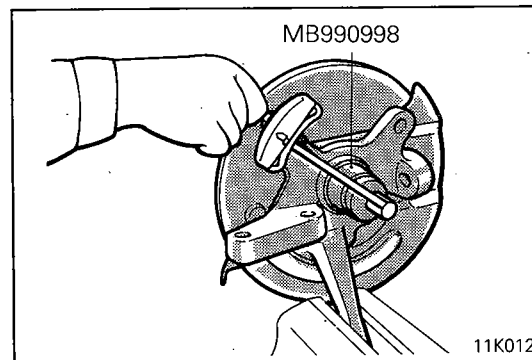
• ADJUSTMENT OF WHEEL BEARING STARTING TORQUE

- (1) Measure the wheel bearing starting torque (hub starting torque) by using the special tool.

Limit: 1.3 Nm (11 in.lbs.) or less

NOTE

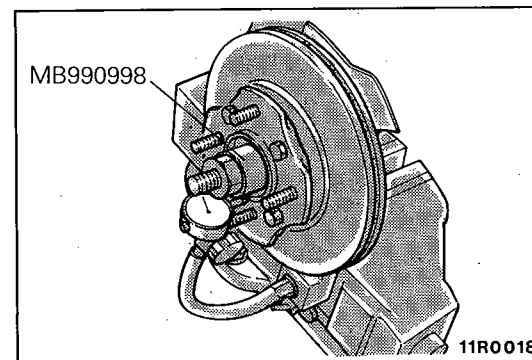
The starting torque must be within the limit and, in addition, the bearings must not feel rough when rotated.



- (2) Measure to determine whether the end play of the hub is within the specified limit or not.

Limit: 0.20 mm (.008 in.) or less

- (3) If the starting torque and hub end play are not within the limit range, the bearing, hub and/or knuckle have probably not been installed correctly. Repeat the dis-assembly and assembly procedure.

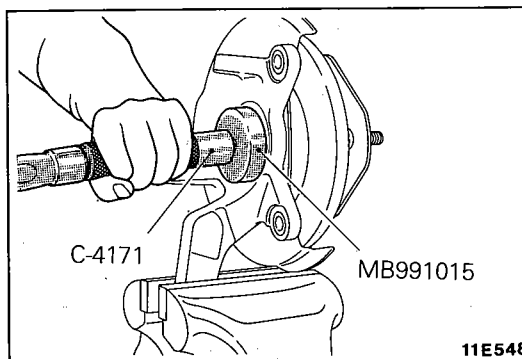


8. INSTALLATION OF OIL SEAL (DRIVE SHAFT SIDE)

- (1) Apply multi-purpose grease to the inner bearing, inside of the knuckle and the lip of oil seal.

**Grease: MOPAR Multi-mileage Lubricant
Part Number 2525035 or equivalent**

- (2) Drive the oil seal (drive shaft side) into the knuckle by using the special tools until it contacts the inner bearing outer race.



DRIVE SHAFT

N02QEAA

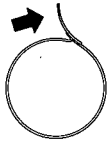
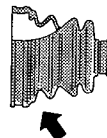

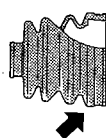

Different types of drive shafts are used on different vehicle models as follows:

		1500	1600-N/A		1600-T/C
			M/T	A/T	
Drive shaft type	L.H.	T.J.-R.J.	T.J.-B.J.	T.J.-B.J.	T.J.-B.J. and inner shaft
	R.H.	T.J.-R.J.	D.O.J.-B.J.	T.J.-B.J.	D.O.J.-B.J.


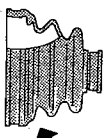

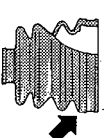

PARTS DISTINCTION

Disconnections of the boots and boot bands can be made by the indicated part numbers.


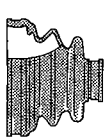

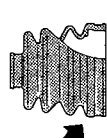
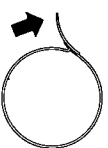
T.J.-R.J TYPE

	T.J. boot band	T.J. boot	Boot band (small)	R.J. boot	R.J. boot band
Part shapes and part identification number location	 11K033	 11K033	 11K033	 11K033	 11K033
1500	92.5	MB297454-B	31.0	MB297740 or MB297482-A	92.5

T.J.-B.J TYPE

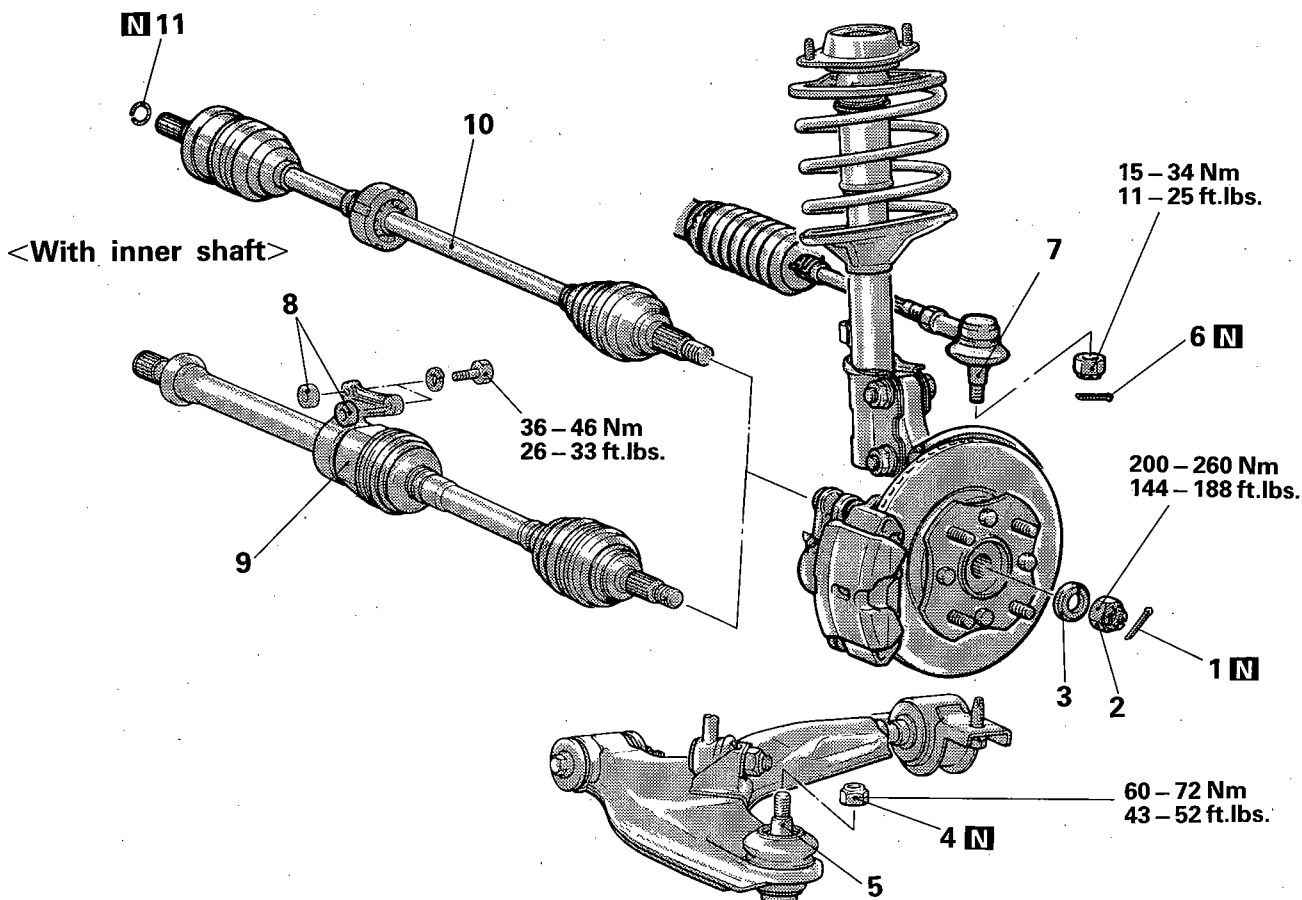
	T.J. boot band	T.J. boot	Boot band (small)	B.J. boot	B.J. boot band
Part shapes and part identification number location	 11K033	 11R0156	 11K033	 11K033	 11K033
1600-N/A	20-110#BJ87	17-261#TJ87	20-146#BJ87	17-249#BJ87L	20-113#BJ87L
1600-T/C	20-12#BJ92	17-55#TJ92	20-111#BJ87	17-31#BJ92L	20-75#BJ95

D.O.J.-B.J. TYPE

	D.O.J. boot band	D.O.J. boot	Boot band (small)	B.J. boot	B.J. boot band
Part shapes and part identification number location	 11K033	 11R0156	 11K033	 11K033	 11K033
1600-N/A	20-110#BJ87	17-258#BJ87	20-111#BJ87	17-249#BJ87L	20-113#BJ87L
1600-T/C	20-12#BJ92	17-52#BJ92	20-111#BJ87	17-31#BJ92L	20-75#BJ95

REMOVAL AND INSTALLATION

<Without inner shaft>



11P0149

Removal steps

- ◆◆ 1. Cotter pin
- ◆◆◆ 2. Drive shaft nut
- ◆◆ 3. Washer
- ◆◆ 4. Self-locking nut
- ◆◆ 5. Connection of lower arm ball joint
- ◆◆ 6. Cotter pin
- ◆◆ 7. Connection of tie rod end
- ◆◆ 8. Spacer
- ◆◆ 9. Drive shaft and inner shaft
- ◆◆ 10. Drive shaft
- ◆◆ 11. Circlip

NOTE

- (1) Reverse the removal procedures to reinstall.
- (2) ◆◆: Refer to "Service Points of Removal".
- (3) ◆◆: Refer to "Service Points of Installation".
- (4) N: Non-reusable parts

SERVICE POINTS OF REMOVAL

N02QBAM

2. REMOVAL OF DRIVE SHAFT NUT

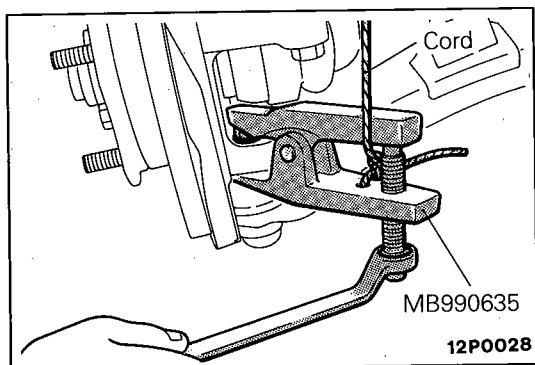
Loosen the drive shaft nut while the vehicle is on the floor with the brakes applied.

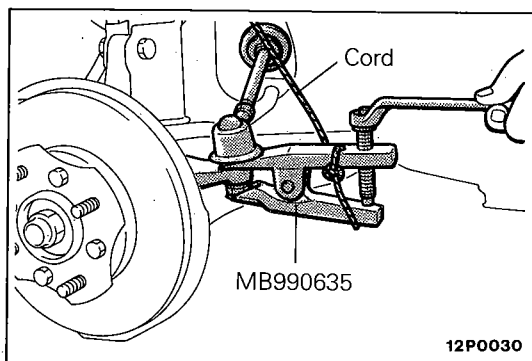
5. DISCONNECTION OF LOWER ARM BALL JOINT

Using the special tool, disconnect the lower arm ball joint from the knuckle.

Caution

- 1. Be sure to tie the cord of the special tool to the nearby part.
- 2. Loose the nut but do not remove it.



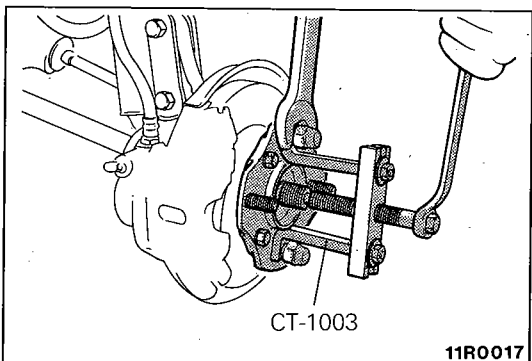


7. DISCONNECTION OF TIE ROD END

Using the special tool, disconnect the tie rod end from the knuckle.

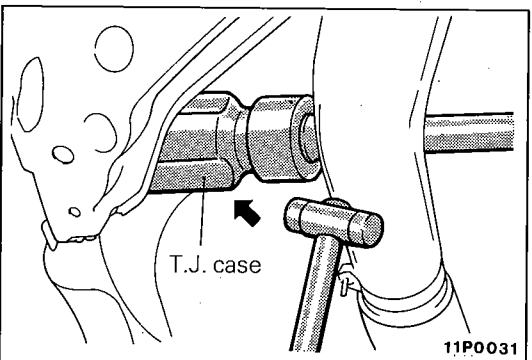
Caution

1. Be sure to tie the cord of the special tool to the nearby part.
2. Loose the nut but do not remove it.

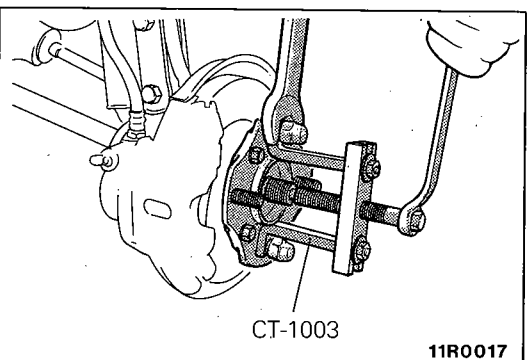


9. REMOVAL OF DRIVE SHAFT AND INNER SHAFT

- (1) Use the special tool to push out the drive shaft from the front hub.

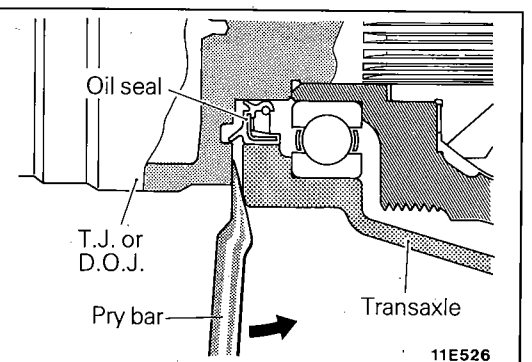


- (2) Tap the T.J. case of the drive shaft and inner shaft lightly with a plastic hammer, and remove the drive shaft and inner shaft from the transaxle.



10. REMOVAL OF DRIVE SHAFT

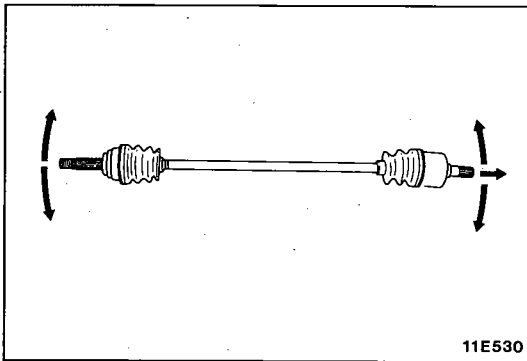
- (1) Use the special tool to push out the drive shaft from the front hub.



- (2) Insert a pry bar between the transaxle case and the drive shaft, and then pry the drive shaft from the transaxle.

Caution

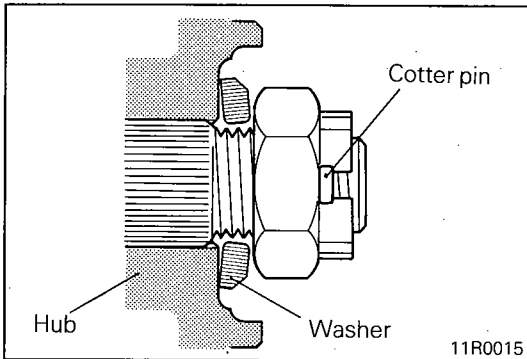
1. Do not pull on the drive shaft; doing so will damage the T.J. or D.O.J.; be sure to use the pry bar.
2. Do not insert the pry bar so deeply as to damage the oil seal.



INSPECTION

N02QCAE

- Check the drive shaft boot for damage or deterioration.
- Check the ball joints for wear or operating condition.
- Check the spline part for wear or damage.
- Check for operation of the center bearing.



SERVICE POINTS OF INSTALLATION

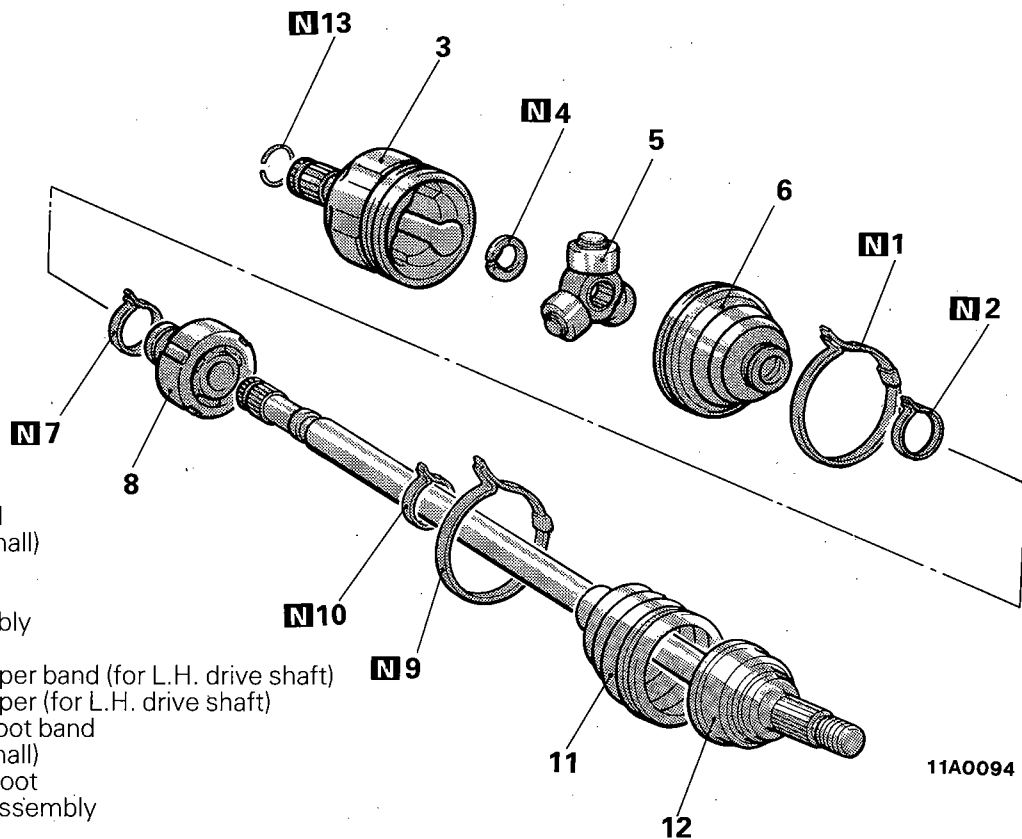
N02QDAL

3. INSTALLATION OF WASHER / 2. DRIVE SHAFT NUT / 1. COTTER PIN

- (1) Be sure to install the washer and drive shaft nut in the specified direction.
- (2) After installing the wheel, lower the vehicle to the ground and finally tighten the drive shaft nut.
- (3) If the position of the cotter pin holes does not match, tighten the nut up to 260 Nm (188 ft.lbs.) in maximum.
- (4) Install the cotter pin in the first matching holes and bend it securely.

DISASSEMBLY AND REASSEMBLY (T.J.-B.J. TYPE or T.J.-R.J. TYPE)

N02QE-A

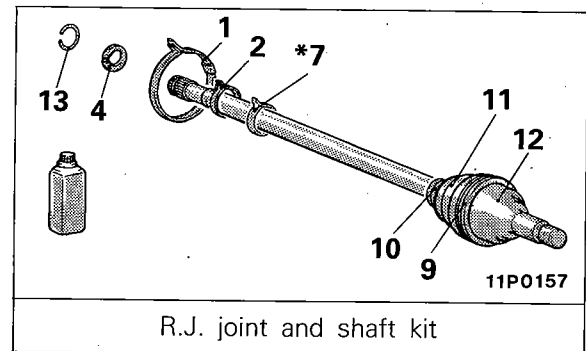
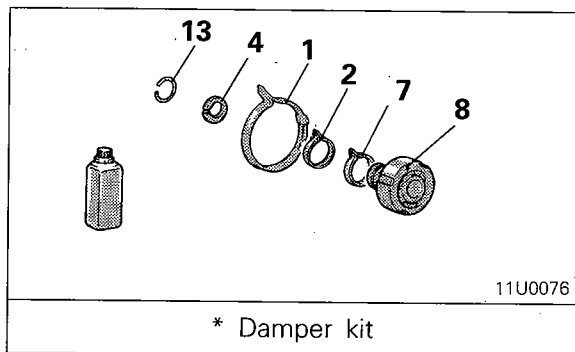
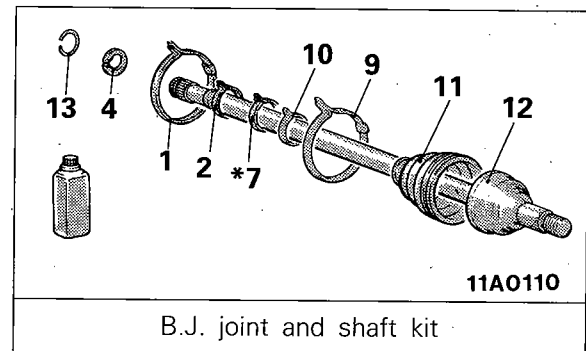
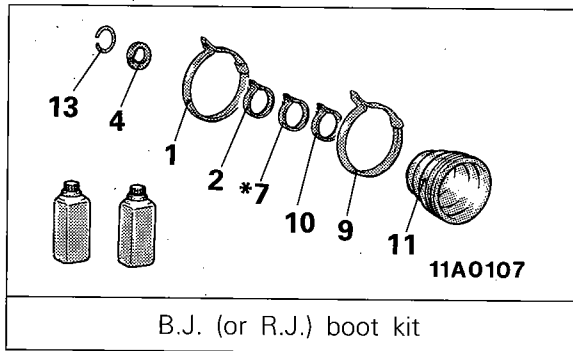
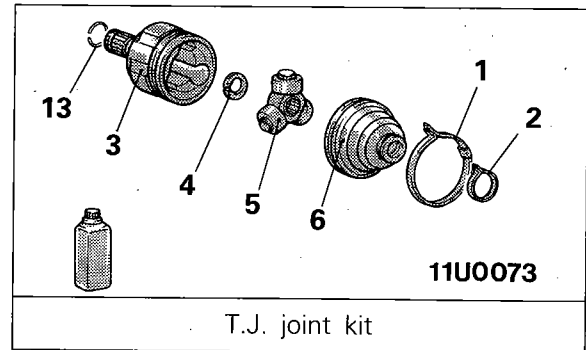
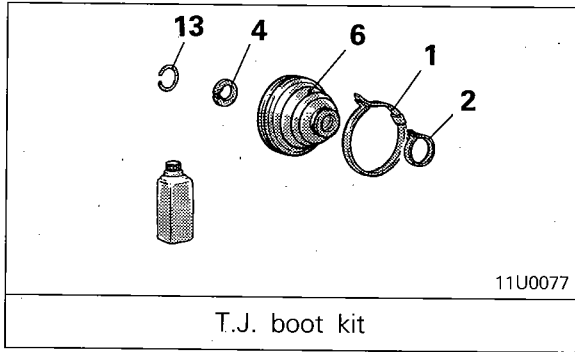


Disassembly steps

- ◆◆ 1. T.J. boot band
- ◆◆ 2. Boot band (small)
- ◆◆ 3. T.J. case
- ◆◆ 4. Snap ring
- ◆◆ 5. Spider assembly
- ◆◆ 6. T.J. boot
- ◆◆ 7. Dynamic damper band (for L.H. drive shaft)
- ◆◆ 8. Dynamic damper (for L.H. drive shaft)
- ◆◆ 9. B.J.(or R.J.) boot band
- ◆◆ 10. Boot band (small)
- ◆◆ 11. B.J. (or R.J.) boot
- ◆◆ 12. B.J. (or R.J.) assembly
- ◆◆ 13. Circlip

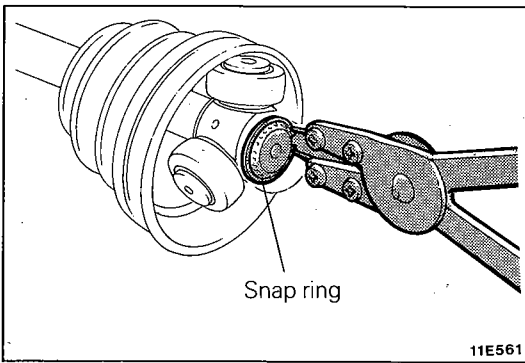
NOTE

- (1) Reverse the disassembly procedures to reassemble.
- (2) ◆◆: Refer to "Service Points of Disassembly".
- (3) ◆◆: Refer to "Service Points of Reassembly".
- (4) [N]: Non-reusable parts
- (5) T.J.: Tripod Joint
- (6) B.J.: Birfield Joint
- (7) R.J.: Rzeppa Joint



NOTE

* : for L.H. drive shaft



SERVICE POINTS OF DISASSEMBLY

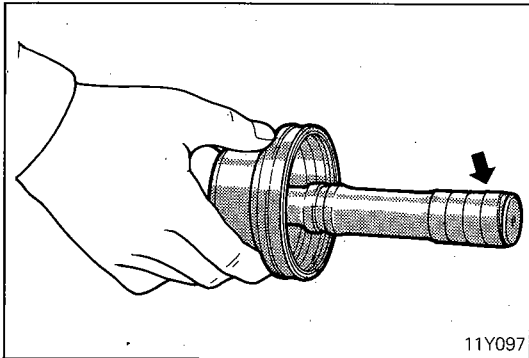
N02QFDB

4. REMOVAL OF SNAP RING / 5. SPIDER ASSEMBLY

- (1) Remove the snap ring from the drive shaft with the snap ring pliers.
- (2) Take out the spider assembly from the drive shaft.
- (3) Clean the spider assembly.

Caution

1. Do not disassemble the spider assembly.
2. If the T.J. of the drive shaft assembly is bent, the joint may be damaged. Use care in handling the drive shaft.
3. The drive shaft joint uses special grease. Do not add another type of grease.



6. REMOVAL OF T.J. BOOT / 8. DYNAMIC DAMPER / 11. B.J. (or R.J.) BOOT

- (1) Wrap vinyl tape around the spline part on the T.J. side of the drive shaft so that the T.J. and B.J. (or R.J.) boots are not damaged when they are removed.
- (2) Withdraw the T.J., the dynamic damper and B.J. (or R.J.) boots from the drive shaft.

Caution

Do not disassemble the B.J. (or R.J.).

INSPECTION

N02QGDB

- Check the drive shaft for damage, bending or corrosion.
- Check the drive shaft spline part for wear or damage.
- Check for entry of water and/or foreign material into B.J. (or R.J.)
- Check the spider assembly for roller rotation, wear or corrosion.
- Check the groove inside T.J. case for wear or corrosion.
- Check the dynamic damper for damage or cracking.
- Check the boots for deterioration, damage or cracking.

SERVICE POINTS OF REASSEMBLY

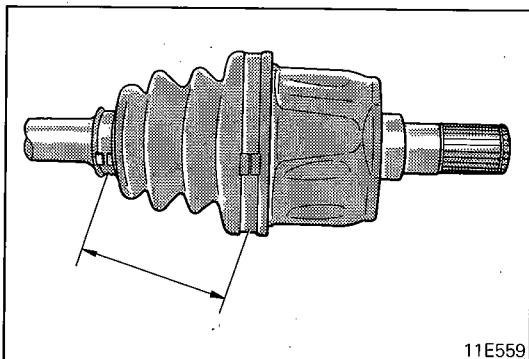
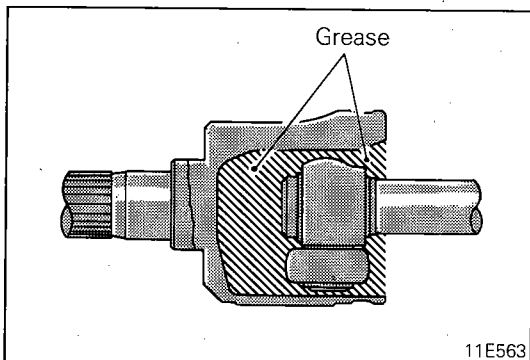
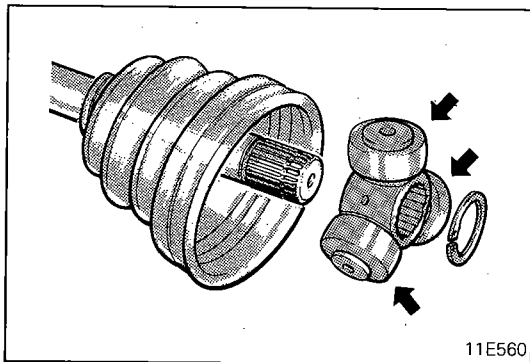
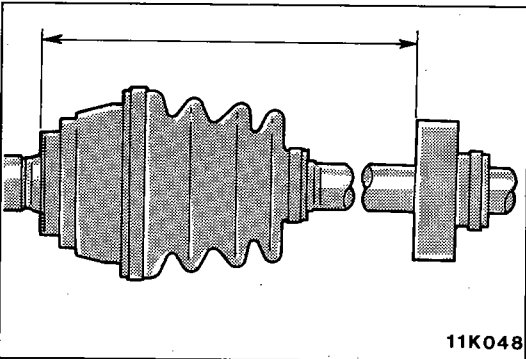
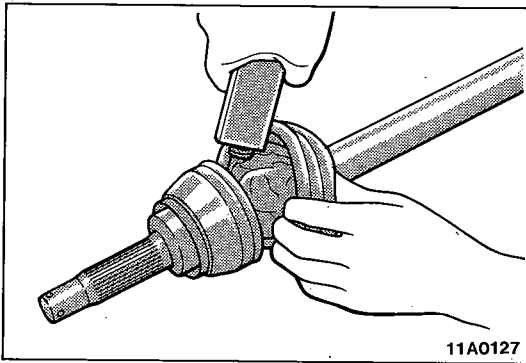
N02QHDB

11. INSTALLATION OF B.J. (or R.J.) BOOT / 8. DYNAMIC DAMPER / 6. T.J. BOOT

- (1) Wrap vinyl tape around the spline part on the drive shaft, and then install the B.J. (or R.J.) boot, the dynamic damper (for the L.H. drive shaft) and T.J. boot, in that order.

Caution

Distinguish between B.J. (or R.J.) boot and T.J. boot parts according to the section "Parts Distinction", and be sure to assemble them correctly.



- (2) Fill the inside of the B.J. and B.J. boot with the specified grease.

Specified grease: Repair kit grease

<T.J.-B.J. type> 90 g (3.2 oz.)

<T.J.-R.J. type> 75 – 95 g (2.7 – 3.6 oz.)

NOTE

The grease in the repair kit should be divided in half for use, respectively, at the joint and inside the boot.

- (3) Secure the boot bands.

Caution

The boot bands should be tightened with the drive shaft at a 0° break angle.

- (4) Install the dynamic damper at the specified distance, and secure it by the boot band.

Standard value:

<1500> 434 – 440 mm (17.1 – 17.3 in.)

<1600> 140 – 145 mm (5.5 – 5.7 in.)

Caution

There should be no grease adhered to the rubber part of the dynamic damper.

5. APPLICATION OF GREASE TO SPIDER ASSEMBLY

Apply the specified grease furnished in the repair kit to the spider assembly.

Specified grease: Repair kit grease

3. APPLICATION OF GREASE TO T.J. CASE

Fill the specified grease furnished in the repair kit to the T.J. case.

Specified grease: Repair kit grease

<T.J.-B.J. type> 110 g (3.9 oz.)

<T.J.-R.J. type> 115 – 135 g (4.1 – 4.8 oz.)

NOTE

The grease in the repair kit should be divided in half for use, respectively, at the joint and inside the boot.

2. INSTALLATION OF BOOT BAND (SMALL) / 1. T.J. BOOT BAND

Set the T.J. boot bands at the specified distance in order to adjust the amount of air inside the T.J. boot, and then tighten the T.J. boot band securely.

Standard value:

<1500, 1600-A/T>

L.H. drive shaft

80 ± 3 mm (3.15 ± .12 in.)

R.H. drive shaft

85 ± 3 mm (3.35 ± .12 in.)

<1600-M/T>

80 ± 3 mm (3.15 ± .12 in.)

DISASSEMBLY AND REASSEMBLY (D.O.J.-B.J. TYPE)

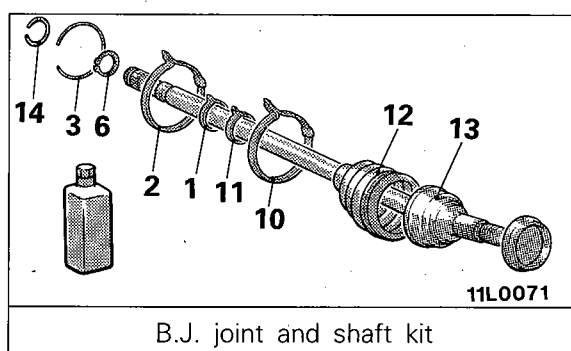
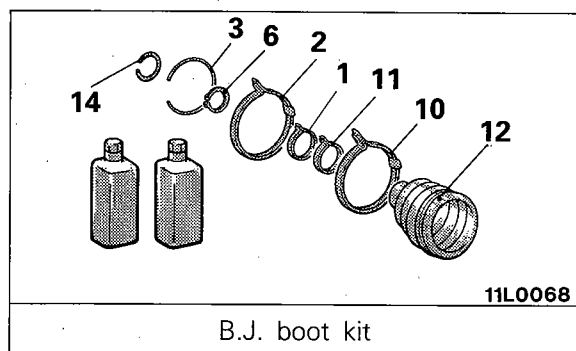
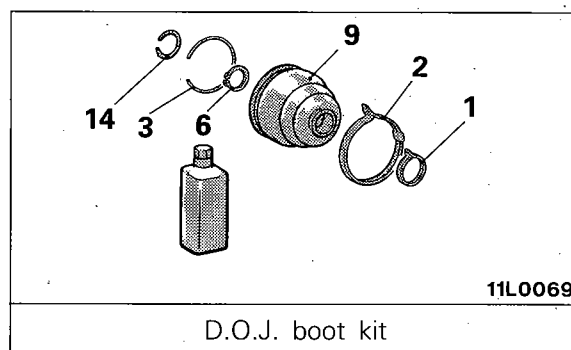
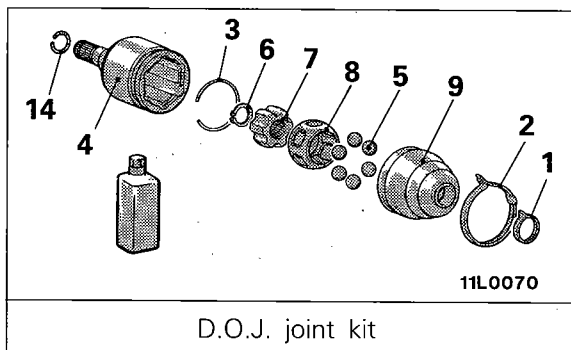
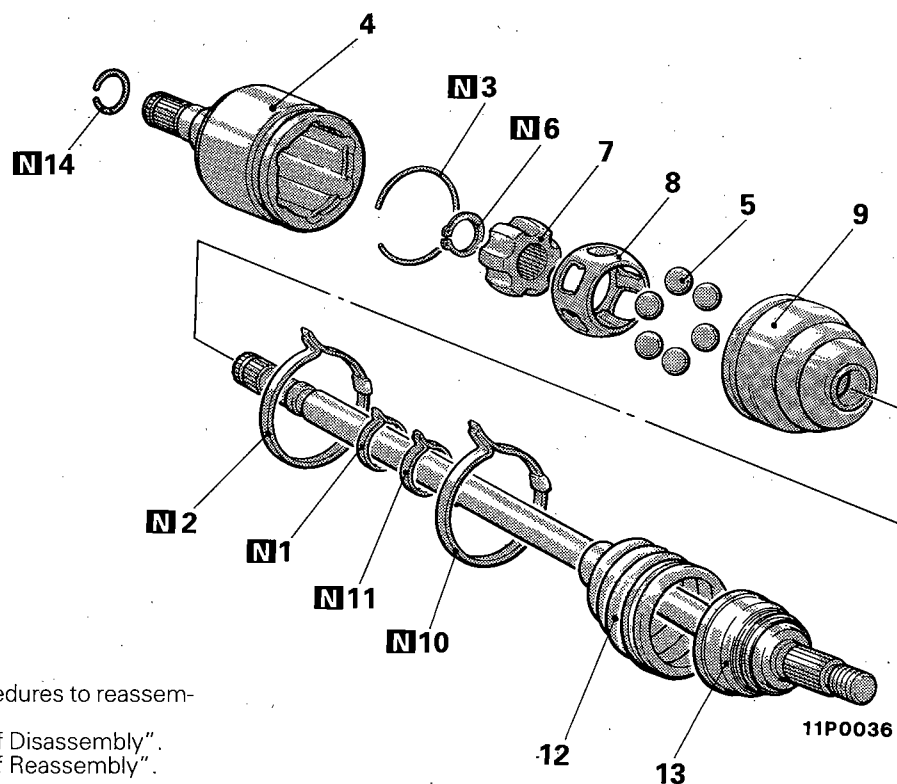
N02QE-B

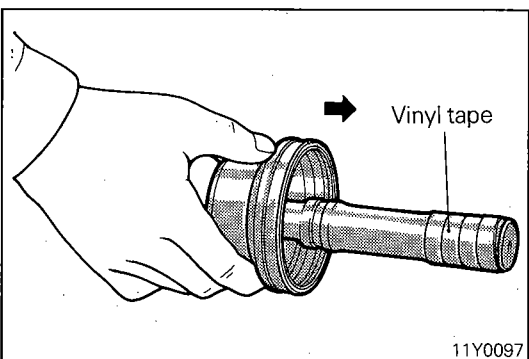
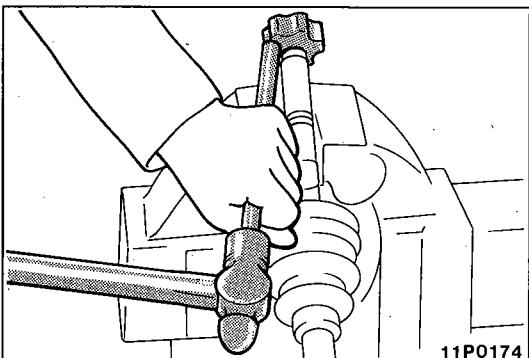
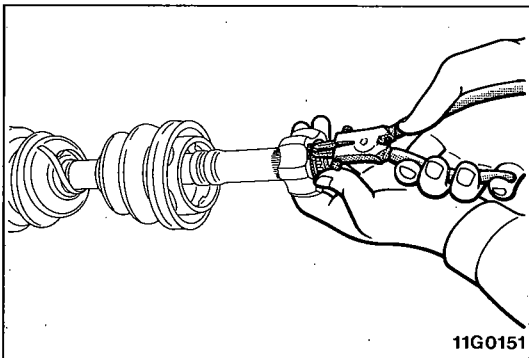
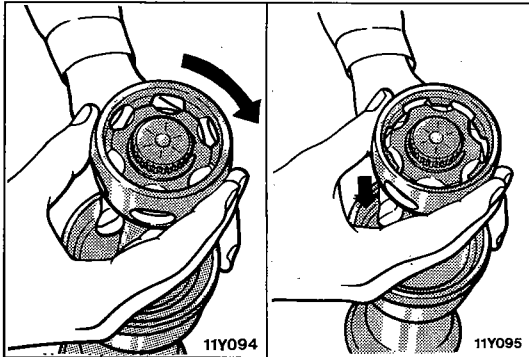
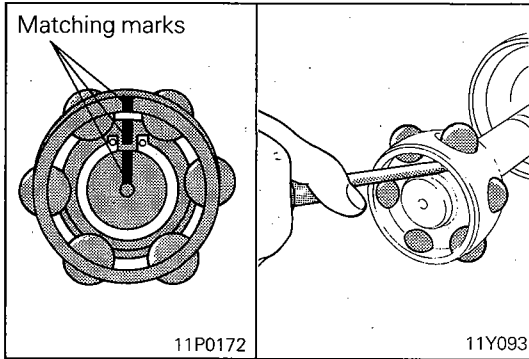
Disassembly steps

- ◆◆ 1. Boot band (small)
- ◆◆ 2. D.O.J. boot band
- ◆ 3. Circlip
- ◆◆ 4. D.O.J. outer race
- ◆◆◆ 5. Balls
- ◆◆ 6. Snap ring
- ◆◆◆ 7. D.O.J. inner race
- ◆◆◆ 8. D.O.J. cage
- ◆◆◆ 9. D.O.J. boot
- ◆◆◆ 10. B.J. boot band
- ◆◆◆ 11. Boot band (small)
- ◆◆◆ 12. B.J. boot
- ◆◆◆ 13. B.J. assembly
- ◆ 14. Circlip

NOTE

- (1) Reverse the disassembly procedures to reassemble.
- (2) ◆◆: Refer to "Service Points of Disassembly".
- (3) ◆◆◆: Refer to "Service Points of Reassembly".
- (4) **N**: Non-reusable parts
- (5) B.J.: Birfield Joint
- (6) D.O.J.: Double Offset Joint





SERVICE POINTS OF DISASSEMBLY

N020FAG

5. REMOVAL OF BALLS / 6. SNAP RING / 7. D.O.J. INNER RACE / 8. D.O.J. CAGE

- (1) Make matching marks on the shaft, D.O.J. inner race and D.O.J. cage.
- (2) Remove the balls from the D.O.J. cage.

- (3) Remove the D.O.J. cage from the D.O.J. inner race in the direction of the B.J.

- (4) Remove the snap ring from the drive shaft with a snap ring pliers.

- (5) Using a brass bar and hammer, lightly and evenly tap all around the D.O.J. inner race, and remove it from the shaft.

- (6) Remove the D.O.J. cage from the shaft.

9. REMOVAL OF D.O.J. BOOT / 12. B.J. BOOT

- (1) Wipe the grease off of the spline portion.
- (2) Remove the D.O.J. boot and B.J. boot.

NOTE

If the boots can be reused, wrap vinyl tape around the drive shaft spline so that the boots are not damaged when they are removed.

Caution

Do not disassemble the B.J.

INSPECTION

N02QGAC

- Check the drive shaft for damage, bending or corrosion.
- Check the drive shaft spline for wear or damage.
- Check the B.J. for entry of water and/or foreign material.
- Check the D.O.J. outer race for damage or corrosion.
- Check the D.O.J. cage, balls and D.O.J. inner race for damage, corrosion or wear.

SERVICE POINTS OF REASSEMBLY

N02QHAK

12. INSTALLATION OF B.J. BOOT / 9. D.O.J. BOOT

- (1) Wrap vinyl tape around the drive shaft spline, and then install the B.J. boot and D.O.J. boot, in that order.

Caution

Distinguish between B.J. boot and D.O.J. boot parts according to the section "Parts Distinction", and be sure to assemble them correctly.

- (2) Fill the inside of the B.J. and B.J. boot with the specified grease.

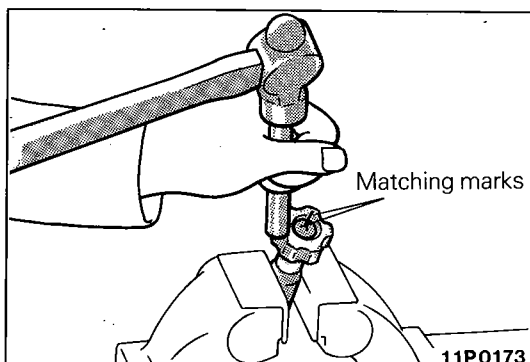
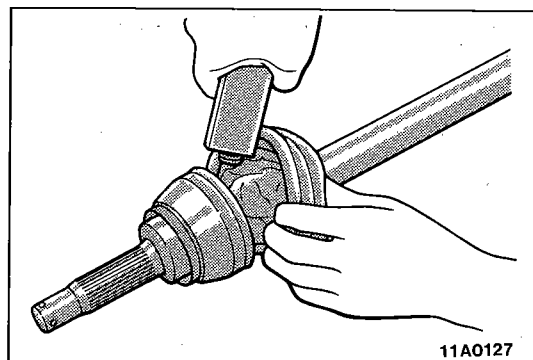
Specified grease: Repair kit grease

<1600-N/A> 90 g (3.2 oz.)

<1600-T/C> 110 g (3.9 oz.)

NOTE

The grease in the repair kit should be divided in half for use, respectively, at the joint and inside the boot.



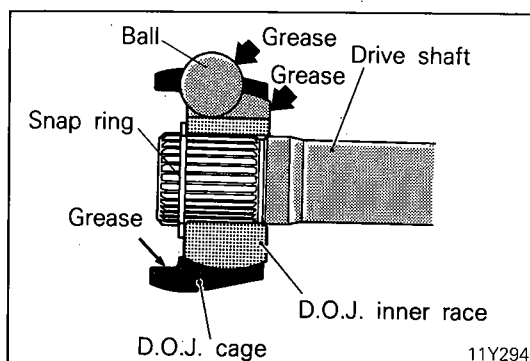
8. INSTALLATION OF D.O.J. CAGE / 7. D.O.J. INNER RACE

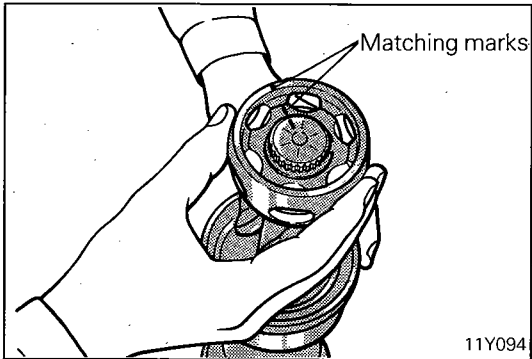
- (1) Install the D.O.J. cage onto the drive shaft so that the smaller diameter side of the cage is installed first.
- (2) Align the matching marks on the D.O.J. inner race and shaft.
- (3) Using a brass bar and hammer, lightly and evenly tap all around the D.O.J. inner race to install it on the shaft, until the race comes in contact with the rib of the shaft.
- (4) Apply the specified grease to the D.O.J. inner race and the D.O.J. cage, and then fit them together.

Specified grease: Repair kit grease

5. INSTALLATION OF BALLS

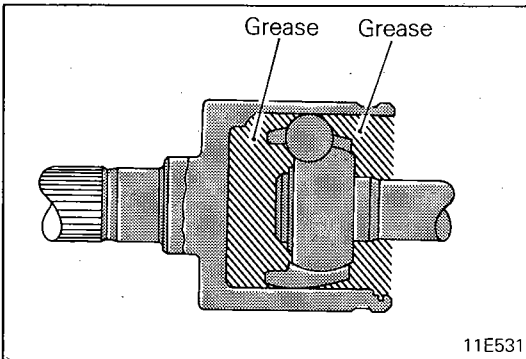
Apply the specified grease to the ball insertion parts of the D.O.J. inner race and D.O.J. cage, and insert the balls.

Specified grease: Repair kit grease



Caution

Be sure to align the matching marks on the D.O.J. cage and inner race before the balls are inserted.



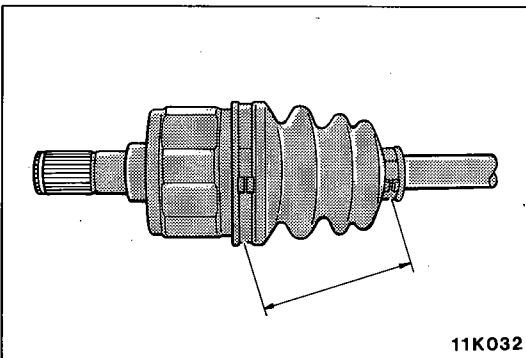
4. APPLICATION OF GREASE TO D.O.J. OUTER RACE

Fill the specified grease to the D.O.J. outer race, fit the drive shaft into the D.O.J. outer race, and then fill more grease to the D.O.J. outer race.

Specified grease: Repair kit grease 110 g (3.9 oz.)

NOTE

- (1) The grease in the repair kit should be divided in half for use, respectively, at the joint and inside the boot.
- (2) Align mating mark on D.O.J. inner race with that on D.O.J. outer race before insertion.



2. INSTALLATION OF D.O.J. BOOT BAND / 1. BOOT BAND (SMALL)

Set the D.O.J. boot bands at the specified distance in order to adjust the amount of air inside the D.O.J. boot, and then tighten the D.O.J. boot band securely.

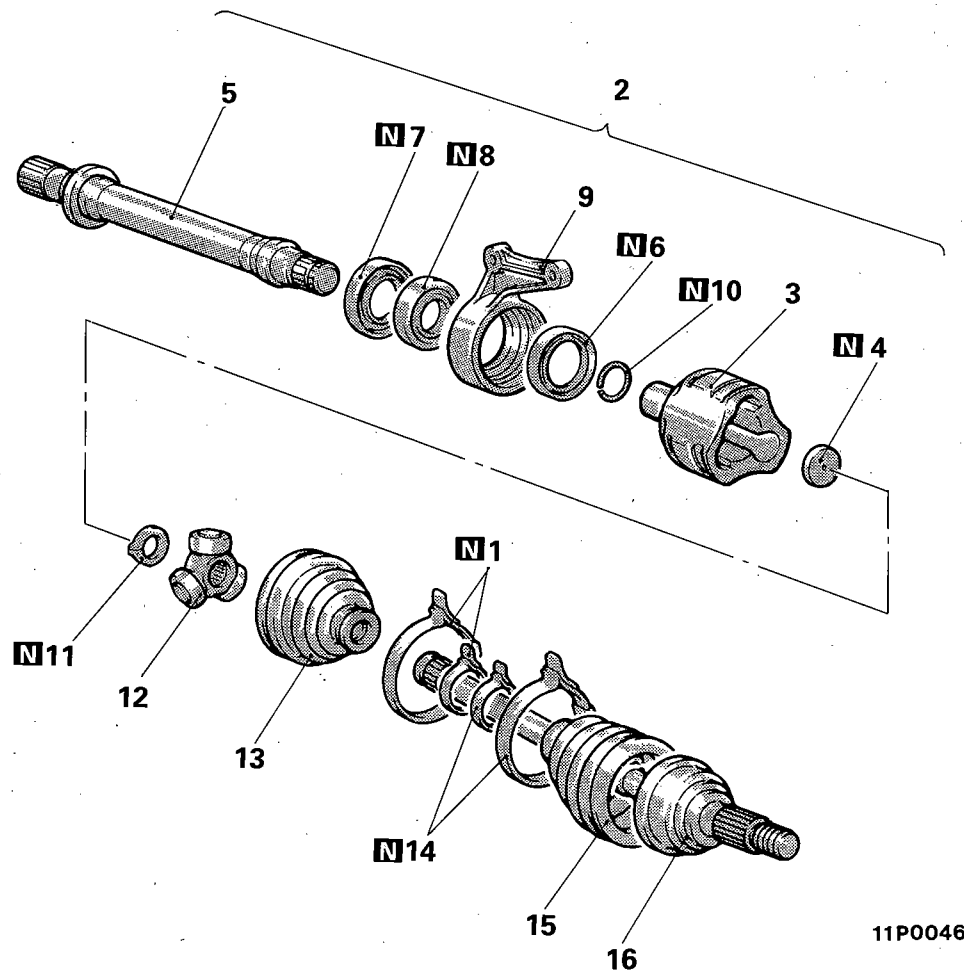
Standard value:

- <1600-N/A>
- <1600-T/C>

- 75 ± 3 mm (2.95 ± .12 in.)
- 80 ± 3 mm (3.15 ± .12 in.)

DISASSEMBLY AND REASSEMBLY (T.J. – B.J. TYPE AND INNER SHAFT)

N02QE-C

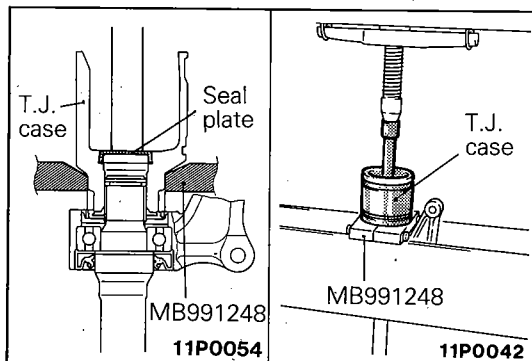
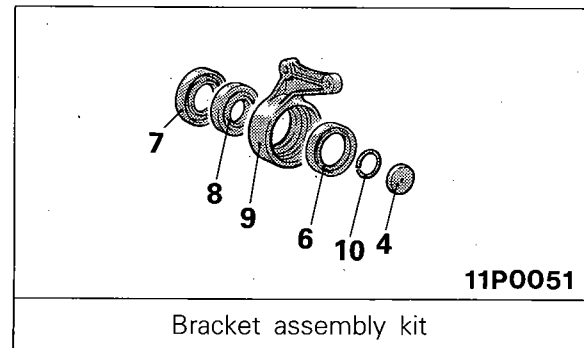
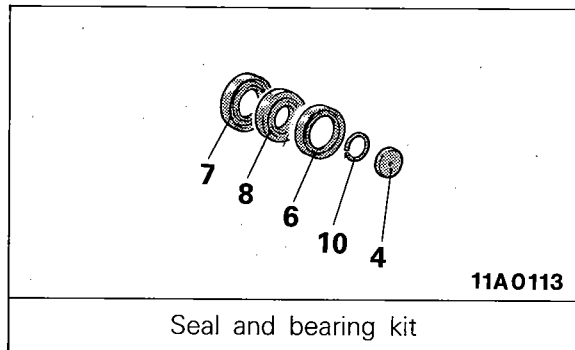
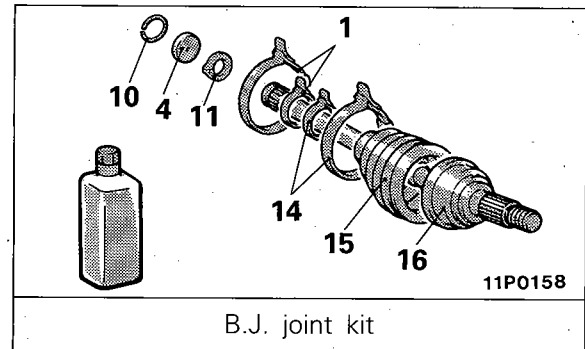
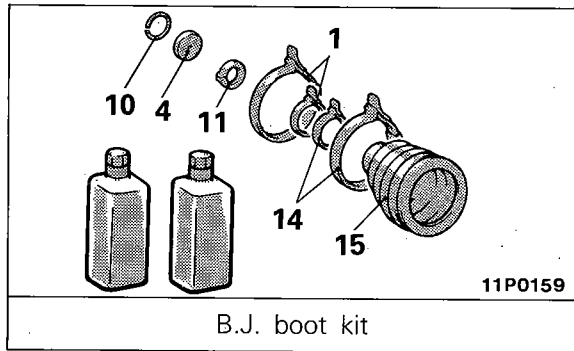
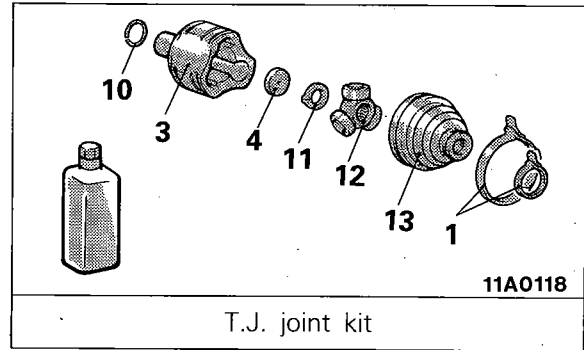
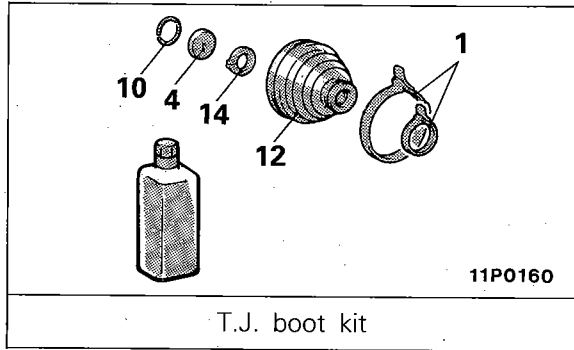


Disassembly steps

- ◆◆ 1. Boot bands (for T.J. boot)
- ◆◆ 2. T.J. case and inner shaft assembly
- 3. T.J. case
- 4. Seal plate
- ◆◆ ◆◆ 5. Inner shaft
- ◆◆ ◆◆ 6. Dust seal
- ◆◆ ◆◆ 7. Dust seal
- ◆◆ ◆◆ 8. Center bearing
- 9. Center bearing bracket
- 10. Circlip
- ◆◆ 11. Snap ring
- ◆◆ ◆◆ 12. Spider assembly
- ◆◆ ◆◆ 13. T.J. boot
- ◆◆ ◆◆ 14. Boot bands (for B.J. boot)
- ◆◆ ◆◆ 15. B.J. boot
- 16. B.J. and shaft assembly (Non-disassembly type)

NOTE

- (1) Reverse the disassembly procedures to reassemble.
- (2) ◆◆: Refer to "Service Points of Disassembly".
- (3) ◆◆: Refer to "Service Points of Reassembly".
- (4) **N** : Non-reusable parts
- (5) T.J.: Tripod Joint
- (6) B.J.: Birfield Joint

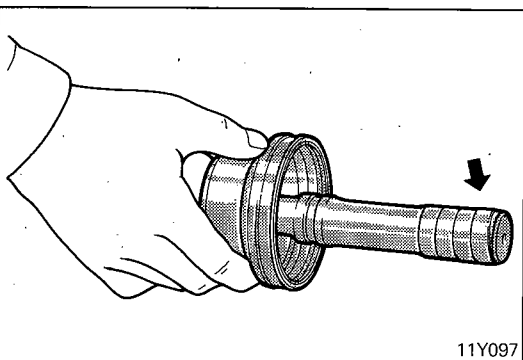
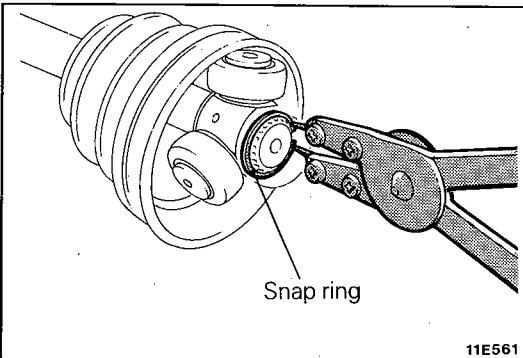
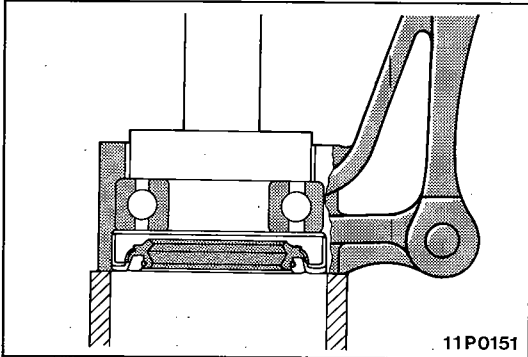
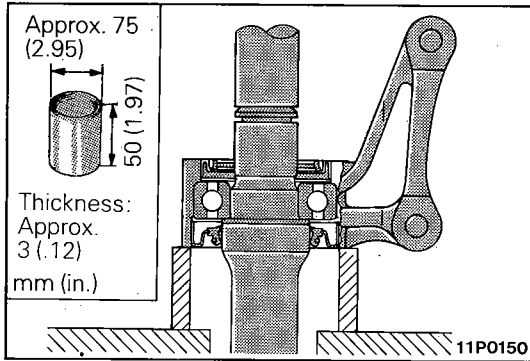


SERVICE POINTS OF DISASSEMBLY

N02QFEA

5. REMOVAL OF INNER SHAFT

- (1) Use the special tool to pull the inner shaft assembly together with the seal plate out of the T.J. case.



- (2) Remove the inner shaft by using the press and the tool (steel pipe) manufactured as shown in the illustration.

6. 7. REMOVAL OF DUST SEAL / 8. CENTER BEARING

- (1) Remove the drive shaft side dust seal by using a screwdriver.
- (2) Use the tools to remove the center bearing together with the differential side dust seal.

11. REMOVAL OF SNAP RING / 12. SPIDER ASSEMBLY

- (1) Remove the snap ring from the drive shaft with the snap ring pliers.
- (2) Take out the spider assembly from the drive shaft.
- (3) Clean the spider assembly.

Caution

1. Do not disassemble the spider assembly.
2. If the T.J. of the drive shaft assembly is bent, the joint may be damaged. Use care in handling the drive shaft.
3. The drive shaft joint use special grease. Do not add another type of grease.

13. REMOVAL OF T.J. BOOT / 15. B.J. BOOT

- (1) Wrap vinyl tape around the spline part on the T.J. side of the drive shaft so that the T.J. and B.J. boots are not damaged when they are removed.
- (2) Withdraw the T.J., the dynamic damper and B.J. boots from the drive shaft.

Caution

Do not disassemble the B.J.

INSPECTION

N02QGEA

- Check the drive shaft for damage, bending or corrosion.
- Check the drive shaft spline part for wear or damage.
- Check for entry of water and/or foreign material into B.J.
- Check the spider assembly for roller rotation, wear or corrosion.
- Check the groove inside T.J. case for wear or corrosion.
- Check the inner shaft for damage, bending, or corrosion.
- Check the splined section of the inner shaft for wear or damage.
- Check the center bearing for seizure, discoloration, or rough raceway surfaces.
- Check the boots for deterioration, damage or cracking.

SERVICE POINTS OF REASSEMBLY

N02QHEA

15. INSTALLATION OF B.J. BOOT / 13. T.J. BOOT

- (1) Wrap vinyl tape around the spline part on the drive shaft, and then install the B.J. boot, the dynamic damper and T.J. boot, in that order.

Caution

Distinguish between B.J. boot and T.J. boot parts according to the section "Parts Distinction", and be sure to assemble them correctly.

- (2) Fill the inside of the B.J. and B.J. boot with the specified grease.

Specified grease: Repair kit grease 110 g (3.9 oz.)

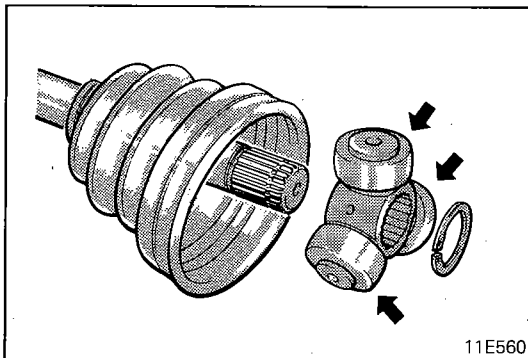
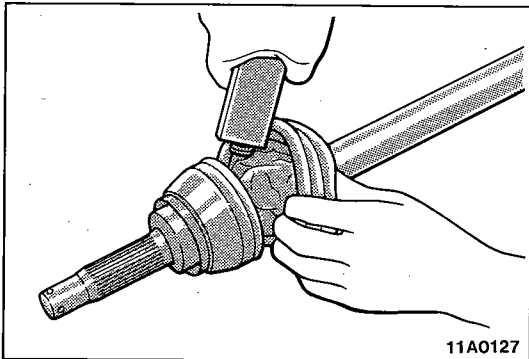
NOTE

The grease in the repair kit should be divided in half for use, respectively, at the joint and inside the boot.

- (3) Secure the boot bands.

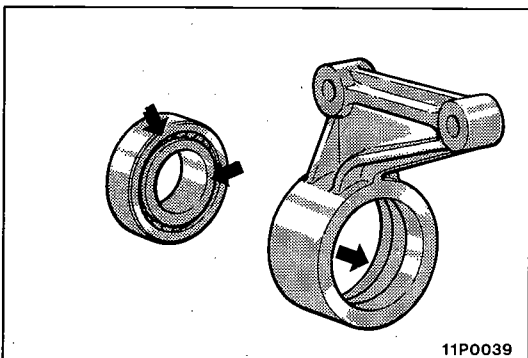
Caution

The boot bands should be tightened with the drive shaft at a 0° break angle.

**12. APPLICATION OF GREASE TO SPIDER ASSEMBLY**

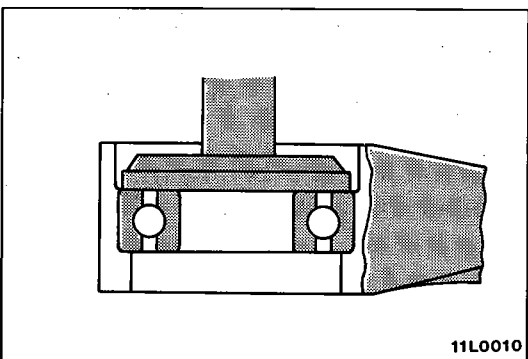
Apply the specified grease furnished in the repair kit to the spider assembly.

Specified grease: Repair kit grease

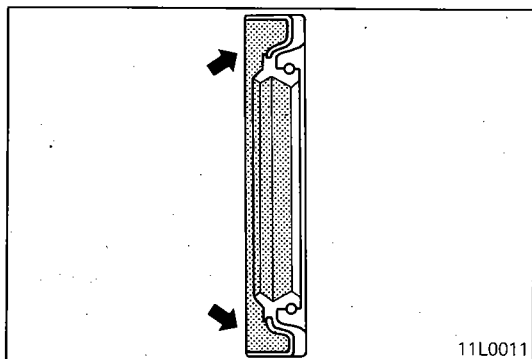
**8. INSTALLATION OF CENTER BEARING**

- (1) Apply multi-purpose grease to the center bearing and center bearing bracket.

**Grease: MOPAR Multi-mileage Lubricant
Part Number 2525035 or equivalent**



- (2) Use the tools to press-fit the bearing in the bracket assembly.



7. 6. INSTALLATION OF DUST SEAL

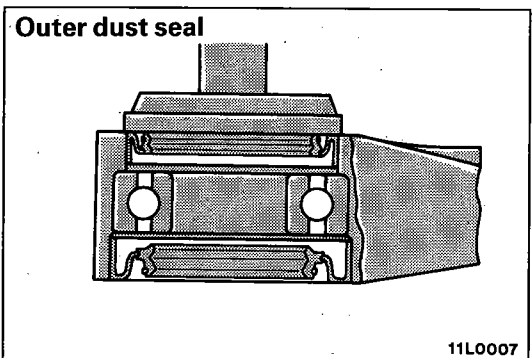
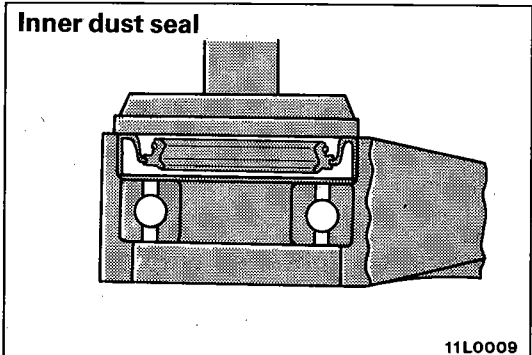
- (1) Fill the reverse side and the lip area of each dust seal with multi-purpose grease.

Grease: MOPAR Multi-mileage Lubricant
Part Number 2525035 or equivalent

Quantity:

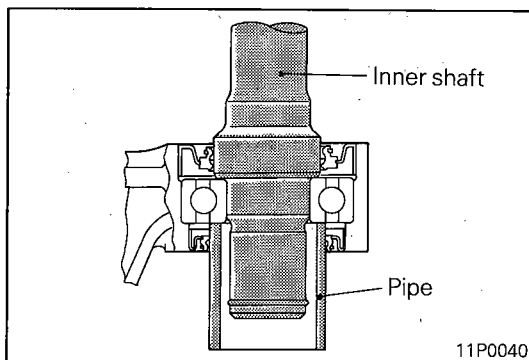
Inner dust seal	7 – 10 g (.25 – .35 oz.)
Outer dust seal	4 – 6 g (.14 – .21 oz.)

- (2) Use the tools to press-fit the dust seals in the bracket assembly.



5. INSTALLATION OF INNER SHAFT

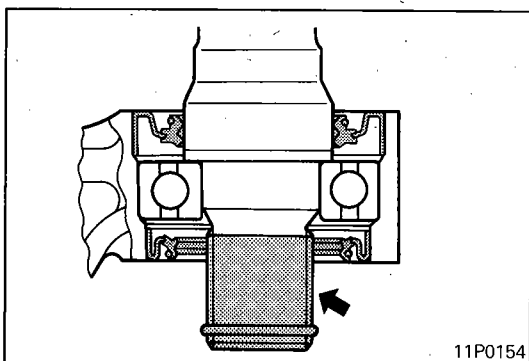
Use a pipe to support the center bearing as shown in the illustration, and then press in the inner shaft.

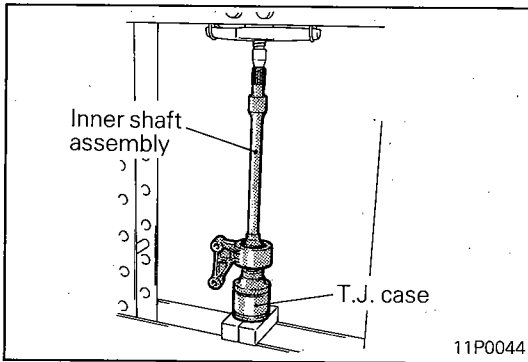


2. INSTALLATION OF T.J. CASE AND INNER SHAFT ASSEMBLY

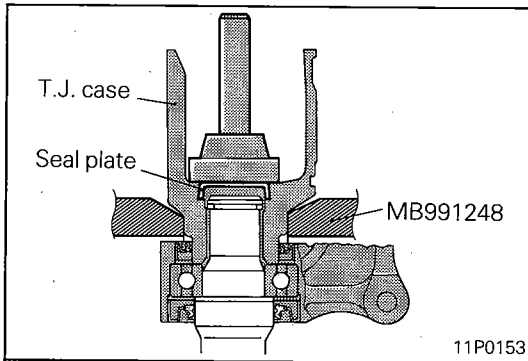
- (1) Coat the splined section of the inner shaft with multi-purpose grease.

Grease: MOPAR Multi-mileage Lubricant
Part Number 2525035 or equivalent

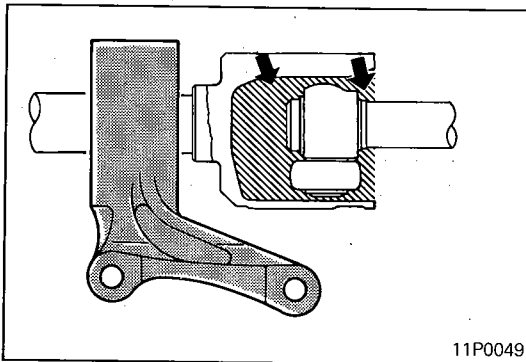




(2) Press the inner shaft assembly into the T.J. case.



(3) Use the special tool to press the seal plate into the T.J. case.

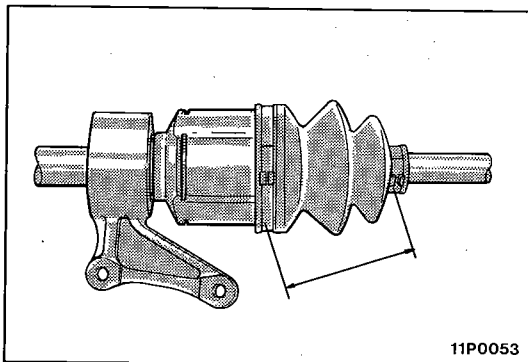


(4) Fill the specified grease furnished in the repair kit to the T.J. case.

Specified grease: Repair kit grease 130 g (4.6 oz.)

NOTE

The grease in the repair kit should be divided in half for use, respectively, at the joint and inside the boot.



1. INSTALLATION OF BOOT BANDS (FOR T.J. BOOT)

Set the T.J. boot bands at the specified distance in order to adjust the amount of air inside the T.J. boot, and then tighten the T.J. boot band securely.

Standard value: 80 ± 3 mm (3.15 ± .12 in.)

STRUT ASSEMBLY

REMOVAL AND INSTALLATION

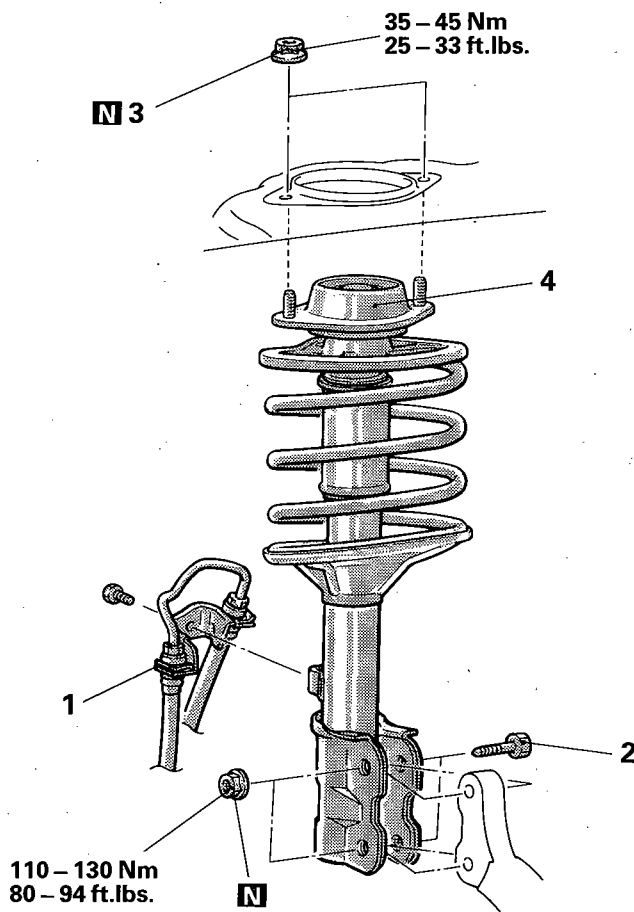
N02LA-

Removal steps

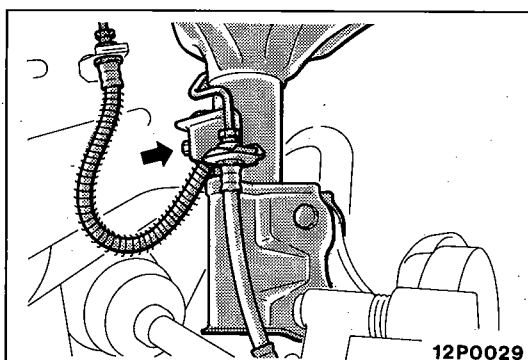
- ↔ 1. Brake hose and tube bracket
- ↔ 2. Strut lower mounting bolts
- ↔ 3. Strut upper mounting nuts
- ↔ 4. Strut assembly

NOTE

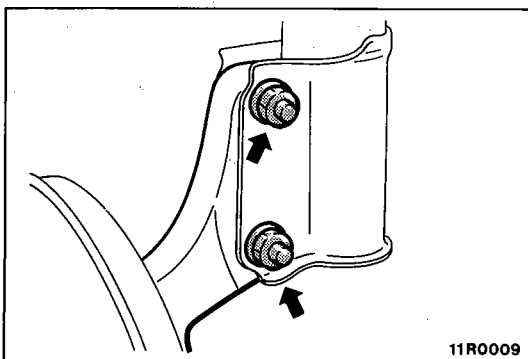
- (1) Reverse the removal procedures to reinstall.
- (2) ↔: Refer to "Service Points of Removal".
- (3) ↔: Refer to "Service Points of Installation".
- (4) **N**: Non-reusable parts



12P0180



12P0029



11R0009

SERVICE POINTS OF REMOVAL

N02LBAG

1. REMOVAL OF BRAKE HOSE AND TUBE BRACKET

Do not pry the brake hose and tube clamp away when removing it.

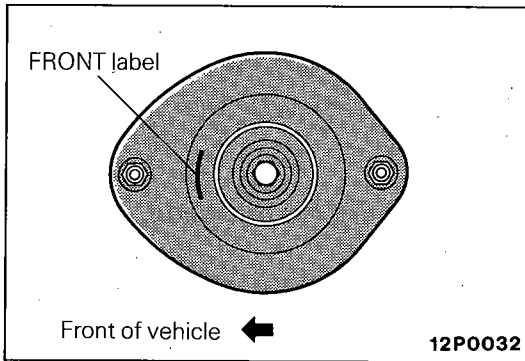
2. REMOVAL OF STRUT LOWER MOUNTING BOLTS

When removing the bolt connecting the strut and knuckle, support the lower arm with a jack. In addition, suspend the knuckle from the vehicle body with a wire in order to prevent the brake hose from being stretched by the weight of the knuckle that has been removed.

INSPECTION

N02LCAB

- Check for oil leaks from the strut assembly.
- Check for strut assembly shock absorber for damage or deformation.



SERVICE POINT OF INSTALLATION

N02LDAH

4. INSTALLATION OF STRUT ASSEMBLY

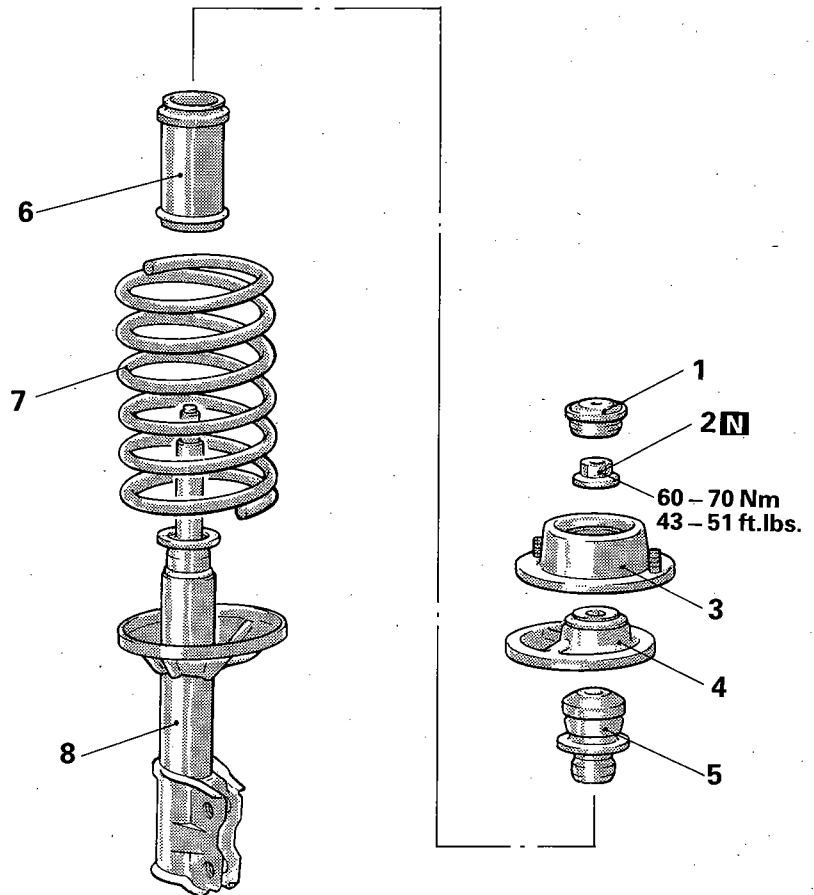
The side labeled "FRONT" of the strut insulator at the top of the shaft assembly should face toward the front of the vehicle when the assembly is installed.

Caution

Always be sure to install the top parts of the strut assembly in the correct direction: the direction these parts are installed has an influence on the caster value.

DISASSEMBLY AND REASSEMBLY

N02LE--



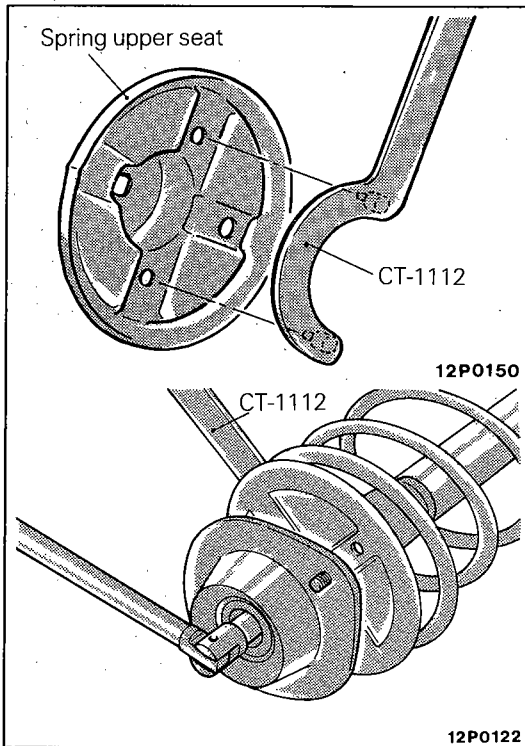
12P0134

Disassembly steps

- ↔ ♦♦ 1. Dust cover
- ↔ ♦♦ 2. Self-locking nut
- ♦♦ 3. Strut insulator
- ♦♦ 4. Spring seat, upper
- ♦♦ 5. Bump rubber
- ♦♦ 6. Dust cover
- 7. Coil spring
- 8. Strut assembly

NOTE

- (1) Reverse the disassembly procedures to reassemble.
- (2) ♦♦: Refer to "Service Points of Disassembly".
- (3) ♦♦: Refer to "Service Points of Reassembly".
- (4) **N**: Non-reusable parts

**SERVICE POINT OF DISASSEMBLY**

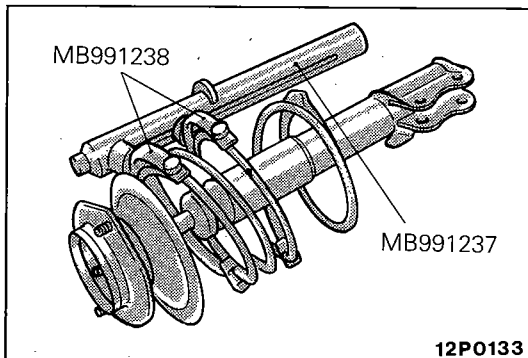
N02LFAI

2. REMOVAL OF SELF-LOCKING NUT

- (1) Holding the spring upper seat with the special tool, loosen the self-locking nut.

Caution

The self-locking nut should be loosened only, not removed.



- (2) Using the special tools, compress the coil spring, and then remove the self-locking nut.

NOTE

Install the special tools evenly, and so that the maximum length will be attained within the installation range.

Caution

Avoid using an air tool when compressing the spring with the special tool.

INSPECTION

N02LGAE

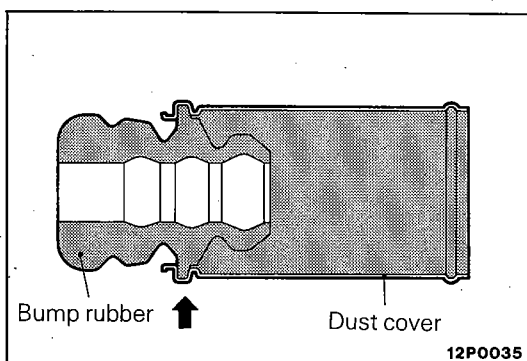
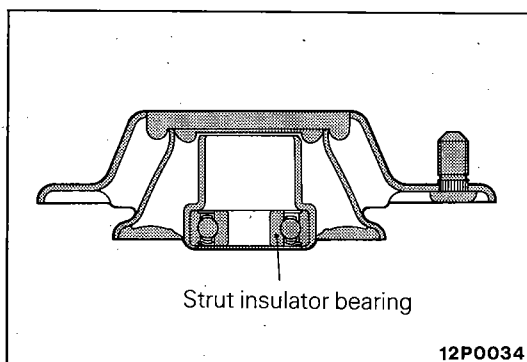
- Check the strut insulator bearing for wear or rust.
- Check the rubber parts for damage or deterioration.
- Check the spring for deformation, deterioration or damage.
- Check the shock absorber for deformation.

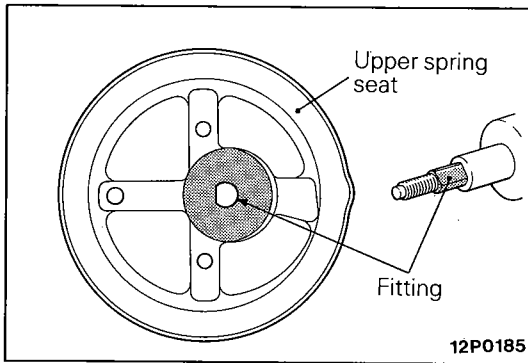
SERVICE POINTS OF REASSEMBLY

N02LHAKa

6. INSTALLATION OF DUST COVER / 5. BUMP RUBBER

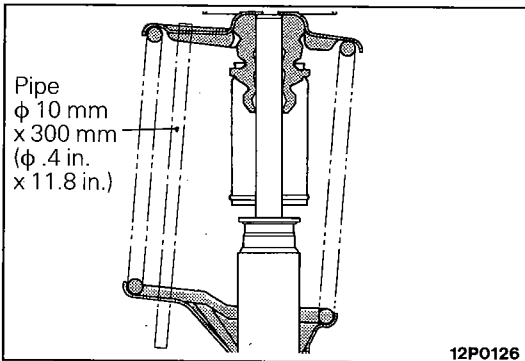
Join the dust cover and bump rubber.





4. INSTALLATION OF SPRING UPPER SEAT ASSEMBLY

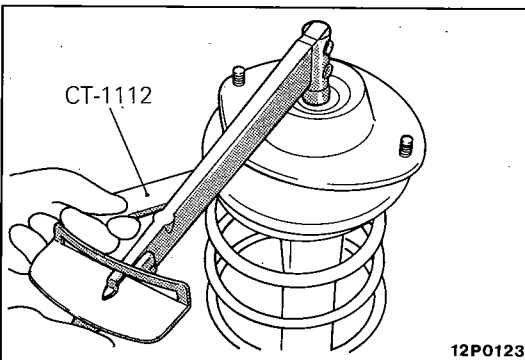
- (1) Assemble the spring upper seat to the piston rod, fitting the notch in the rod to the shaped hole in spring seat.



- (2) Line up the holes in the strut assembly spring lower seat with the hole in the spring upper seat.

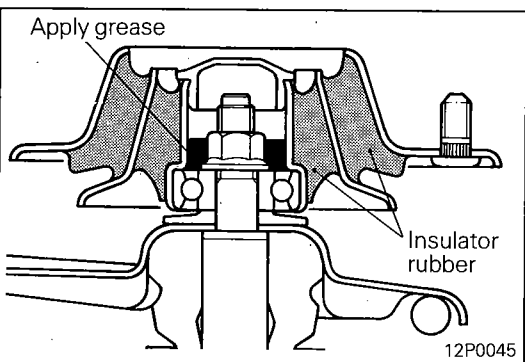
NOTE

The job is easily accomplished with a pipe [φ10 mm x 300 mm (φ .4 in x 11.8 in.)]



2. INSTALLATION OF SELF-LOCKING NUT

- (1) With the coil spring held compressed by the special tools (MB991237 and MB991238), provisionally tighten the self-locking nut.
- (2) Correctly align both ends of the coil spring with the grooves in the spring seat, and then loosen the special tools (MB991237 and MB991238).
- (3) Using the special tool, tighten the strut insulator at the specified torque.



- (4) Apply multi-purpose grease to the bearing part of the strut insulator, and install the insulator cap.

**Grease: MOPAR Multi-mileage Lubricant
Part Number 2525035 or equivalent**

Caution

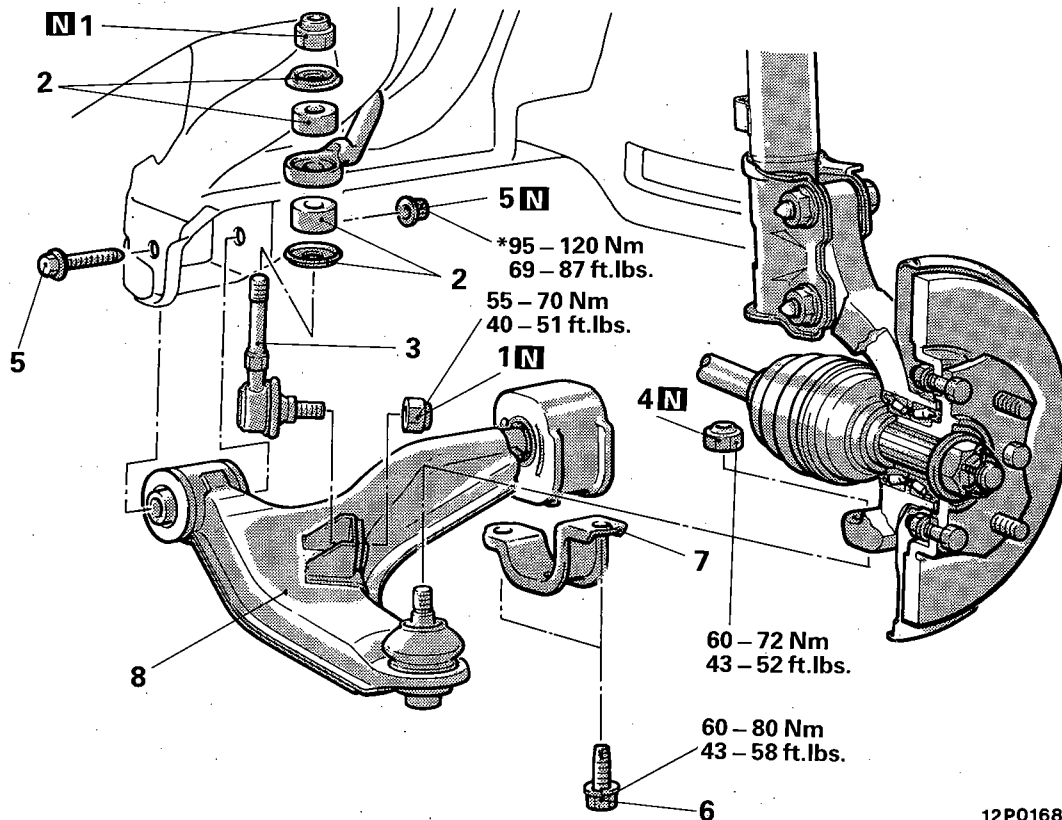
When applying the grease, take care that grease does not adhere to the insulator's rubber part.

LOWER ARM

N02NA -

REMOVAL AND INSTALLATION

<1500>



12P0168

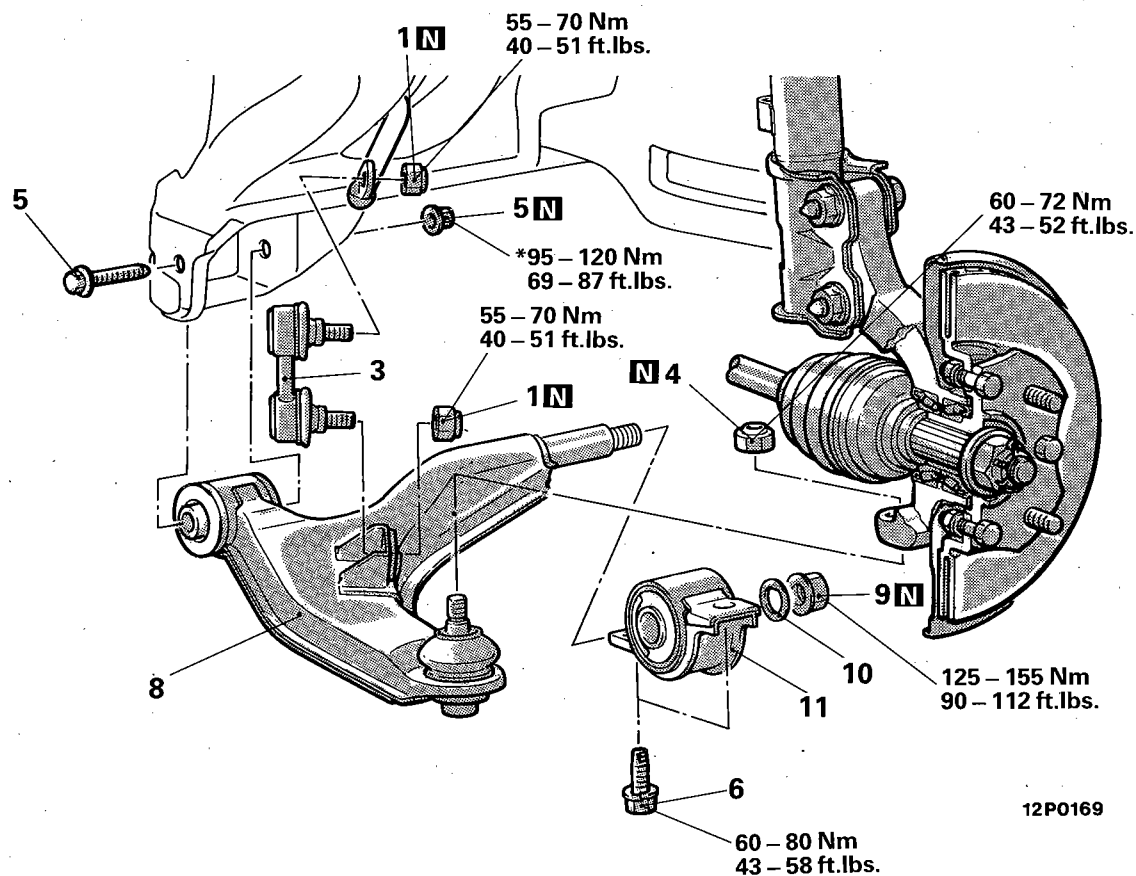
Removal steps

- ◆◆◆ 1. Stabilizer link mounting self-locking nut
- ◆◆◆ 2. Joint cups and bushings
- ◆◆◆ 3. Stabilizer link
- ◆◆ 4. Self-locking nut
- ◆◆ 5. Lower arm front mounting nut and bolt
- ◆◆ 6. Lower arm rear mounting bolts
- ◆◆ 7. Clamp
- ◆◆ 8. Lower arm

NOTE

- (1) Reverse the removal procedures to reinstall.
- (2) ◆◆: Refer to "Service Points of Removal".
- (3) ◆◆◆: Refer to "Service Points of Installation".
- (4) **N**: Non-reusable parts
- (5) *: Fasteners which should first be temporarily tightened only. Once the vehicle is resting on the ground, completely unloaded, they should be finally tightened.

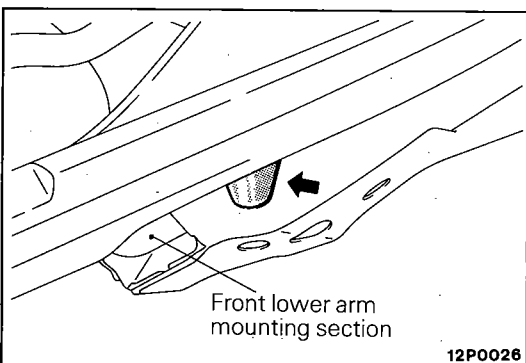
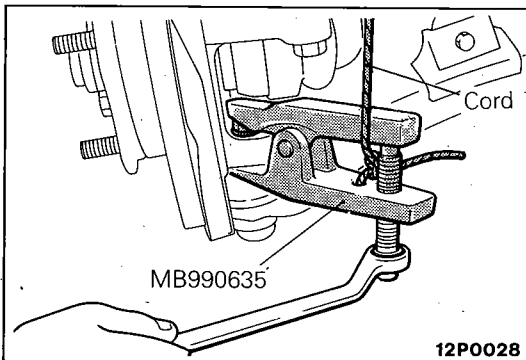
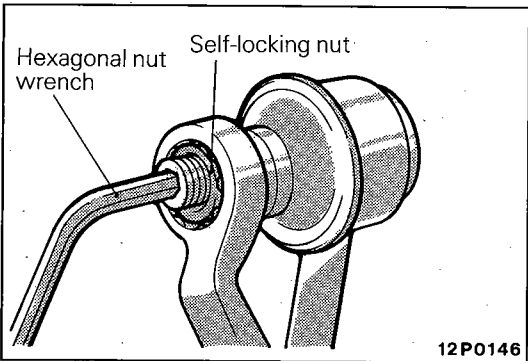
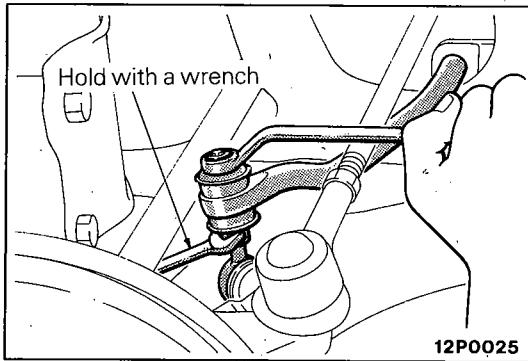
<1600>

**Removal steps**

- ↔ ↔ 1. Stabilizer link mounting self-locking nut
- ↔ 3. Stabilizer link
- ↔ 4. Self-locking nut
- ↔ 5. Lower arm front mounting nut and bolt
- 6. Lower arm rear mounting bolts
- 8. Lower arm
- ↔ 9. Lower arm bushing (B) nut
- ↔ 10. Washer
- 11. Lower arm bushing (B)

NOTE

- (1) Reverse the removal procedures to reinstall.
- (2) ↔: Refer to "Service Points of Removal".
- (3) ↔: Refer to "Service Points of Installation".
- (4) **N**: Non-reusable parts
- (5) *: Fasteners which should first be temporarily tightened only. Once the vehicle is resting on the ground, completely unloaded, they should be finally tightened.



SERVICE POINTS OF REMOVAL

N02NBAJ

1. REMOVAL OF STABILIZER LINK MOUNTING SELF-LOCKING NUTS

- (1) Hold the stabilizer link on the rubber bushing side with a wrench and remove the self-locking nut.

- (2) Hold the ball stud hexagonal opening on the pillow ball side of the link by inserting a hexagonal nut wrench so that it cannot revolve, and remove the self-locking nut.

4. REMOVAL OF SELF-LOCKING NUT

Using the special tool, disconnect the lower arm ball joint from the knuckle.

Caution

1. Be sure to tie the cord of the special tool to the nearby part.
2. Loosen the nut but do not remove it.

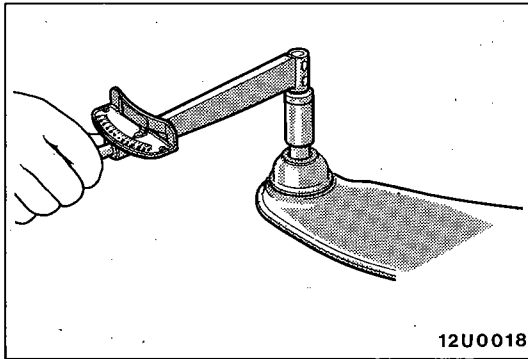
5. REMOVAL OF LOWER ARM FRONT MOUNTING NUT AND BOLT

Use the opening provided on the vehicle body to remove the lower arm mounting nut and bolt.

INSPECTION

N02NCAE

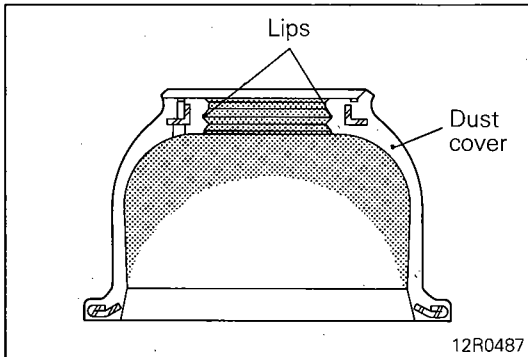
- Check the bushing for wear and deterioration.
- Check the lower arm for bend or breakage.
- Check the clamp for deterioration or damage.
- Check the ball joint dust cover for cracks.
- Check all bolts for condition and straightness.

**CHECKING OF BALL JOINT FOR STARTING TORQUE**

- (1) If a crack is noted in the dust cover, replace it, adding grease.
- (2) Shake the ball joint stud several times.
- (3) Mount two nuts on the ball joints, and then measure the ball joint starting torque.

Standard value: 5.5 Nm (48 in.lbs.) or less

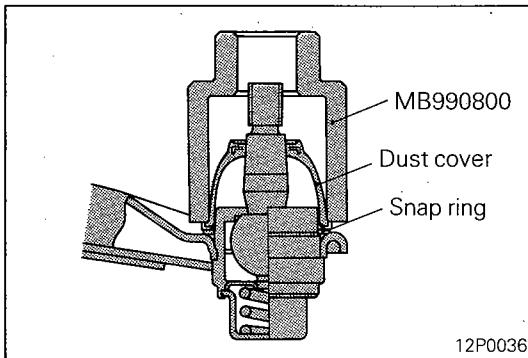
- (4) If the starting torque exceeds the upper limit of standard value, replace the lower arm assembly.
- (5) Even if the starting torque is below the lower limit of the standard value, the ball joint may be reused unless it has drag and excessive play.

**BALL JOINT DUST COVER REPLACEMENT**

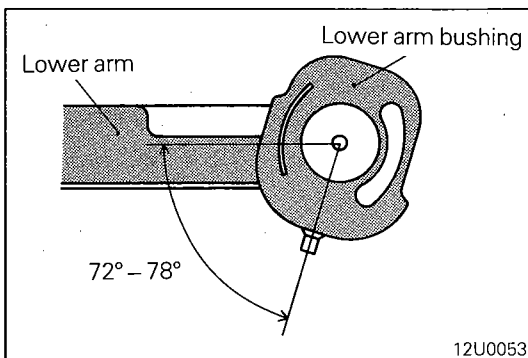
N02NEAFa

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

**Grease: MOPAR Multi-mileage Lubricant
Part Number 2525035 or equivalent**

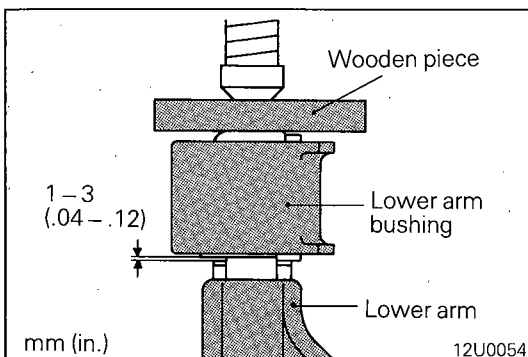


- (3) Drive in the dust cover with the special tool until it is fully seated.

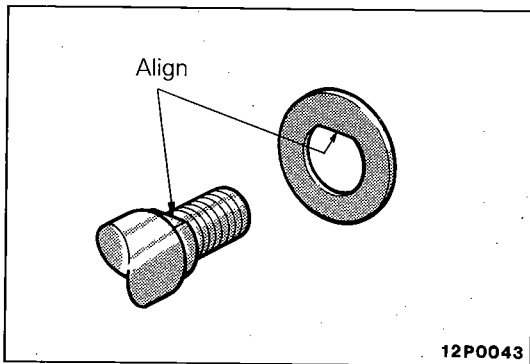
**LOWER ARM BUSHING (B) REPLACEMENT**

N02OJAa

- (1) Apply soapy water between the shaft and old bushing, and pry up bushing using a screwdriver.
- (2) Apply soapy water to the shaft and new bushing and install new bushing into the shaft at the angle shown in the illustration.



- (3) Press in the bushing as illustrated.

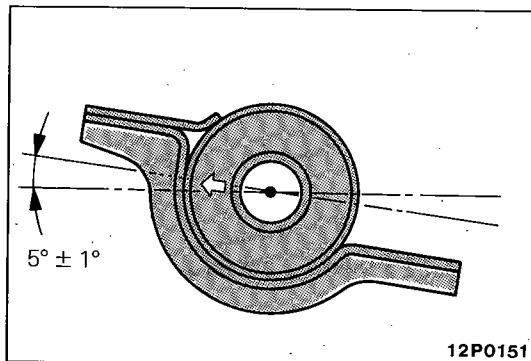


SERVICE POINTS OF INSTALLATION

N02NFAK

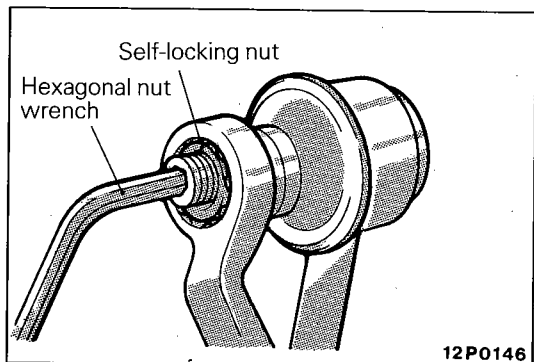
10. INSTALLATION OF WASHER <1600>

Align the washer with the flat area provided on the lower arm mounting part.



9. INSTALLATION OF LOWER ARM BUSHING (B) NUT <1600>

After positioning the lower arm bushing (B) at the angle indicated in the illustration, install the self-locking nut.

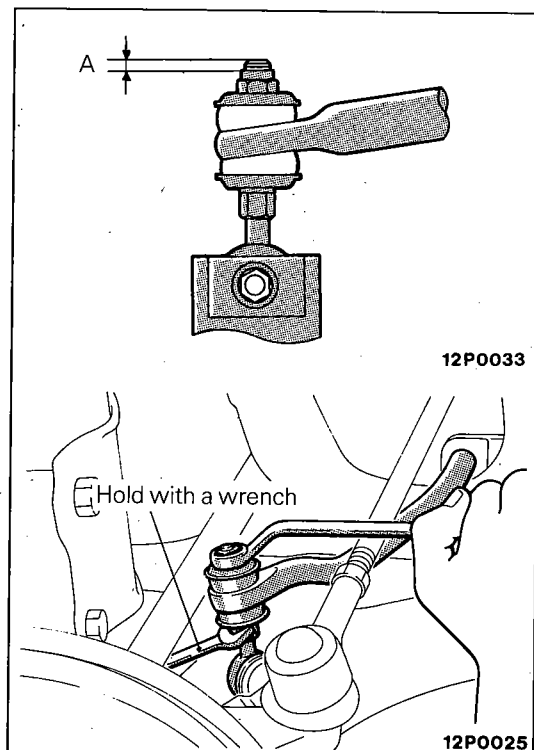


1. INSTALLATION OF STABILIZER LINK MOUNTING SELF-LOCKING NUT

(1) Hold steady the ball stud hexagonal opening on the pillow ball side of the link by inserting a hexagonal nut wrench so that it cannot move, and install the self-locking nut.

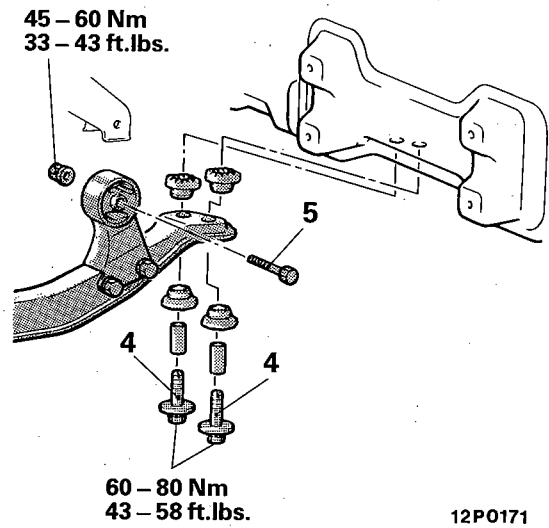
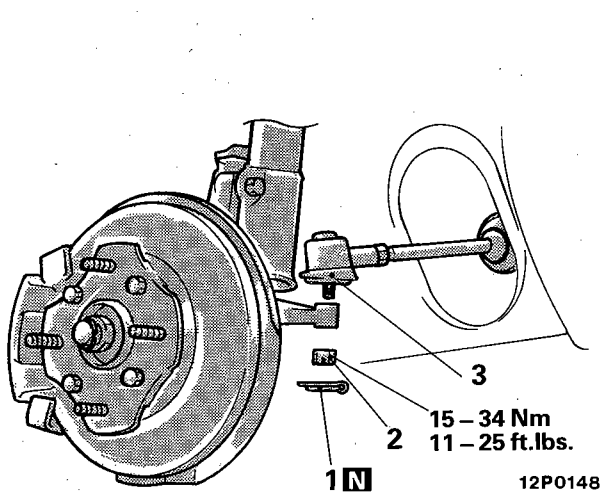
(2) Hold the stabilizer link on the rubber bushing side with a wrench, making sure that the degree of protrusion conforms to the standard value (indicated by dimension A in the illustration) and install the self-locking nut.

Standard value (A): 3 – 5 mm (.12 – .20 in.)

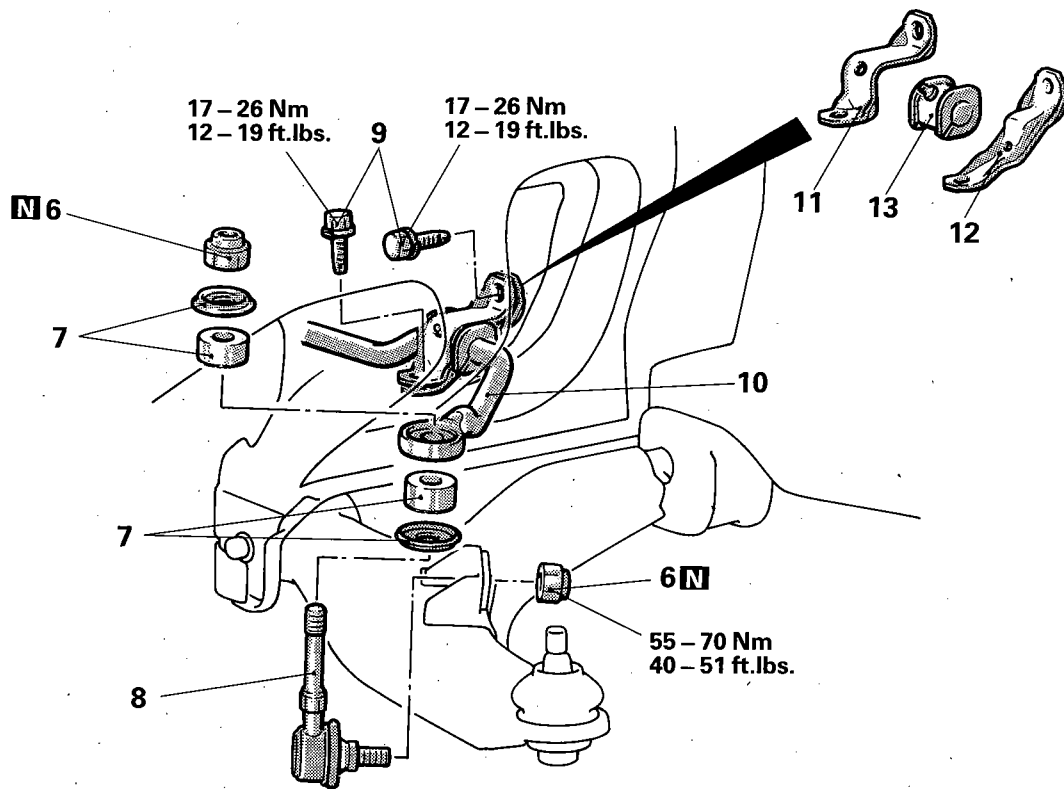


STABILIZER BAR REMOVAL AND INSTALLATION

N02TA--

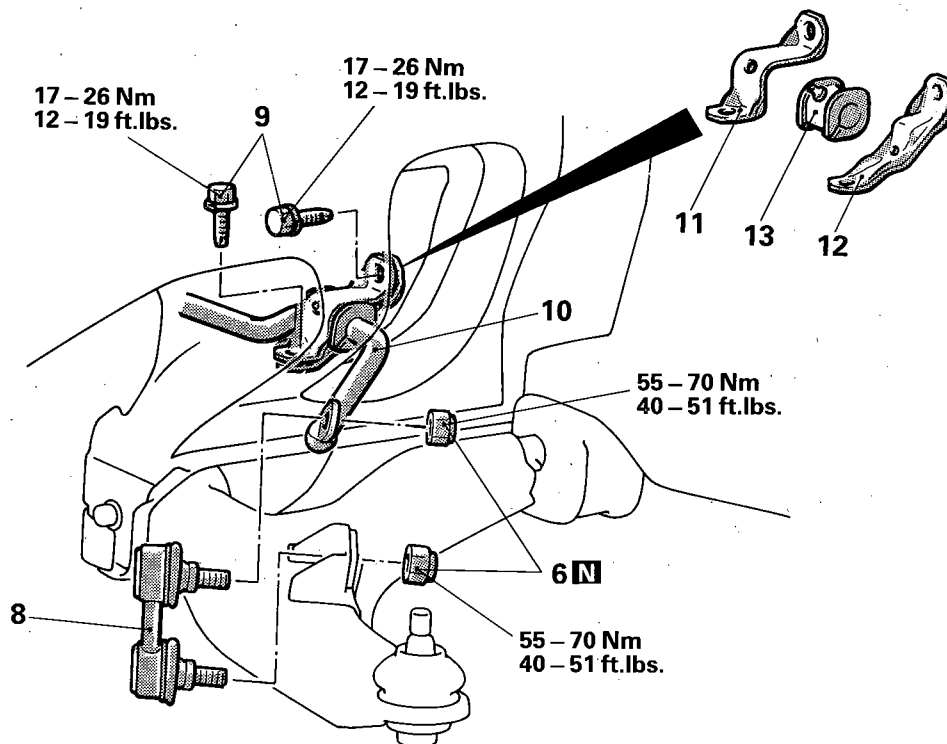


<1500>



12P0174

<1600>



12P0173

Removal steps

1. Cotter pin
- ↔ 2. Tie rod end to knuckle connecting nut
- ↔ 3. Tie rod end to knuckle coupling
4. Center member rear installation bolts
5. Rear roll stopper mounting bolt
- ↔ ↔ 6. Stabilizer link mounting self-locking nut
7. Joint cups and bushings
8. Stabilizer link
- ↔ 9. Stabilizer bar mounting bolts
- ↔ 10. Stabilizer bar
- ↔ 11. Upper fixture
- ↔ 12. Lower fixture
13. Bushing

NOTE

- (1) Reverse the removal procedures to reinstall.
- (2) ↔: Refer to "Service Points of Removal".
- (3) ↔↔: Refer to "Service Points of Installation".
- (4) N: Non-reusable parts

SERVICE POINTS OF REMOVAL

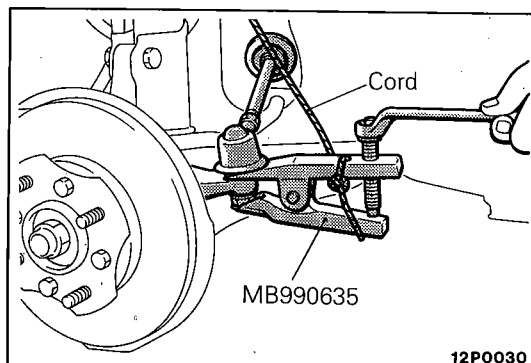
N02TBAC

2. TIE ROD END TO KNUCKLE CONNECTING NUT / 3. TIE ROD END TO KNUCKLE COUPLING

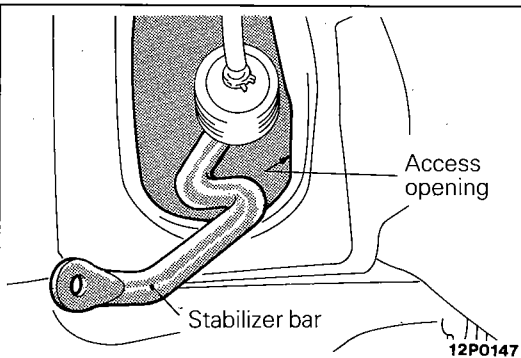
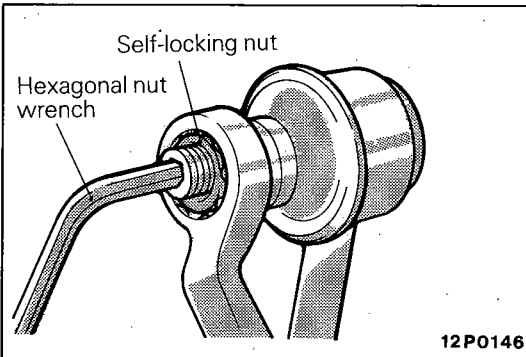
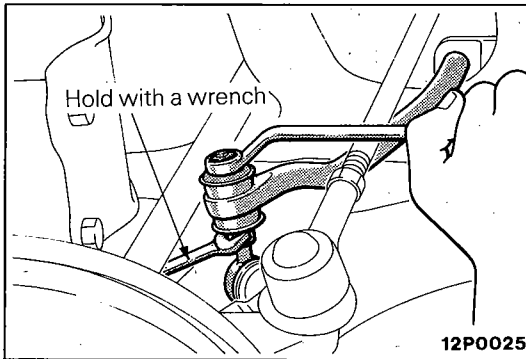
Using the special tool, disconnect the tie rod end from the knuckle.

Caution

1. Be sure to tie the cord of the special tool to the nearby part.
2. Loosen the nut but do not remove it.



12P0030



6. REMOVAL OF STABILIZER LINK MOUNTING SELF-LOCKING NUTS

- (1) Hold the stabilizer link on the rubber bushing side with a wrench and remove the self-locking nut.

- (2) Hold the ball stud hexagonal opening on the pillow ball side of the link by inserting a hexagonal nut wrench so that it cannot revolve, and remove the self-locking nut.

10. REMOVAL OF STABILIZER BAR

Remove the stabilizer bar using the opening (steering gear box access opening) provided on the vehicle body.

INSPECTION

N02TCAD

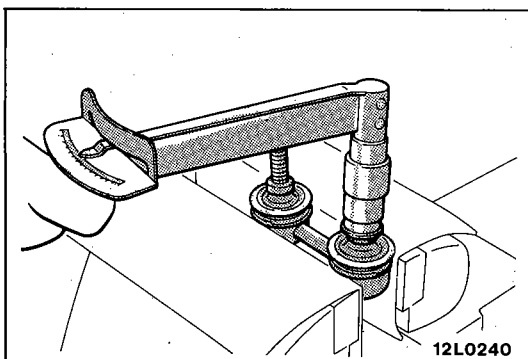
- Check the bushing for wear and deterioration.
- Check the stabilizer bar for deterioration or damage.
- Check the stabilizer link ball joint dust cover for cracks.
- Check all bolts for condition and straightness.

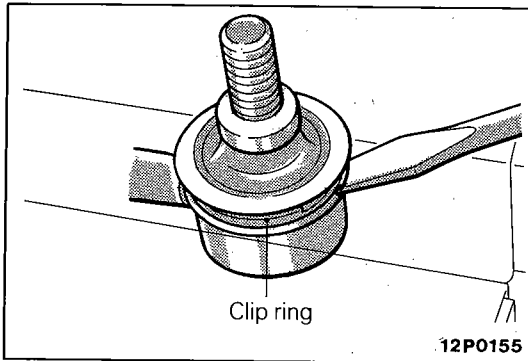
CHECKING OF STABILIZER LINK BALL JOINT FOR STARTING TORQUE

- (1) If a crack is noted in the dust cover, replace it, adding grease.
- (2) Shake the stabilizer link ball joint stud several times.
- (3) Mount two nuts on the ball joint, and then measure the ball joint starting torque.

Standard value: 1.7 – 3.2 Nm (15 – 28 in.lbs.)

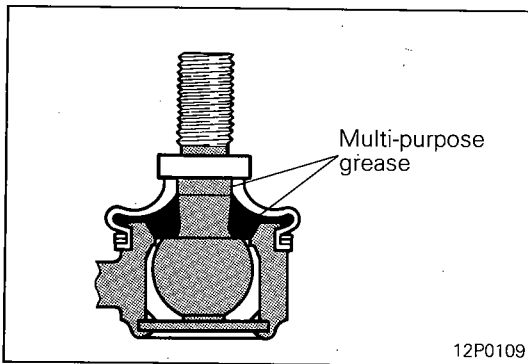
- (4) If the starting torque exceeds the upper limit of standard value, replace the stabilizer link.
- (5) Even if the starting torque is below the lower limit of the standard value, the ball joint may be reused unless it has drag and excessive play.



**BALL JOINT DUST COVER REPLACEMENT**

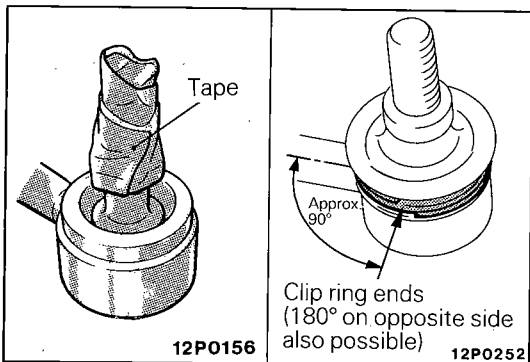
N02TEAB

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



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

**Grease: MOPAR Multi-mileage Lubricant
Part Number 2525035 or equivalent**



- (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

N02TDAH

12. INSTALLATION OF LOWER FIXTURE / 11. UPPER FIXTURE

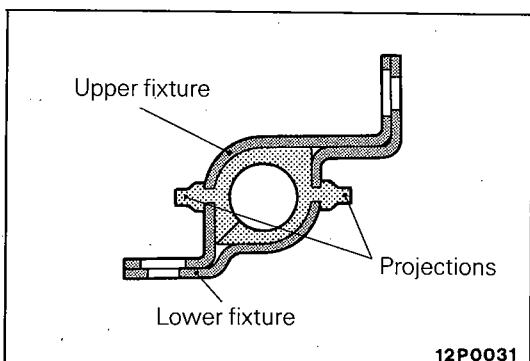
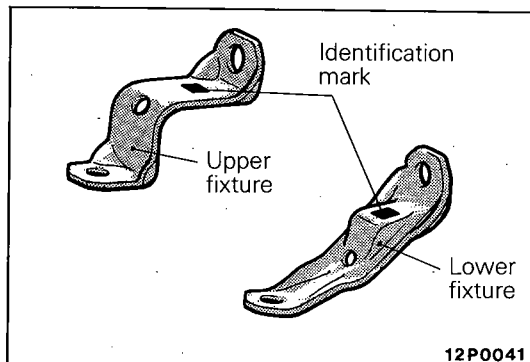
- (1) The lower fixture and upper fixture have different shapes according to whether they are used on the left side or the right side. Distinguish them by noting their identification marks.

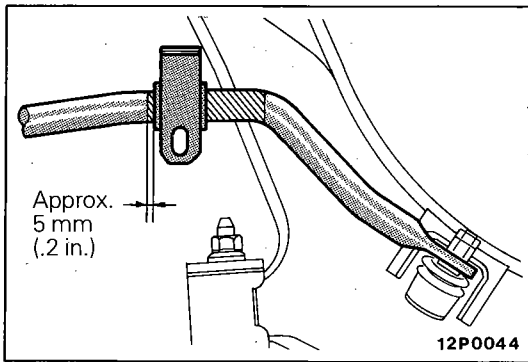
Identification mark:

R for R.H. side

L for L.H. side

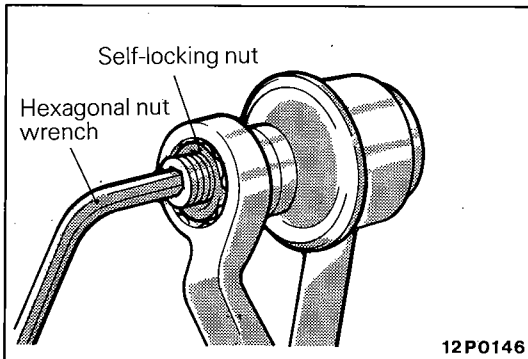
- (2) Sandwich the projections of the stabilizer bushing securely in the space between the fixtures.





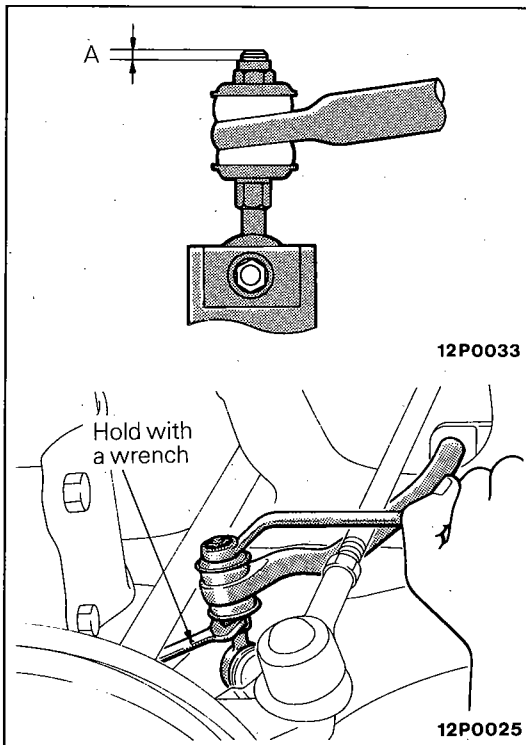
9. INSTALLATION OF STABILIZER BAR MOUNTING BOLTS

- (1) Locate the stabilizer bushing (L.H. side) so that its end is positioned the amount indicated in the illustration from the end of the marked area of the stabilizer bar.
- (2) Temporarily tighten the fixtures of the stabilizer bushing (L.H. side) that has been positioned, then position the stabilizer bushing for the R.H. side. Then securely tighten the stabilizer bar mounting bolts.



6. INSTALLATION OF STABILIZER LINK MOUNTING SELF-LOCKING NUTS

- (1) Hold steady the ball stud hexagonal opening on the pillow ball side of the link by inserting a hexagonal nut wrench so that it cannot move, and install the self-locking nut.



- (2) Hold the stabilizer link on the rubber bushing side with a wrench, making sure that the degree of protrusion conforms to the standard value (indicated by dimension A in the illustration) and install the self-locking nut.

Standard value (A): 3 – 5 mm (.12 – .20 in.)