

GENERAL SPECIFICATIONS
<Vehicles built up to May 1992>
<VEHICLES FOR EUROPE>

FRONT AXLE

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<VEHICLES FOR GENERAL EXPORT AND AUSTRALIA>

Item	1900 (TAXI) 1900 (Export) 1900 (General Export) 1900 (General Export) 1900 (General Export)	1900 (TAXI) 1900 (Export) 1900 (General Export) 1900 (General Export) 1900 (General Export)	1900 (TAXI) 1900 (Export) 1900 (General Export) 1900 (General Export) 1900 (General Export)	1900 (TAXI) 1900 (Export) 1900 (General Export) 1900 (General Export) 1900 (General Export)	1900 (TAXI) 1900 (Export) 1900 (General Export) 1900 (General Export) 1900 (General Export)
Wheel bearing	Single row tapered roller bearing	Single row tapered roller bearing	Single row tapered roller bearing	Single row tapered roller bearing	Single row tapered roller bearing
Type					
O.D. x I.D. (mm/in.)	62 x 38 (2.56 x 1.50)	62 x 38 (2.56 x 1.50)	62 x 38 (2.56 x 1.50)	62 x 38 (2.56 x 1.50)	62 x 38 (2.56 x 1.50)
Drive shaft					
Joint type					
Outer					
Inner					
Length - mm/in.					
L.H. shaft	685 (27.4)	685 (27.4)	685 (27.4)	685 (27.4)	685 (27.4)
R.H. shaft	308 (14.5)	387 (19.4)	387 (19.4)	387 (19.4)	387 (19.4)

NOTE
* B.L. - Right hand
* L.L. - Left hand
* B.L. - Right hand
* L.L. - Left hand

SPECIFICATIONS

GENERAL SPECIFICATIONS

E26CA-

<Vehicles built up to May 1992>

<VEHICLES FOR EUROPE>

Items	1200, 1300, 1500	1600	1800 DOHC	1800 <4WD>	1800D
Wheel bearing Type O.D. x I.D. mm (in.)	Single-row tapered roller bearing 65 x 38 (2.56 x 1.50)				
Drive shaft Joint type Outer Inner Length mm (in.) L.H. shaft R.H. shaft	R.J.* ¹ T.J.* ² 695 (27.4) 368 (14.5)	B.J.* ³ T.J.* ² 692 (27.2) 348 (13.7)	B.J.* ³ T.J.* ² 690 (27.2) 346 (13.6)	B.J.* ³ D.O.J.* ⁴ 356 (14.0) 356 (14.0)	B.J.* ³ T.J.* ² 692 (27.2) 348.5 (13.7)
Center bearing Type O.D. x I.D. mm (in.)	— —	— —	— —	Radial ball bearing 62 x 30 (2.44 x 1.18)	— —

<VEHICLES FOR GENERAL EXPORT AND AUSTRALIA>

Items	1300, 1500, 1800D (except TAXI)	1600 (Vehicles for General Export), 1800 DOHC (COLT for General Export)	1800 DOHC (LANCER for General Export and vehicles for GCC)	1800D (TAXI- LHD), 1600 (Vehicles for Australia)	1800D (TAXI- RHD)
Wheel bearing Type O.D. x I.D. mm (in.)	Single-row tapered roller bearing 65 x 38 (2.56 x 1.50)				
Drive shaft Joint type Outer Inner Length mm (in.) L.H. shaft R.H. shaft	R.J.* ¹ T.J.* ² 695 (27.4) 368 (14.5)	B.J.* ³ L.H. side: T.J.* ² R.H. side: D.O.J.* ⁴ 692 (27.2) 357 (14.1)	B.J.* ³ T.J.* ² 690 (27.2) 346 (13.6)	B.J.* ³ T.J.* ² 692 (27.2) 348.5 (13.7)	B.J.* ³ T.J.* ² 689 (27.1) 345.5 (13.6)

NOTE

*¹R.J.: Rzeppa joint*²T.J.: Tripod joint*³B.J.: Birfield joint*⁴D.O.J.: Double offset joint

<Vehicles built from June 1992>

<VEHICLES FOR EUROPE>

Items	1300, 1500	1600 <2WD>	1600 <4WD>	1800 DOHC	2000D
Wheel bearing Type O.D. x I.D. mm (in.)	Single-row tapered roller bearing 65 x 38 (2.56 x 1.50)				
Drive shaft Joint type Outer Inner Length mm (in.) L.H. shaft R.H. shaft	R.J.* ¹ T.J.* ² 695 (27.4) 368 (14.5)	B.J.* ³ T.J.* ² 692 (27.2) 348 (13.7)-M/T 364 (14.3)-A/T	B.J.* ³ D.O.J.* ⁴ 356 (14.0) 356 (14.0)	B.J.* ³ T.J.* ² 690 (27.2) 346 (13.6)	B.J.* ³ T.J.* ² 692 (27.2) 348.5 (13.7)
Center bearing Type O.D. x I.D. mm (in.)	— —	— —	Radial ball bearing 62 x 30 (2.44 x 1.18)	— —	— —

<VEHICLES FOR GENERAL EXPORT AND AUSTRALIA>

Items	1500	1600
Wheel bearing Type O.D. x I.D. mm (in.)	Single-row tapered roller bearing 65 x 38 (2.56 x 1.50)	
Drive shaft Joint type Outer Inner Length mm (in.) L.H. shaft R.H. shaft	R.J.* ¹ T.J.* ² 695 (27.4) 368 (14.5)	B.J.* ³ T.J.* ² 692 (27.2) 348.5 (13.7)-M/T 364 (14.3)-A/T

NOTE

*¹R.J.: Rzeppa joint

*²T.J.: Tripod joint

*³B.J.: Birfield joint

*⁴D.O.J.: Double offset joint

NOTES

<Vehicles built from June 1992>

<VEHICLES FOR EUROPE>

Item	1300, 1500	1600 <2WD>	1600 <4WD>	1800 GCHC	2000
Wheel bearing Type G.D. x I.D. (mm in.)	Single row tapered roller bearing 85 x 28.12.58 x 1.58				
Drive shaft Joint type Outer Inner Length (mm in.)	R.L. T.L.	R.L. T.L.	R.L. D.O.L.	R.L. T.L.	R.L. T.L.
L.H. shaft R.H. shaft	985 (37.4) 388 (15.2)	985 (37.4) 388 (15.2)	985 (37.4) 388 (15.2)	985 (37.4) 388 (15.2)	985 (37.4) 388 (15.2)
Center bearing Type G.D. x I.D. (mm in.)	-	-	Roller ball bearing 62 x 30 12.44 x 1.18	-	-

<VEHICLES FOR GENERAL EXPORT AND AUSTRALIA>

Item	1500	1600
Wheel bearing Type G.D. x I.D. (mm in.)	Single row tapered roller bearing 85 x 28.12.58 x 1.58	
Drive shaft Joint type Outer Inner Length (mm in.)	R.L. T.L.	R.L. T.L.
L.H. shaft R.H. shaft	985 (37.4) 388 (15.2)	985 (37.4) 388 (15.2)

NOTE
 * R.L. Right hand lock
 * T.L. Taper lock
 * D.O.L. Double offset lock
 * G.D. G.D. Double offset lock

SERVICE SPECIFICATIONS

Items	Specifications
Standard value	
Setting of T.J. boot length mm (in.)	
T.J.-R.J. type	L.H. 80 ± 3 (3.15 ± 0.12) R.H. 85 ± 3 (3.35 ± 0.12)
T.J.-B.J. type <1600-2WD, 1800D, 2000D>	L.H. 80 ± 3 (3.15 ± 0.12) R.H. 85 ± 3 (3.35 ± 0.12)
T.J.-B.J. type <1800 DOHC>	L.H. 80 ± 3 (3.15 ± 0.12) R.H. 80 ± 3 (3.15 ± 0.12)
Setting of D.O.J. boot length mm (in.)	
Vehicles for Europe	90 ± 3 (3.54 ± 0.12)
Vehicles for General Export	75 ± 3 (2.95 ± 0.12)
Limit	
Hub end play mm (in.)	0.2 (0.008) or less
Wheel bearing starting torque Nm (kgcm, in.lbs.)	1.3 (13, 11) or less

TORQUE SPECIFICATIONS

Items	Nm	kgm	ft.lbs.
Drive shaft nut	200 – 260	20 – 26	144 – 188
Lower arm ball joint	60 – 72	6.0 – 7.2	43 – 52
Tie rod end ball joint	15 – 34	1.5 – 3.4	11 – 25
Front strut mounting nut	110 – 130	11 – 13	80 – 94
Caliper assembly mounting bolt	80 – 100	8.0 – 10	58 – 72
Front hub to brake disc	50 – 60	5.0 – 6.0	36 – 43
Front hub to front rotor <Vehicles with A.B.S.*>	50 – 60	5.0 – 6.0	36 – 43
Inner shaft bracket mounting nut	36 – 46	3.6 – 4.6	26 – 33

NOTE

* : A.B.S. – Anti-skid brake system

LUBRICANTS

E26CD-

Items	Specified lubricants	Quantity
T.J.-R.J. type drive shaft		
R.J. boot grease	Repair kit grease	75 – 95 g (2.6 – 3.4 oz)
T.J. boot grease	Repair kit grease	115 – 135 g (4.1 – 4.8 oz)
T.J.-B.J. type drive shaft		
*1<1600 (2WD), 1800D>		
B.J. boot grease	Repair kit grease	90 g (3.2 oz)
T.J. boot grease	Repair kit grease	110 g (3.9 oz)
*2<1600 (2WD), 2000D>		
B.J. boot grease	Repair kit grease	85 – 105 g (3.0 – 3.7 oz)
T.J. boot grease	Repair kit grease	95 – 115 g (3.4 – 4.1 oz)
T.J.-B.J. type drive shaft <1800 DOHC>		
B.J. boot grease	Repair kit grease	100 – 120 g (3.5 – 4.2 oz)
T.J. boot grease	Repair kit grease	110 – 130 g (3.9 – 4.6 oz)
D.O.J.-B.J. type drive shaft		
B.J. boot grease	Repair kit grease	75 – 95 g (2.6 – 3.4 oz)
D.O.J. boot grease	Repair kit grease	80 – 100 g (2.8 – 3.5 oz)

NOTE

*1: Vehicles built up to May 1992

*2: Vehicles built from June 1992

Drive shaft nut	20 – 25	200 – 250
Lower arm ball joint	5.0 – 7.5	50 – 75
Two rod end ball joint	7.5 – 9.4	75 – 94
Front strut mounting nut	7.1 – 13	110 – 150
Coilover assembly mounting bolt	8.0 – 10	80 – 100
Front hub to brake disc	8.0 – 8.0	80 – 80
Front hub to front fork <Vehicle with A.B.2>	8.0 – 8.0	80 – 80
Inner front bracket mounting nut	8.8 – 8.8	88 – 88

NOTE

A.B.2 – Anti-lock brake system

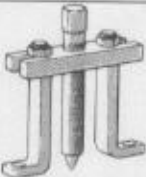
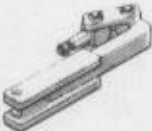
SPECIAL TOOLS

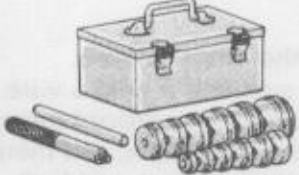
NOTES

Tool	Number	Name	Use
	MB90113 (MB90039)	Steering knuckle puller	Removal of the lower arm ball joint and tie rod
	MB90067	End yoke holder	Removal of the drive shaft nut
	MB90031	Axle shaft puller	Removal of the drive shaft
	MB90158	Knuckle arm bridge	Removal of the hub
	MB90088	Front hub remover and protector	Removal or grease the front hub
	MB90034	Beaming roller	Removal of the wheel bearing inner race
	MB90060	Beaming remover	
	MB90071	Front bearing separator or seal remover	
	MB90078	Front axle bush	Press fitting of the wheel bearing inner race

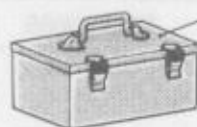
SPECIAL TOOLS

E26DA-

Tool	Number	Name	Use
	MB991113 (MB990635)	Steering linkage puller	Removal of the lower arm ball joint and tie rod
	MB990767	End yoke holder	Removal of the drive shaft nut
	MB990241	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 the front hub
	MB990339	Bearing puller	Removal of the wheel bearing inner race
	MB990781	Bearing remover	
	MD998031	Front bearing retainer oil seal installer	
	MB990776	Front axle base	Press-fitting of the wheel bearing inner race

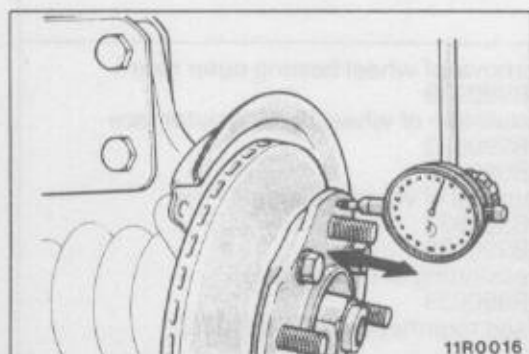
Tool	Number	Name	Use
	MB990685	Torque wrench	Measurement of the wheel bearing starting torque
	MB990326	Preload socket	
	MB990628	Snap ring pliers	To remove and install the snap ring of the drive shaft
	MB991015	Oil seal installer	Press-fitting of the oil seals (Used together with MB990938 in MB990925)
	MB990925	Bearing and oil seal installer set	Removal of wheel bearing outer race MB990939 Installation of wheel bearing outer race MB990933 MB990938 Removal of wheel bearing MB990932 MB990938 Press-fitting of the oil seals MB990938 (Used together with MB991015)

MB990925

A
Installer adapter.C Brass bar
B Bar (snap-in type)

Tool box

Type	Tool number	O.D. mm (in.)	Type	Tool number	O.D. mm (in.)
A	MB990926	39 (1.54)	A	MB990933	63.5 (2.50)
	MB990927	45 (1.77)		MB990934	67.5 (2.66)
	MB990928	49.5 (1.95)		MB990935	71.5 (2.81)
	MB990929	51 (2.01)		MB990936	75.5 (2.97)
	MB990930	54 (2.13)		MB990937	79 (3.11)
	MB990931	57 (2.24)	B	MB990938	—
	MB990932	61 (2.40)	C	MB990939	—



11R0016

SERVICE ADJUSTMENT PROCEDURES

E26FEAE

HUB END PLAY INSPECTION

1. Jack up the vehicle and remove the front wheels.
2. Remove the disc brake caliper and suspend it with a wire. (Refer to GROUP 35 – Service Adjustment Procedures.)
3. Attach a dial indicator as shown in the illustration, and then measure the end play while moving the hub back and forth.

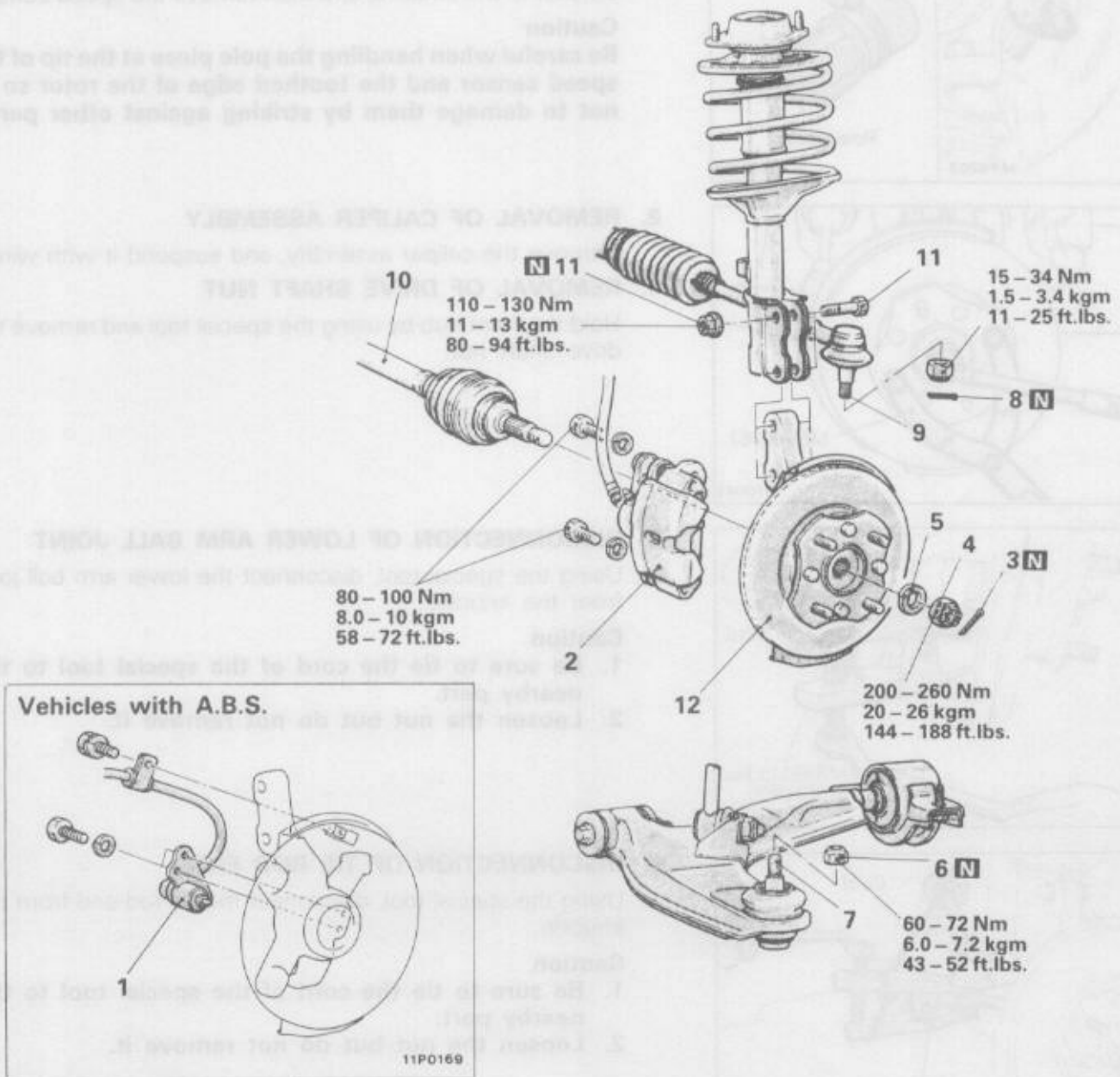
Limit: 0.2 mm (0.008 in.) or less

4. If end play exceeds the limit, disassemble and check parts.

AXLE HUB

REMOVAL AND INSTALLATION

E26HA -

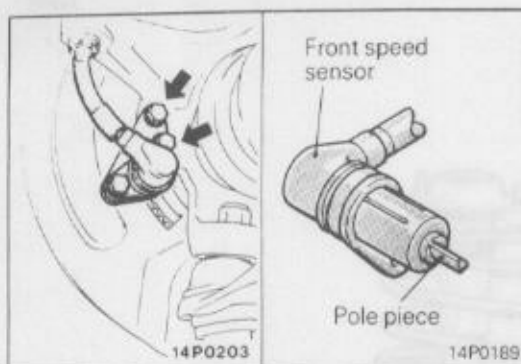


Removal steps

- ◆◆ ◆◆ 1. Connection of front speed sensor <Vehicles with A.B.S.>
- ◆◆ 2. Caliper assembly connection
- ◆◆ ◆◆ 3. Split pin
- ◆◆ ◆◆ 4. Drive shaft nut
- ◆◆ 5. Washer
- ◆◆ 6. Self-locking nut
- ◆◆ 7. Lower arm ball joint connection
- ◆◆ 8. Split pin
- ◆◆ 9. Tie rod end connection
- ◆◆ 10. Drive shaft
- ◆◆ 11. Strut assembly connection
- ◆◆ 12. 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



SERVICE POINTS OF REMOVAL

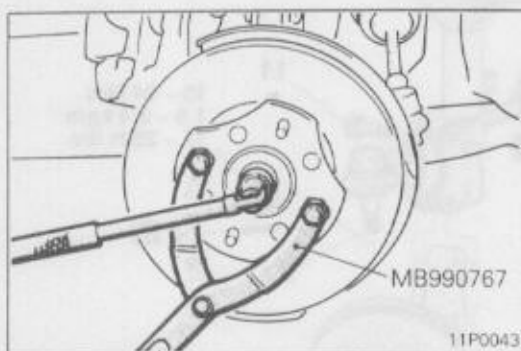
E26HBAE

1. DISCONNECTION OF FRONT SPEED SENSOR

Remove the mounting bolts which hold the speed sensor bracket to the knuckle, and then remove the speed sensor.

Caution

Be careful when handling the pole piece at the tip of the speed sensor and the toothed edge of the rotor so as not to damage them by striking against other parts.

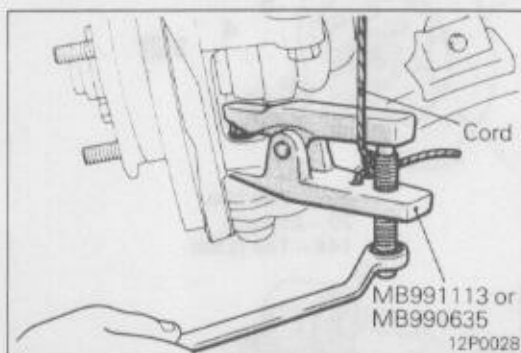


2. REMOVAL OF CALIPER ASSEMBLY

Remove the caliper assembly, and suspend it with wires.

4. REMOVAL OF DRIVE SHAFT NUT

Hold the front hub by using the special tool and remove the drive shaft nut.

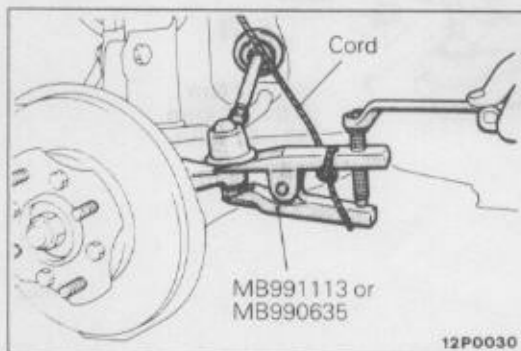


7. DISCONNECTION OF LOWER ARM BALL JOINT

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. Loosen the nut but do not remove it.

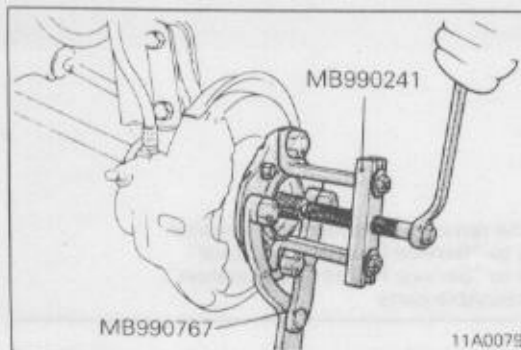


9. DISCONNECTION OF TIE ROD END

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. Loosen the nut but do not remove it.



10. REMOVAL OF DRIVE SHAFT

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

INSPECTION

E26HCADa

- 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

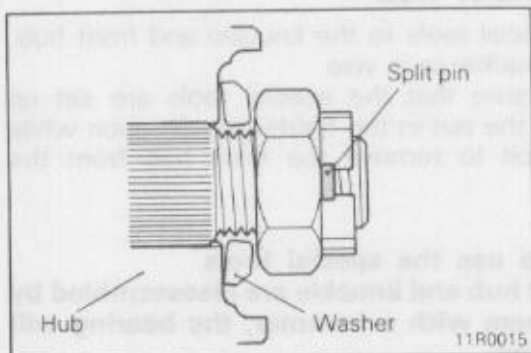
If the meshing of the wheel bearing outer race and the knuckle, or of the wheel bearing inner race and the hub, is loose, replace the bearing.

SERVICE POINTS OF INSTALLATION

E26HDAE

5. INSTALLATION OF WASHER / 4. DRIVE SHAFT NUT / 3. SPLIT 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 split pin holes does not match, tighten the nut up to 260 Nm (26 kgm, 188 ft.lbs.) in maximum.
- (4) Install the split pin in the first matching holes and bend it securely.

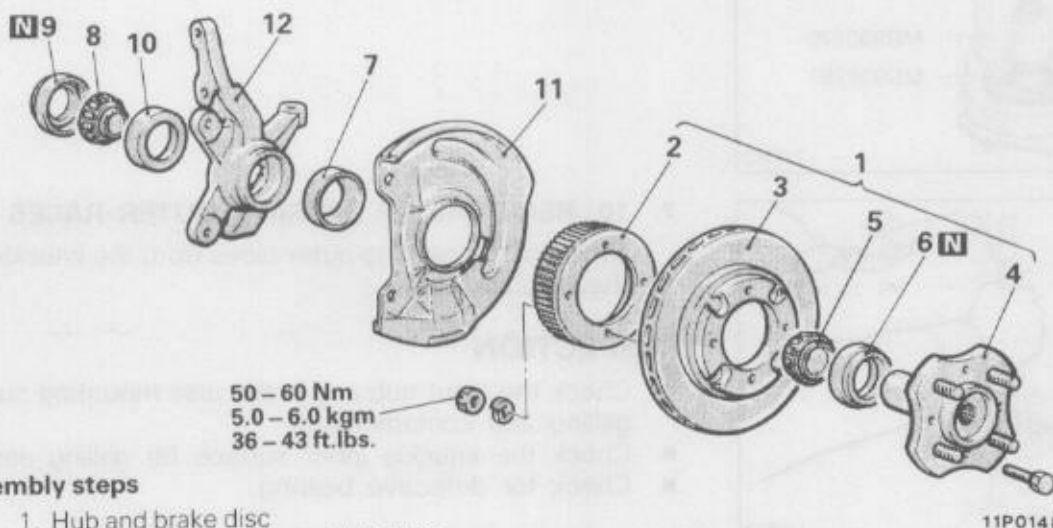


1. INSTALLATION OF FRONT SPEED SENSOR

Refer to GROUP 35 – Speed Sensor.

E26HI-

DISASSEMBLY AND REASSEMBLY



Disassembly steps

1. Hub and brake disc
2. Front rotor <Vehicles with A.B.S.>
3. Brake disc
4. Front hub
5. Outer bearing inner race
6. Oil seal (hub side)
7. Outer bearing outer race
8. Inner bearing inner race
9. Oil seal (drive shaft side)
10. Inner bearing outer race
11. Dust cover
12. Knuckle

NOTE

- (1) ♦♦ Refer to "Service Points of Disassembly".
- (2) ♦♦ Refer to "Service Points of Reassembly".
- (3) [N] Non-reusable parts

Reassembly steps

12. Knuckle
11. Dust cover
- ♦♦ 10. Inner bearing outer race
- ♦♦ 7. Outer bearing outer race
5. Outer bearing inner race
- ♦♦ 6. Oil seal (hub side)
8. Inner bearing inner race
3. Brake disc
2. Front rotor <Vehicles with A.B.S.>
4. Front hub
- ♦♦ Adjustment of wheel bearing starting torque
- ♦♦ 9. Oil seal (drive shaft side)

SERVICE POINTS OF DISASSEMBLY

E26HJAE

2. REMOVAL OF FRONT ROTOR

Caution

Care must be taken not to scar or scratch the rotor's tooth surfaces, and the rotor must never be dropped. If the rotor's tooth surfaces are chipped, or the rotor is in any way deformed, it cannot accurately detect the wheel rotation speed, and the system might not function normally.

4. 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.

5. REMOVAL OF OUTER BEARING INNER RACE

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

7. 10. REMOVAL OF BEARING OUTER RACES

Drive out the bearing outer races from the knuckle by using the special tool.

INSPECTION

E26HKAAa

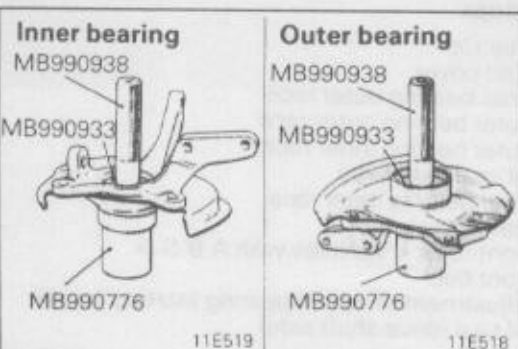
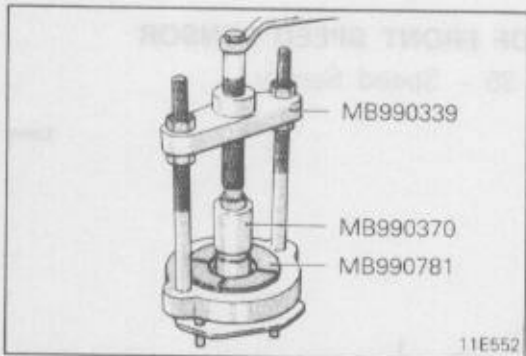
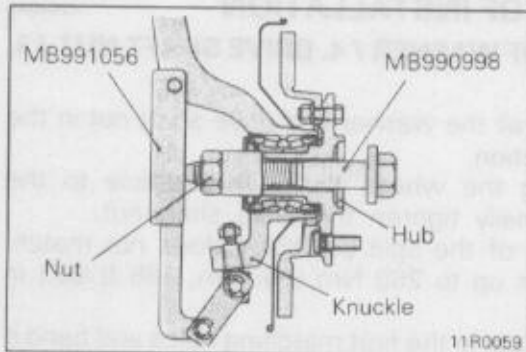
- Check the front hub and brake disc mounting surfaces for galling and contamination.
- Check the knuckle inner surface for galling and cracks.
- Check for defective bearing.

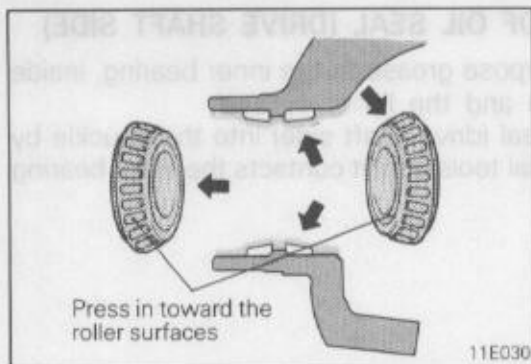
SERVICE POINTS OF REASSEMBLY

E26HOAF

10. 7. INSTALLATION OF BEARING OUTER RACES

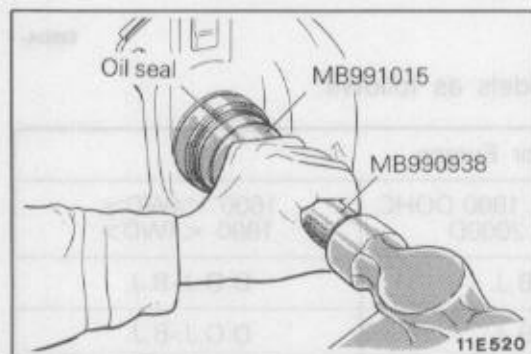
- (1) Apply multi-purpose grease to the outside surface of the bearing outer races.
- (2) Drive the bearing outer races into the knuckle by using the special tools.



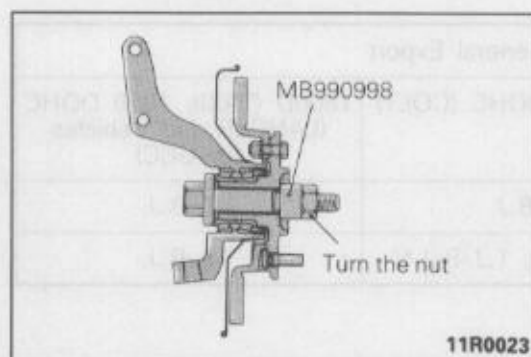


6. INSTALLATION OF OIL SEAL (HUB SIDE)

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

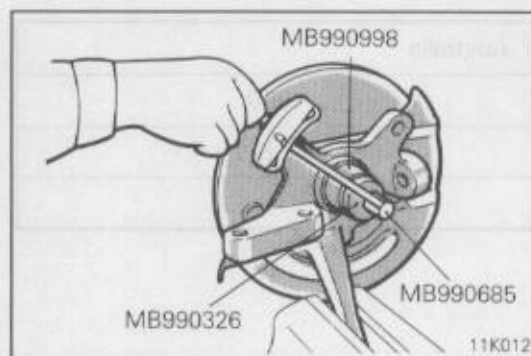


- (4) Drive the oil seal (hub side) into the knuckle by using the special tools.



4. 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 (20 – 26 kgm, 144 – 188 ft.lbs.) torque.
- (2) Rotate the front hub in order to seat the bearings.



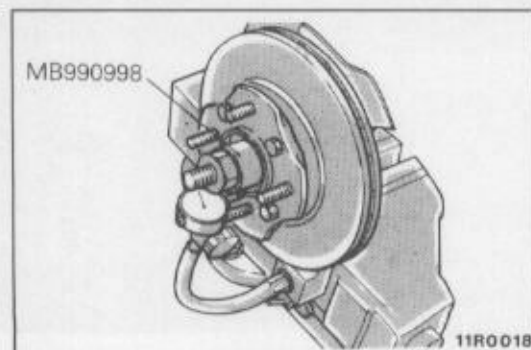
• ADJUSTMENT OF WHEEL BEARING STARTING TORQUE

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

Limit: 1.3 Nm (13 kgcm, 11 in.lbs.) or less

NOTE

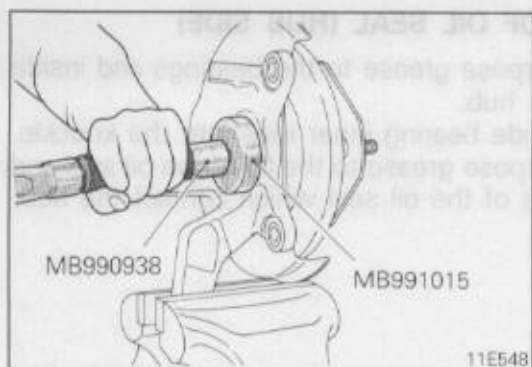
The starting torque must be within the limit and, in addition, the bearings must not feel rough when rotated.



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

Limit: 0.20 mm (0.008 in.) or less

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



9. 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.
- (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

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

		Vehicles for Europe		
		1200, 1300, 1500	1600 <2WD>, 1800 DOHC, 1800D, 2000D	1600 <4WD>, 1800 <4WD>
Drive shaft type	L.H.	T.J.-R.J.	T.J.-B.J.	D.O.J.-B.J.
	R.H.	T.J.-R.J.	T.J.-B.J.	D.O.J.-B.J.

		Vehicles for General Export		
		1300, 1500, 1800D (Except TAXI)	1600, 1800 DOHC (COLT)	1800D (TAXI), 1800 DOHC (LANCER and Vehicles for GCC)
Drive shaft type	L.H.	T.J.-R.J.	T.J.-B.J.	T.J.-B.J.
	R.H.	T.J.-R.J.	D.O.J.-B.J.*1, T.J.-B.J.*2	T.J.-B.J.

NOTE

*1: Vehicles built up to May 1992

*2: Vehicles built from June 1992

		Vehicles for Australia	
		1500	1600
Drive shaft type	L.H.	T.J.-R.J.	T.J.-B.J.
	R.H.	T.J.-R.J.	T.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
Part identification No.	*'92.5 *'84.6	*'MB297454-B *'MB526295	31.0	*'MB297740 or *'MB297482-A *'No number	*'92.5 *'84.6

NOTE

*1: Vehicles built up to May 1992
*2: Vehicles built from June 1992

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	
Part identification No.	*1	20-110#BJ87	17-261#TJ87	20-146#BJ87	17-249#BJ87L or *17-345#BJ87L	20-113#BJ87L
	*2	20-12#BJ92	17-55#TJ92	20-111#BJ87	17-31#BJ92L	20-75#BJ95

NOTE

*1: 1600 (2WD), 1800D, 2000D
*2: 1800 DOHC
*3: Vehicles built from June 1992

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		Identification location  11K033	Identification location  11R0156	Identification location  11K033	Identification location  11K033	Identification location  11K033
Part identification No.	*1	20-82#BJ82	17-152#BJ82	20-83#BJ82	17-151#BJ82L	20-110#BJ87
	*2	20-110#BJ87	17-258#BJ87	20-111#BJ87	17-249#BJ87L	20-113#BJ87L

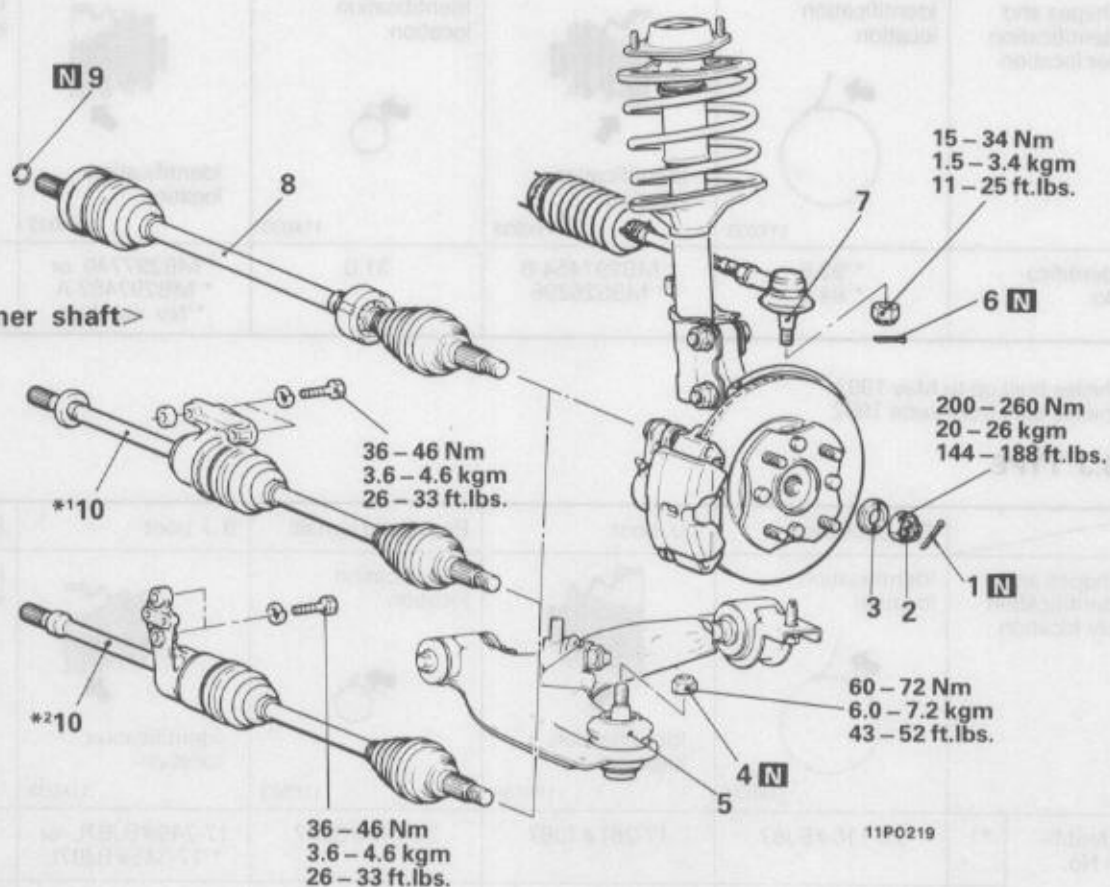
NOTE

*1: Vehicles for Europe
*2: Vehicles for General Export

REMOVAL AND INSTALLATION

<Without inner shaft>

<With inner shaft>



Removal steps

- ◆◆ 1. Split pin
- ◆◆ ◆◆ 2. Drive shaft nut
- ◆◆ 3. Washer
- ◆◆ 4. Self-locking nut
- ◆◆ 5. Connection for lower arm ball joint
- ◆◆ 6. Split pin
- ◆◆ 7. Connection for tie rod end
- ◆◆ 8. Drive shaft
- ◆◆ 9. Circlip
- ◆◆ 10. Drive shaft and inner shaft 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
- (5) *1: Vehicles built up to May 1992
- (6) *2: Vehicles built from June 1992

SERVICE POINTS OF REMOVAL

E26QBBF

2. REMOVAL OF DRIVE SHAFT NUT

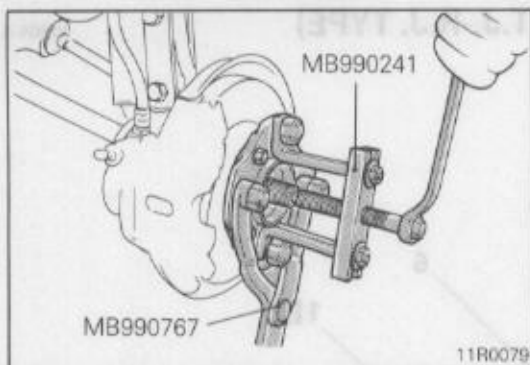
Refer to P.26-8.

5. DISCONNECTION OF LOWER ARM BALL JOINT

Refer to P.26-8.

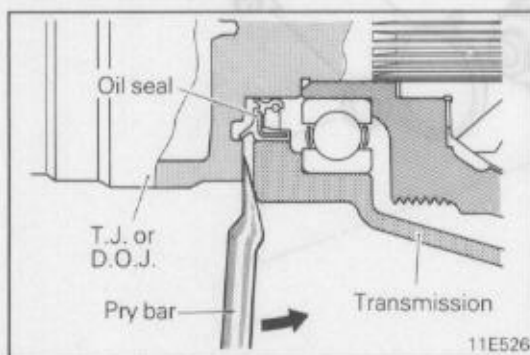
7. DISCONNECTION OF TIE ROD END

Refer to P.26-8.



8. REMOVAL OF DRIVE SHAFT / 10. DRIVE SHAFT AND INNER SHAFT ASSEMBLY

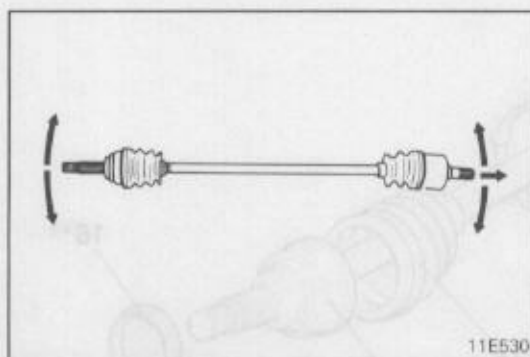
- (1) Use the special tools to push out the drive shaft from the front hub.



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

Caution

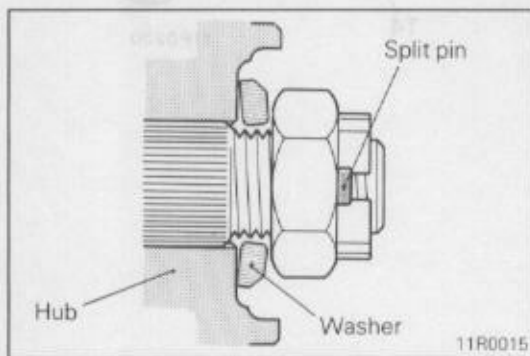
1. Do not pull on the drive shaft; doing so will damage the T.J. or D.O.J.; be sure to use the pry bar.
2. Do not insert the pry bar so deeply as to damage the oil seal.



INSPECTION

E26QC8D

- 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.



SERVICE POINTS OF INSTALLATION

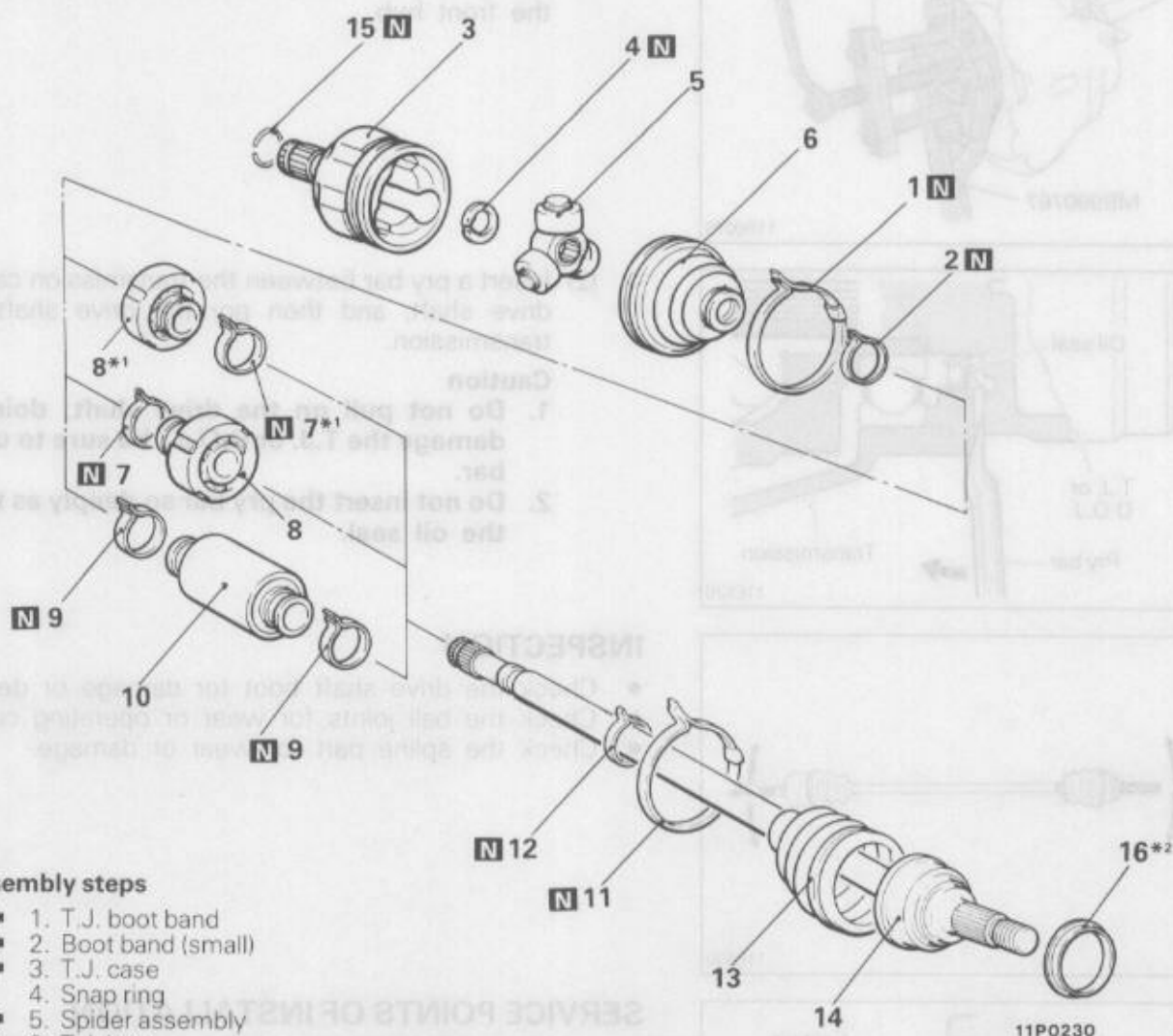
E26QD8G

3. INSTALLATION OF WASHER / 2. DRIVE SHAFT NUT / 1. SPLIT 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 split pin holes does not match, tighten the nut up to 260 Nm (26 kgm, 188 ft.lbs.) in maximum.
- (4) Install the split pin in the first matching holes and bend it securely.

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

E260E-A



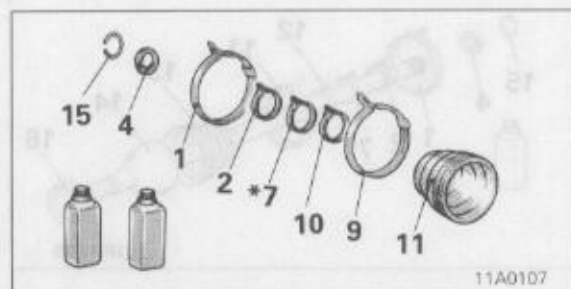
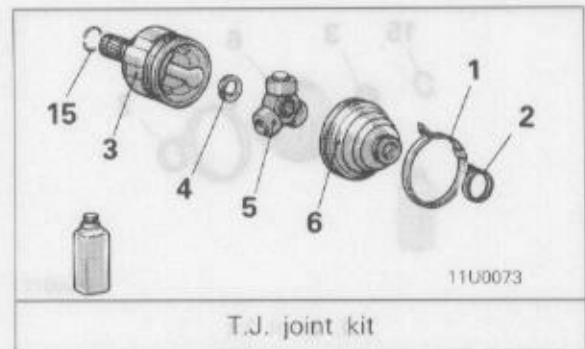
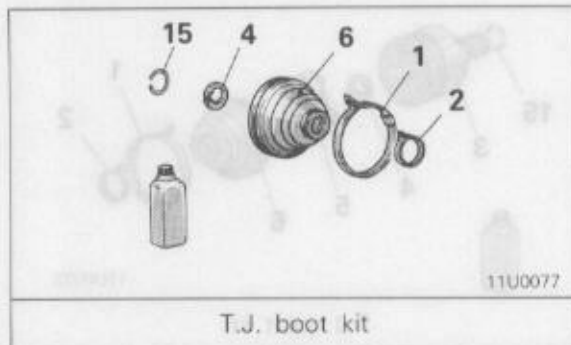
Disassembly steps

- ◆◆ 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
<L.H. drive shaft of petrol-powered vehicles built up to May 1992, and all vehicles built from June 1992 except C67ALN JL6.(*) : R.H. drive shaft of 1300 and 1500 models for Europe built from June 1990 up to May 1992, and 1300 models built from May 1992.)>
- ◆◆ 8. Dynamic damper
<L.H. drive shaft of petrol-powered vehicles built up to May 1992, and all vehicles built from June 1992 except C67ALN JL6.(*) : R.H. drive shaft of 1300 and 1500 models for Europe built from June 1990 up to May 1992, and 1300 models built from May 1992.)>
- ◆◆ 9. Torsional damper band <for R.H. drive shaft of 1600 models>
- ◆◆ 10. Torsional damper <for R.H. drive shaft of 1600-M/T models>
- ◆◆ 11. B.J. (or R.J.) boot band
- ◆◆ 12. Boot band (small)
- ◆◆ 13. B.J. (or R.J.) boot
- ◆◆ 14. B.J. (or R.J.) assembly
- ◆◆ 15. Circlip
- ◆◆ 16. Dust cover (except 1300 and 1500 models)

NOTE

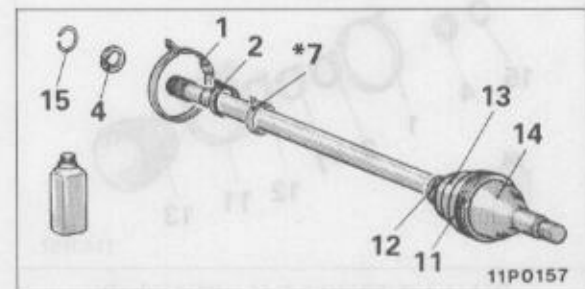
- (1) Reverse the disassembly procedures to reassemble.
- (2) ◆◆ Refer to "Service Points of Disassembly".
- (3) ◆◆ Refer to "Service Points of Reassembly".
- (4) [N] Non-reusable parts
- (5) T.J.: Tripod Joint
- (6) B.J.: Birfield Joint
- (7) R.J.: Rzeppa Joint
- (8) *: Vehicles built from June 1992

<1200, 1300, 1500>



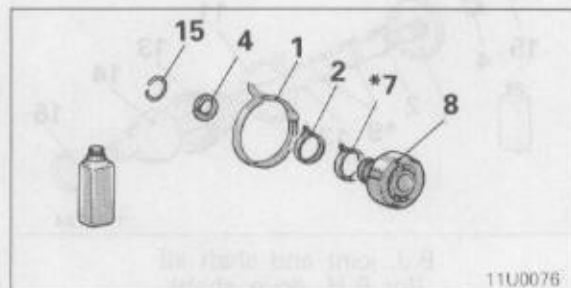
NOTE

*: Vehicles built from 1990



NOTE

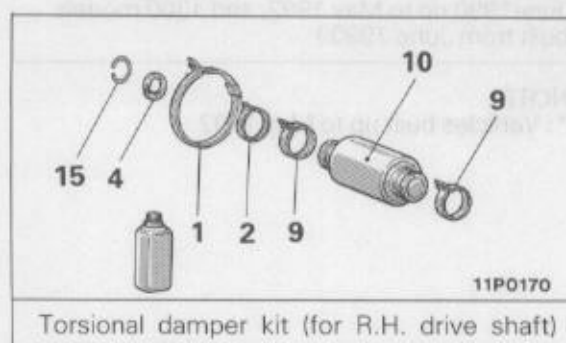
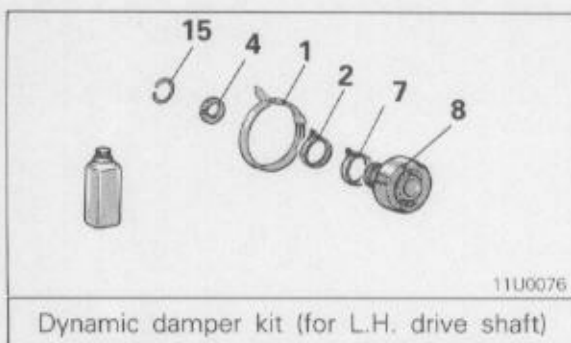
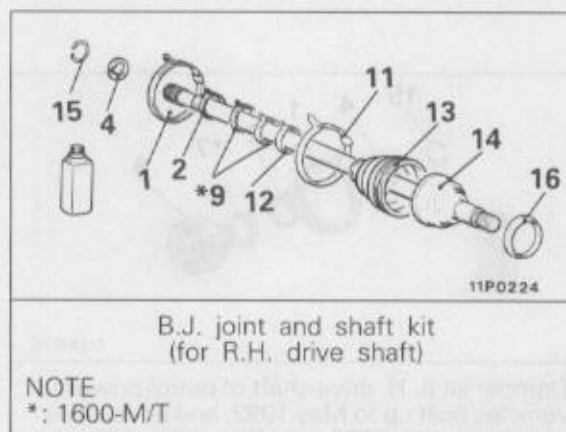
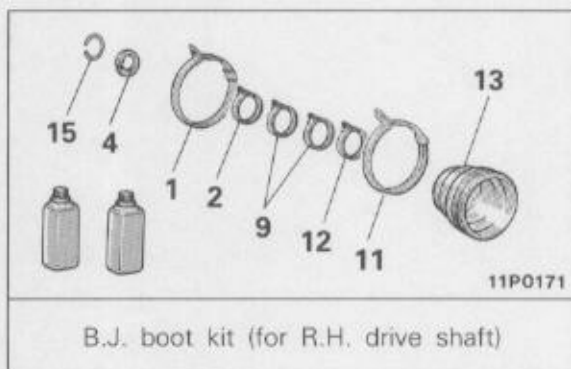
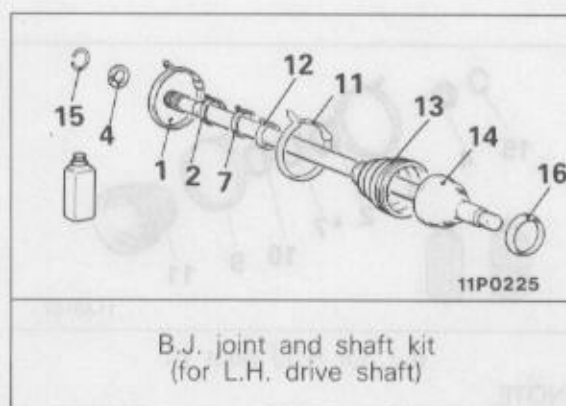
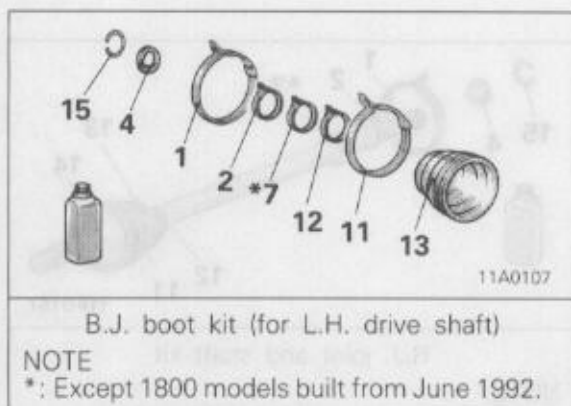
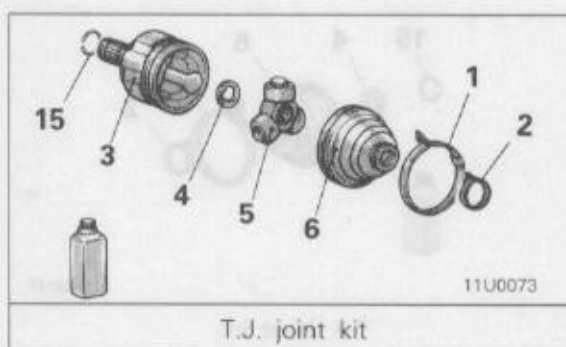
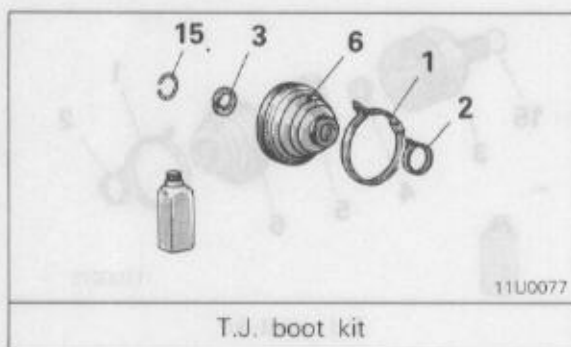
*: Vehicles built from 1990 to May 1992



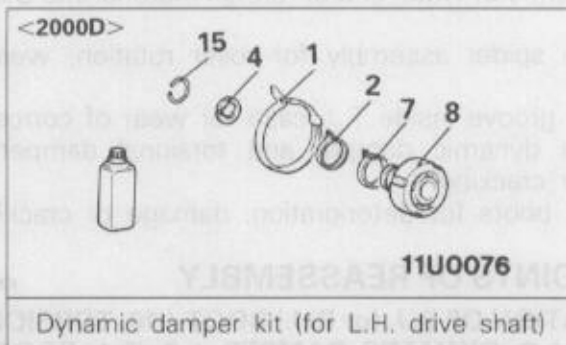
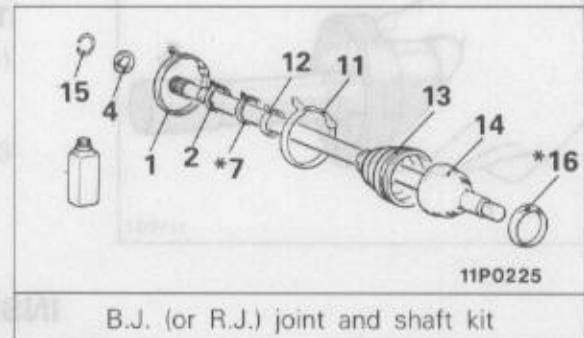
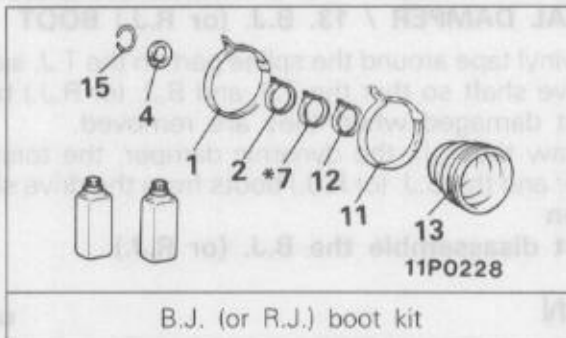
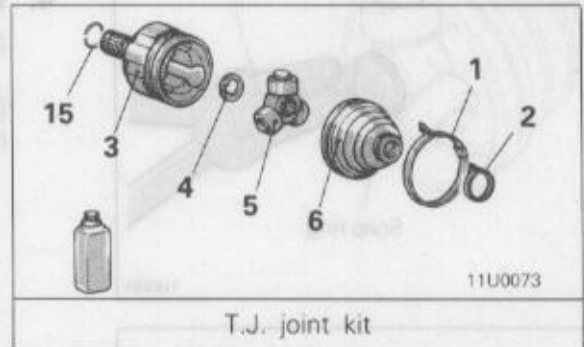
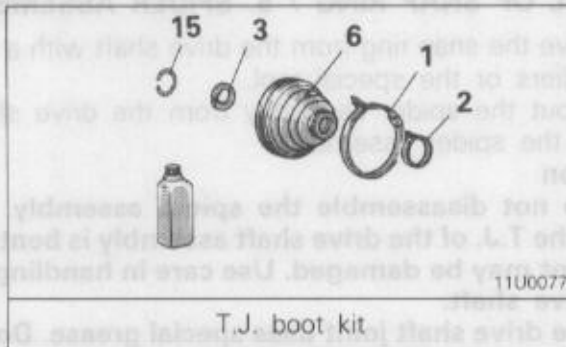
NOTE

*: Vehicles built up to May 1992

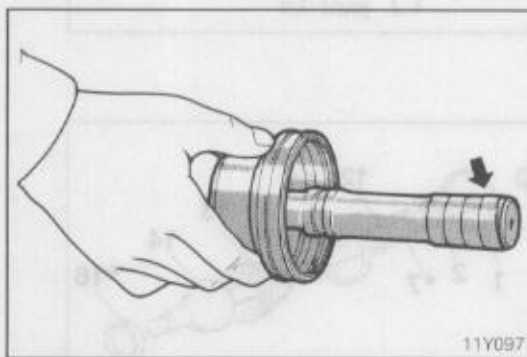
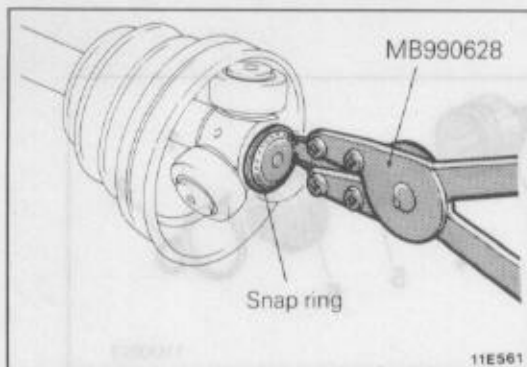
<1600 (2WD), 1800 DOHC>



<1800D, 2000D>



NOTE
*: Vehicles built from June 1992



SERVICE POINTS OF DISASSEMBLY

E26QFCD

4. REMOVAL OF SNAP RING / 5. SPIDER ASSEMBLY

- (1) Remove the snap ring from the drive shaft with a snap ring pliers or the special tool.
- (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 / 10. TORSIONAL DAMPER / 13. 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, the torsional damper and the B.J. (or R.J.) boots from the drive shaft.

Caution

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

INSPECTION

E26QGCC

- 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 and torsional damper for damage or cracking.
- Check the boots for deterioration, damage or cracking.

SERVICE POINTS OF REASSEMBLY

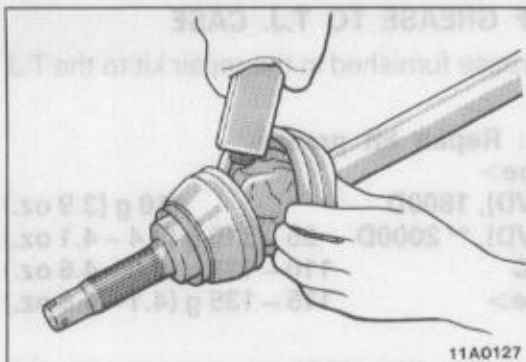
E26QHCD

13. INSTALLATION OF B.J. (or R.J.) BOOT / 10. TORSIONAL DAMPER / 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 of petrol-powered vehicles), the torsional damper (for the R.H. drive shaft of 1600 (2WD) models) 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. (or R.J.) and B.J. (or R.J.) boot with the specified grease.

Specified grease: Repair kit grease

<T.J.-B.J. type>

*1600 (2WD), 1800D 90 g (3.2 oz.)

*21600 (2WD), *2000D 85 – 105 g (3.0 – 3.7 oz.)

1800 DOHC 100 – 120 g (3.5 – 4.2 oz.)

<T.J.-R.J. type>

75 – 95 g (2.6 – 3.4 oz.)

NOTE

*1: Vehicles built up to May 1992.

*2: Vehicles built from June 1992.

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 and the torsional damper at the specified distance, and secure it by the boot band.

*1140 – 145 mm (5.5 – 5.7 in.) <for L.H. drive shaft of petrol-powered vehicles>

*2434 – 440 mm (17.1 – 17.3 in.) <for L.H. drive shaft of 1300 and 1500 models>

*2140 – 145 mm (5.5 – 5.7 in.) <for L.H. drive shaft of vehicles other than 1300 and 1500 models>

*2221 – 227 mm (8.7 – 8.9 in.) <for R.H. drive shaft of 1300 and 1500 models for Europe>

*2234 – 240 mm (9.2 – 9.4 in.) <for R.H. drive shaft of 1300 models>

Torsional damper 195 – 201 mm (7.7 – 7.9 in.)

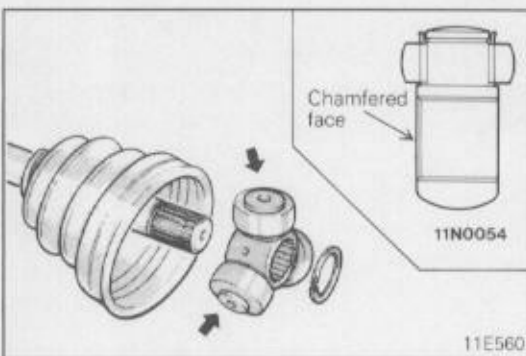
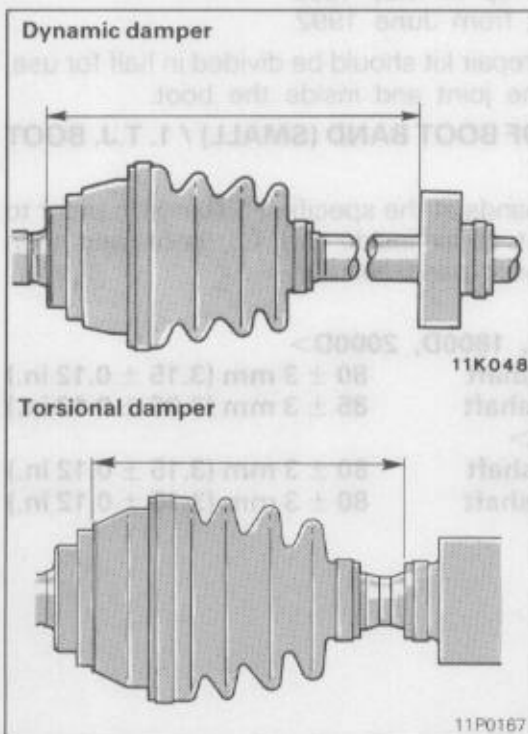
NOTE

*1: Vehicles built up to May 1992.

*2: Vehicles built from June 1992.

Caution

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



5. INSTALLATION OF SPIDER ASSEMBLY

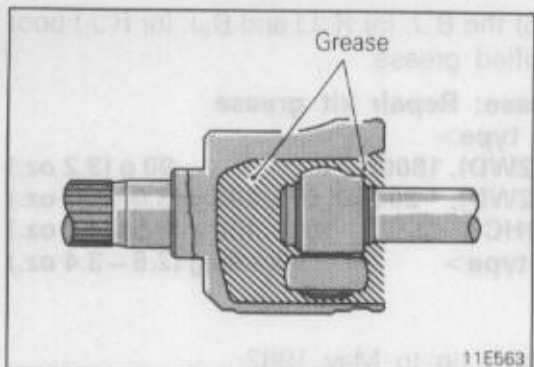
- (1) Pack specified grease amply between the spider shaft and rollers of the spider assembly.

Specified grease: Repair kit grease

Caution

Special grease is used to lubricate the joint. Do not mix old and new grease or different types of grease.

- (2) To install the spider assembly to the shaft, insert the shaft from the chamfered end of the spider.



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>

*1 1600 (2WD), 1800D 110 g (3.9 oz.)

*2 1600 (2WD), *2 2000D 95 – 115 g (3.4 – 4.1 oz.)

1800 DOHC 110 – 130 g (3.9 – 4.6 oz.)

<T.J.-R.J. type>

115 – 135 g (4.1 – 4.8 oz.)

NOTE

*1: Vehicles built up to May 1992

*2: Vehicles built from June 1992

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:

<1600 (2WD), 1800D, 2000D>

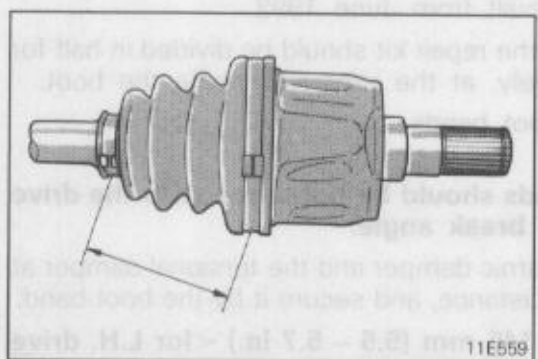
L.H. drive shaft 80 ± 3 mm (3.15 $\pm$ 0.12 in.)

R.H. drive shaft 85 ± 3 mm (3.35 $\pm$ 0.12 in.)

<1800 DOHC>

L.H. drive shaft 80 ± 3 mm (3.15 $\pm$ 0.12 in.)

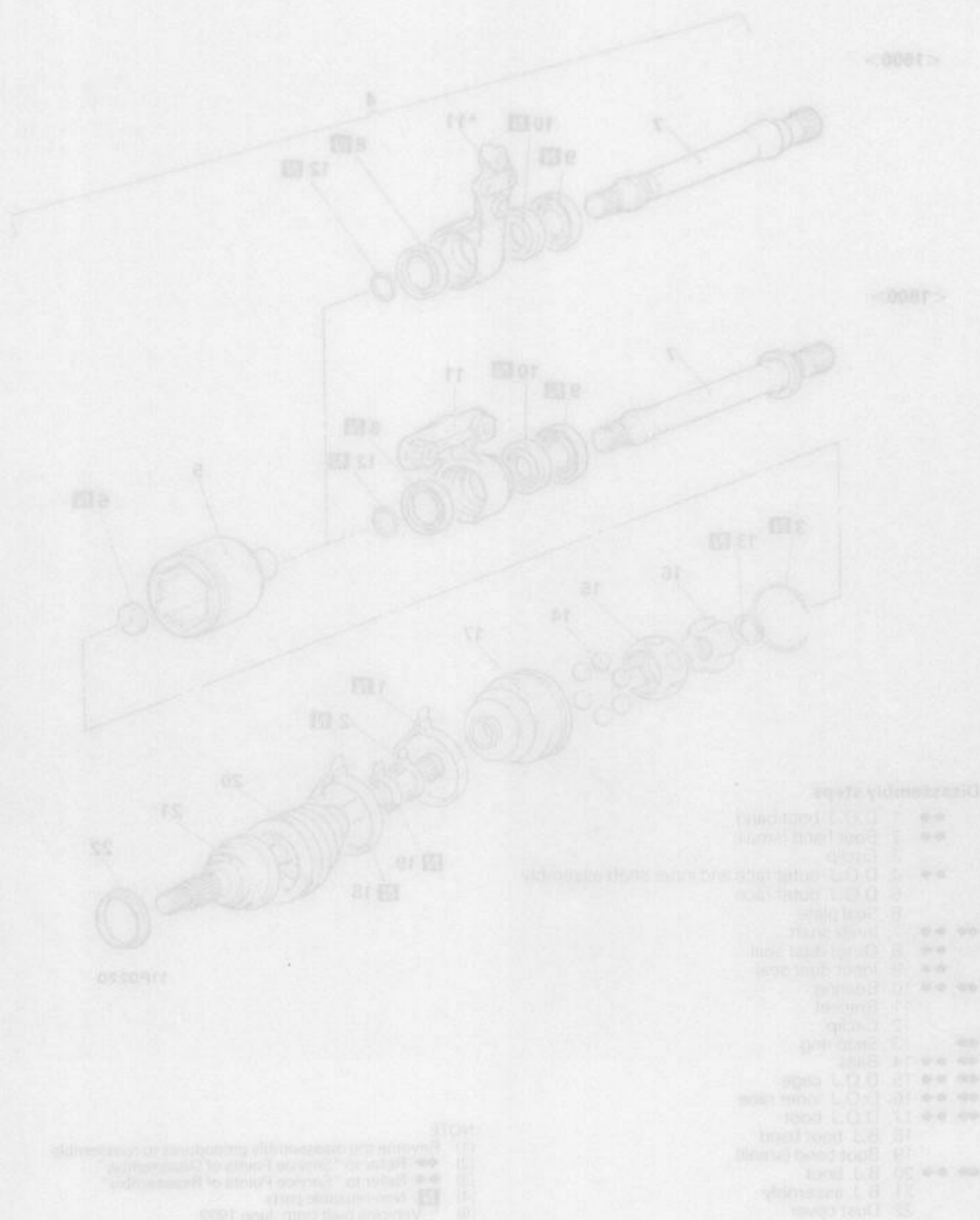
R.H. drive shaft 80 ± 3 mm (3.15 $\pm$ 0.12 in.)



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

<Left drive shaft>

NOTES

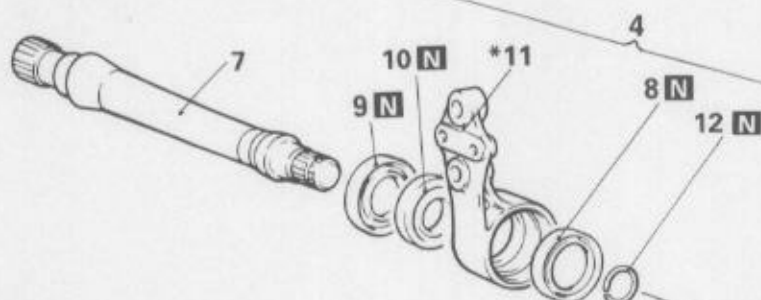


DISASSEMBLY AND REASSEMBLY (D.O.J.-B.J. TYPE)

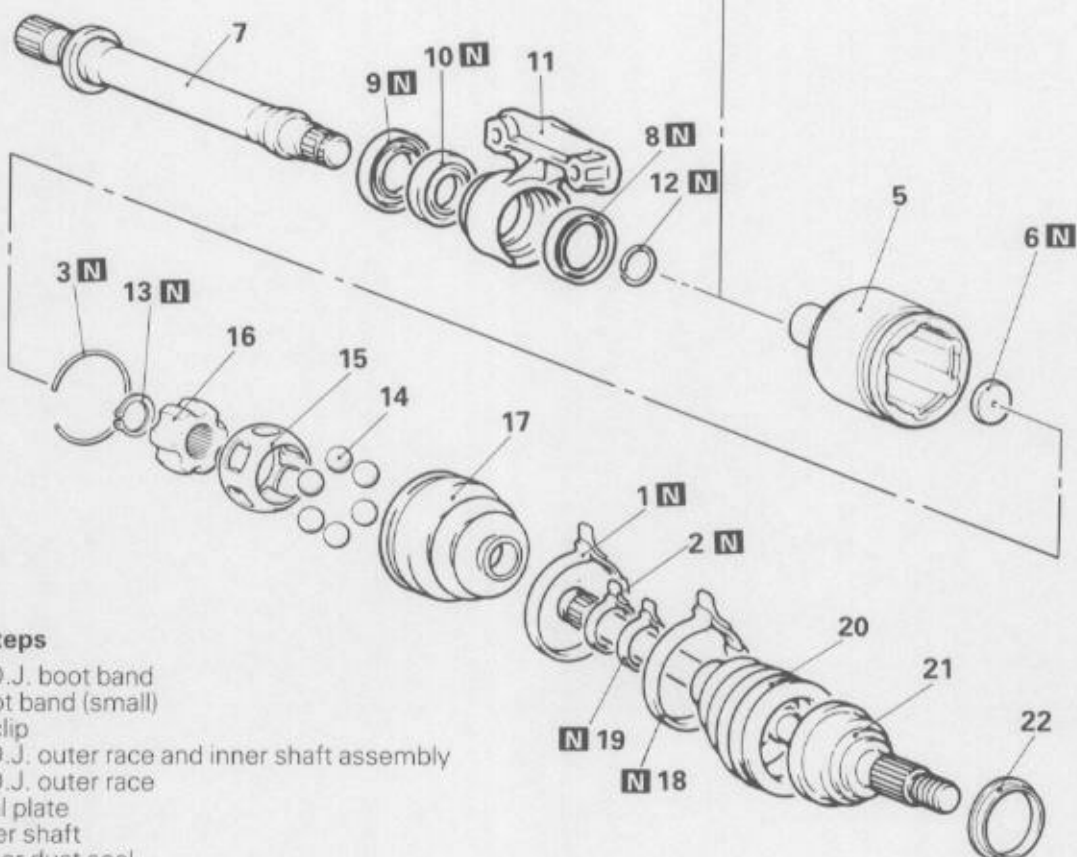
E26QE-B

<Left drive shaft>

<1600>



<1800>

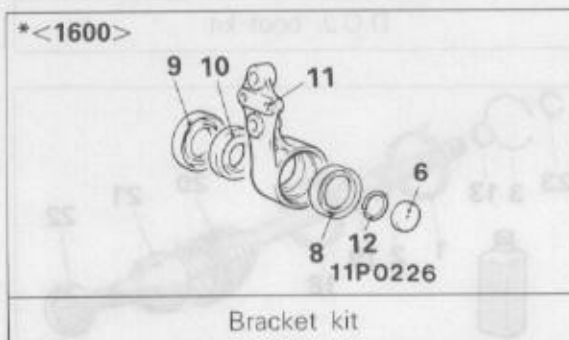
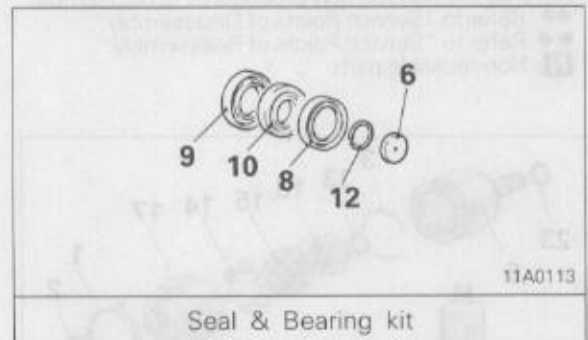
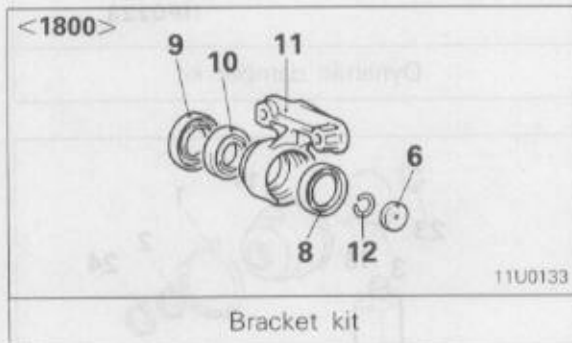
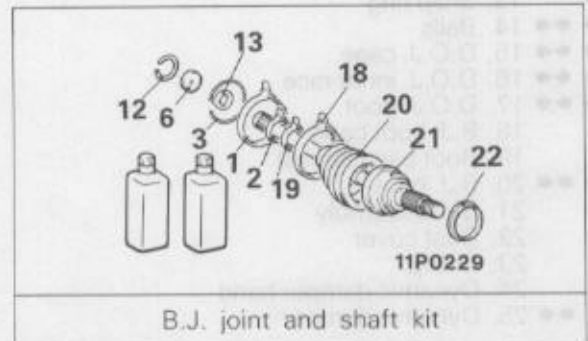
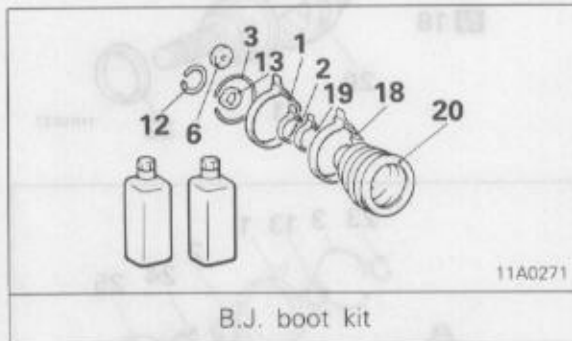
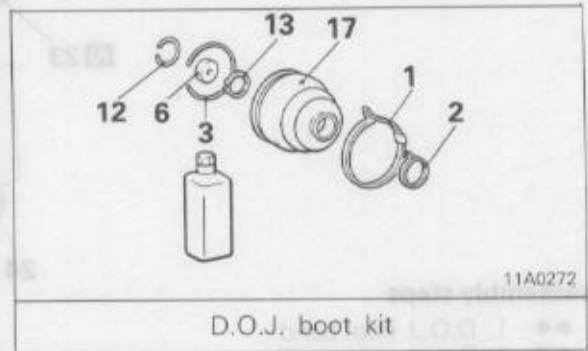
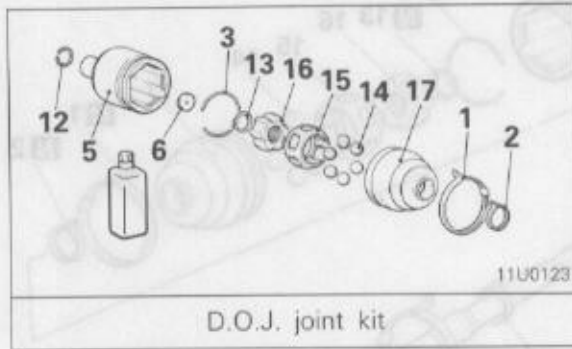


Disassembly steps

- ◆◆ 1. D.O.J. boot band
- ◆◆ 2. Boot band (small)
- 3. Circlip
- ◆◆ 4. D.O.J. outer race and inner shaft assembly
- 5. D.O.J. outer race
- 6. Seal plate
- ◆◆ ◆◆ 7. Inner shaft
- ◆◆ 8. Outer dust seal
- ◆◆ 9. Inner dust seal
- ◆◆ ◆◆ 10. Bearing
- 11. Bracket
- 12. Circlip
- ◆◆ 13. Snap ring
- ◆◆ ◆◆ 14. Balls
- ◆◆ ◆◆ 15. D.O.J. cage
- ◆◆ ◆◆ 16. D.O.J. inner race
- ◆◆ ◆◆ 17. D.O.J. boot
- 18. B.J. boot band
- 19. Boot band (small)
- ◆◆ ◆◆ 20. B.J. boot
- 21. B.J. assembly
- 22. Dust cover

NOTE

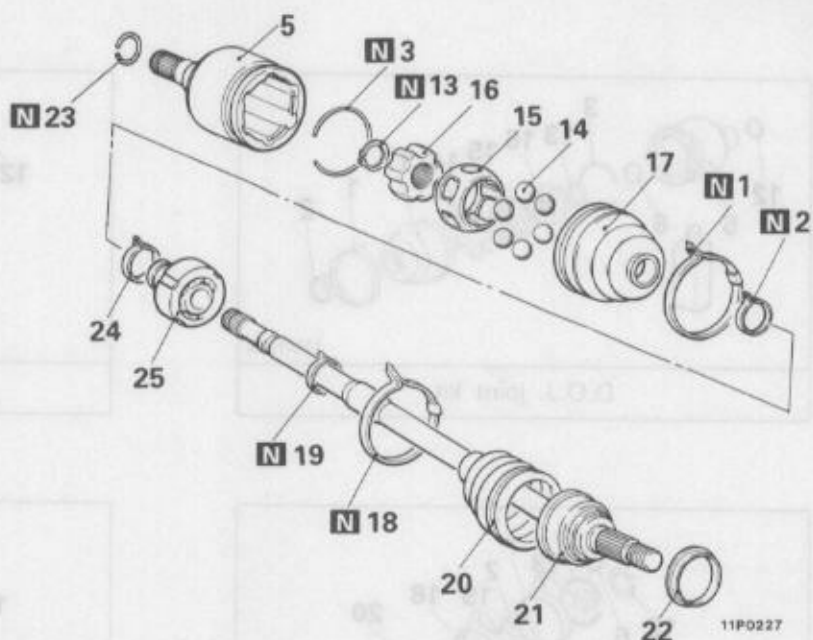
- (1) Reverse the disassembly procedures to reassemble.
- (2) ♦♦: Refer to "Service Points of Disassembly".
- (3) ♦♦: Refer to "Service Points of Reassembly".
- (4) **N**: Non-reusable parts
- (5) *: Vehicles built from June 1992



NOTE

*: Vehicles built from June 1992

<Right drive shaft>

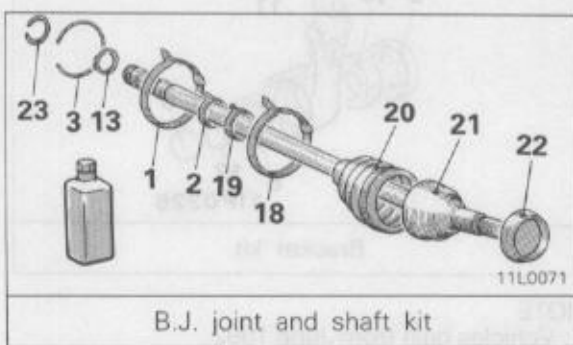
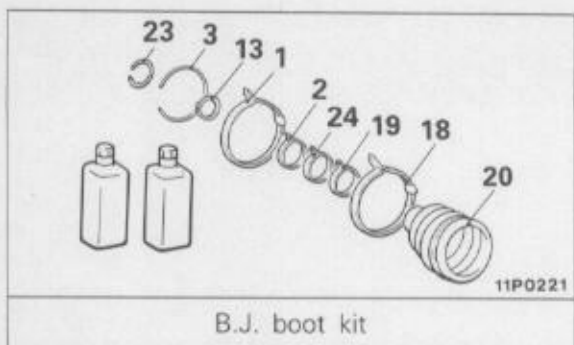
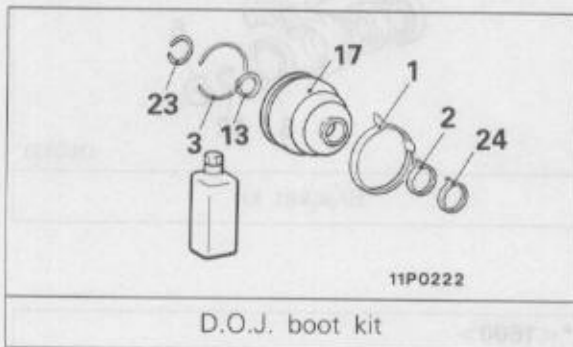
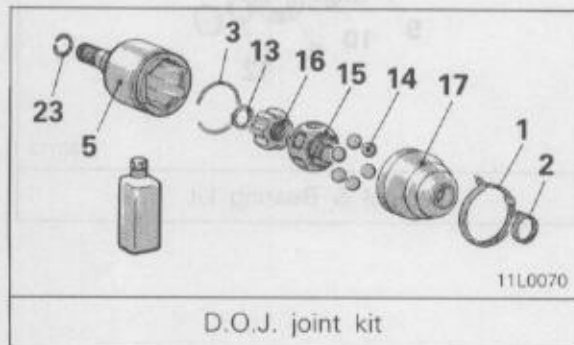
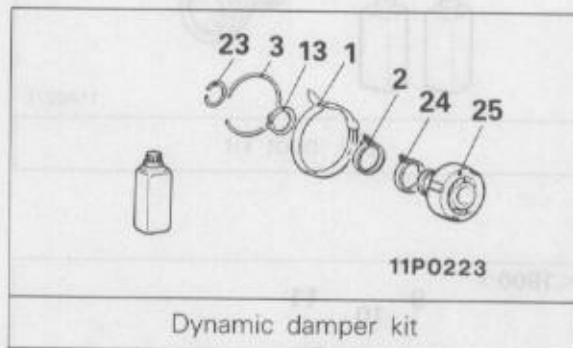


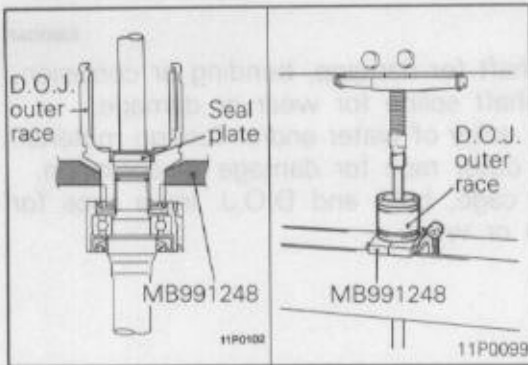
Disassembly steps

- ◆◆ 1. D.O.J. boot band
- ◆◆ 2. Boot band (small)
- ◆◆ 3. Circlip
- ◆◆ 5. D.O.J. outer race
- ◆◆ 13. Snap ring
- ◆◆ 14. Balls
- ◆◆ 15. D.O.J. cage
- ◆◆ 16. D.O.J. inner race
- ◆◆ 17. D.O.J. boot
- ◆◆ 18. B.J. boot band
- ◆◆ 19. Boot band (small)
- ◆◆ 20. B.J. boot
- ◆◆ 21. B.J. assembly
- ◆◆ 22. Dust cover
- ◆◆ 23. Circlip
- ◆◆ 24. Dynamic damper band
- ◆◆ 25. Dynamic damper

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



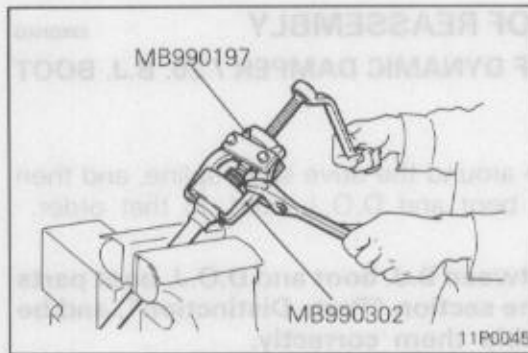


SERVICE POINTS OF DISASSEMBLY

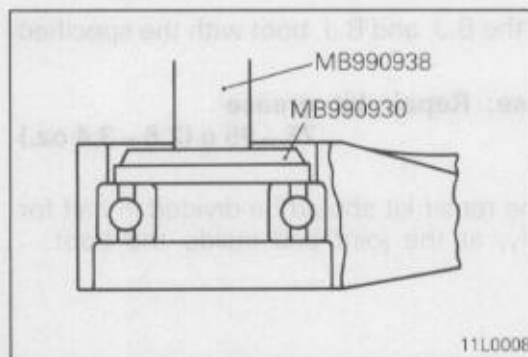
E26QFAG

7. REMOVAL OF INNER SHAFT

- (1) Using the special tool, remove the inner shaft assembly, together with the seal plate, from the D.O.J. outer race.

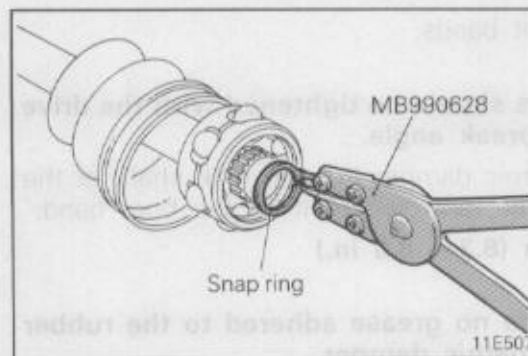


- (2) Use the special tools to remove the inner shaft from the bracket.



10. REMOVAL OF BEARING

Use the special tools to remove the bearing from the bracket.



13. REMOVAL OF SNAP RING / 14. BALLS / 15. D.O.J. CAGE / 16. D.O.J. INNER RACE

- (1) Remove the snap ring with the snap ring pliers or the special tool, and then remove the D.O.J. inner race, the D.O.J. cage, and the balls as a unit.
- (2) Clean the D.O.J. inner race, the D.O.J. cage, and the balls, without disassembling them.

Caution

1. Be careful that balls do not drop out of the cage.
2. If the balls drop out, press them back into the D.O.J. cage with the D.O.J. inner race.

17. REMOVAL OF D.O.J. BOOT / 20. B.J. BOOT

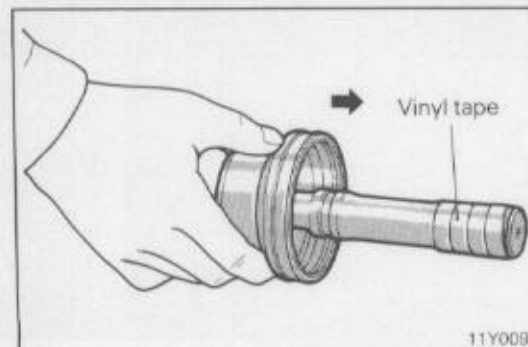
- (1) Wipe the grease off of the spline portion.
- (2) Remove the D.O.J. boot and B.J. boot.

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

E26QGAF

- 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

E26QHAG

25. INSTALLATION OF DYNAMIC DAMPER / 20. B.J. BOOT / 17. 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**75 – 95 g (2.6 – 3.4 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.

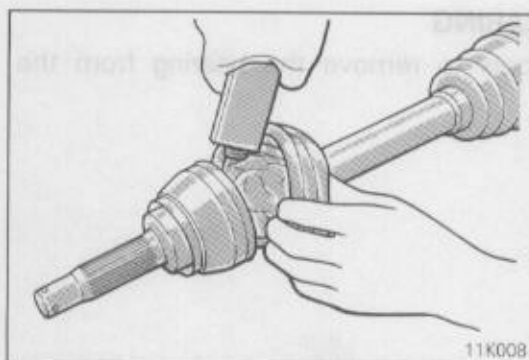
Caution

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

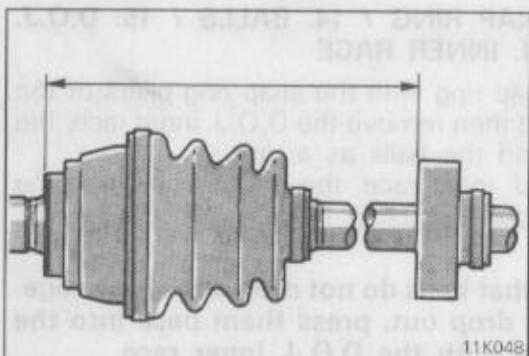
- (4) Install the dynamic damper (for the R.H. shaft) at the specified distance, and secure it by the boot band.

211 – 217 mm (8.3 – 8.5 in.)**Caution**

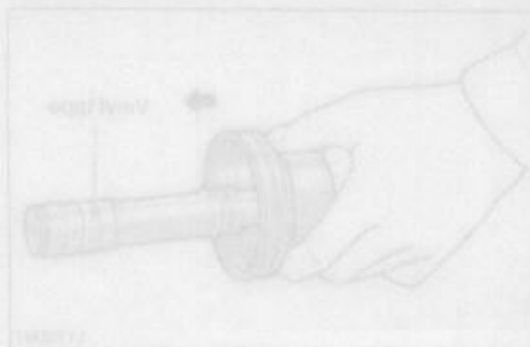
There should be no grease adhered to the rubber part of the dynamic damper.

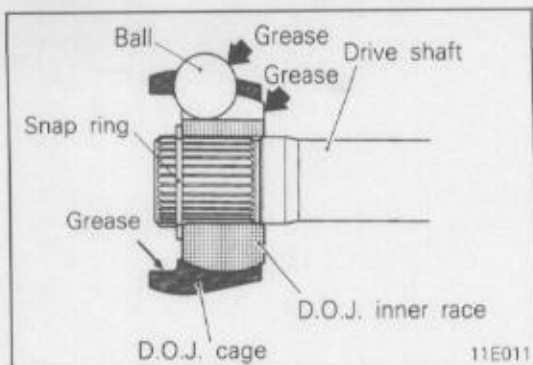


11K008



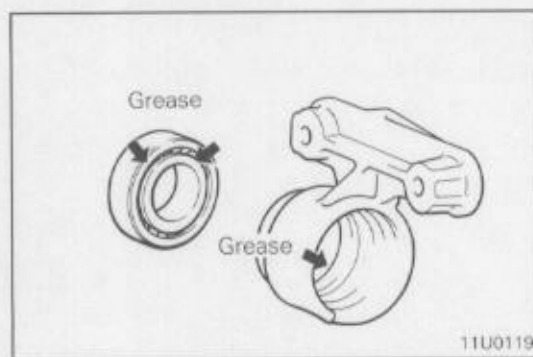
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**16. APPLICATION OF GREASE TO D.O.J. INNER RACE / 15. D.O.J. CAGE / 14. BALLS**

Apply the specified grease to the D.O.J. cage, the balls and the D.O.J. inner race.

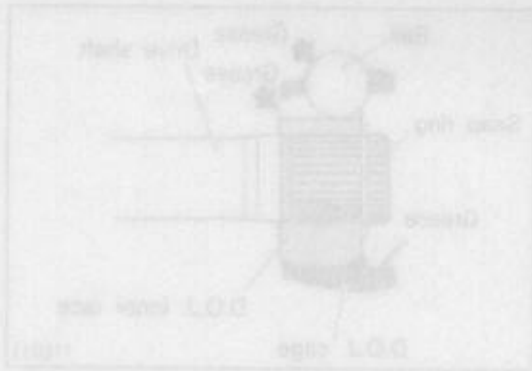
Specified grease: Repair kit grease (As required)

**10. INSTALLATION OF BEARING**

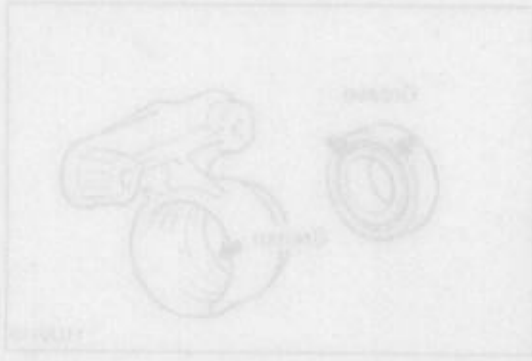
- (1) Apply multipurpose grease to the bearing and inside the bracket.

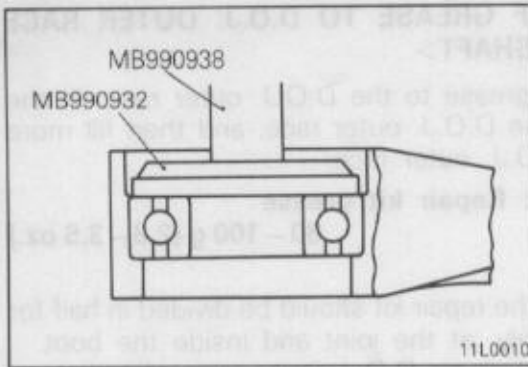
NOTES

18. APPLICATION OF GREASE TO D.O.J. INNER RAIL
D.O.J. CAGE & 16 BALLS
Apply the specified grease to the D.O.J. cage, the balls and the D.O.J. inner race.
Specified grease: Repack kit grease (As required)

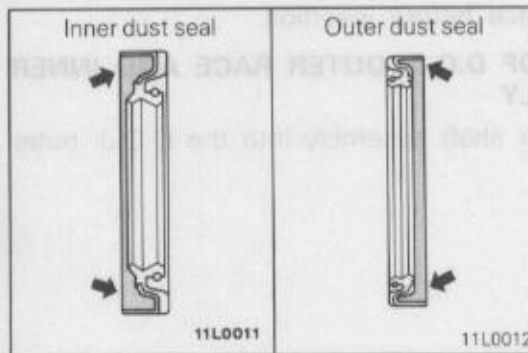


19. INSTALLATION OF BEARING
(F) Apply multipurpose grease to the bearing and inside the bracket





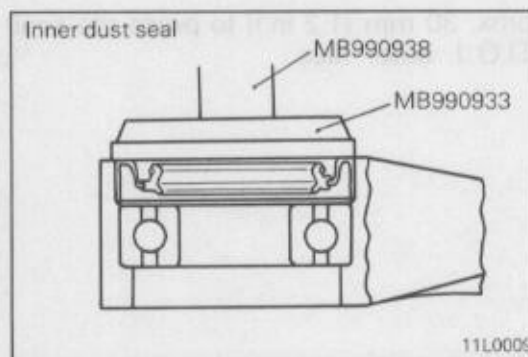
- (2) Use the special tools to press-fit the bearing into the bracket.



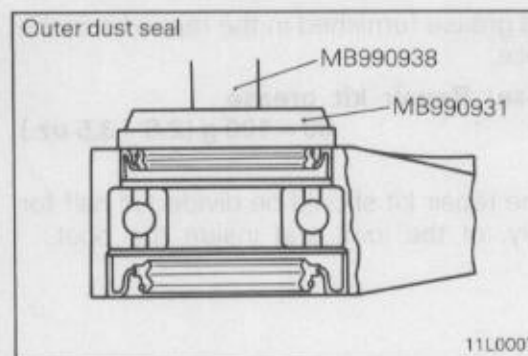
9. 8. INSTALLATION OF DUST SEALS

- (1) Apply multipurpose grease to the rear surfaces of all dust seals.

Inner dust seal	7 – 10 g (0.25 – 0.35 oz.)
Outer dust seal	4 – 6 g (0.14 – 0.21 oz.)

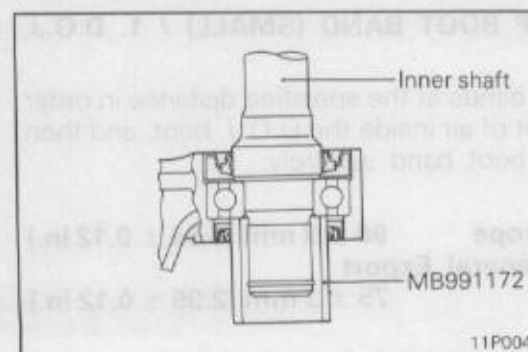


- (2) Use the special tools to install the dust seal so that its surface runs even with that of the bracket.
(3) Apply multipurpose grease to the lip of each dust seal.



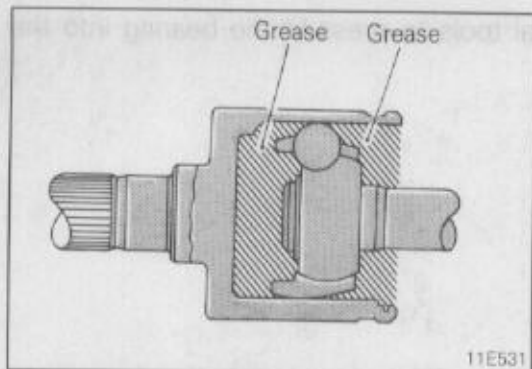
NOTE

When applying grease, make sure that it does not adhere to anything outside the lip.



7. INSTALLATION OF INNER SHAFT

Use the special tool to hold the inner race of the bearing and force the inner shaft into place.



5. APPLICATION OF GREASE TO D.O.J. OUTER RACE <RIGHT DRIVE SHAFT>

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

80 – 100 g (2.8 – 3.5 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.

4. INSTALLATION OF D.O.J. OUTER RACE AND INNER SHAFT ASSEMBLY

- (1) Press the inner shaft assembly into the D.O.J. outer race.

- (2) Use a pipe [approx. 30 mm (1.2 in.)] to press the seal plate into the D.O.J. outer race.

- (3) Fill the specified grease furnished in the repair kit to the D.O.J. outer race.

Specified grease: Repair kit grease

80 – 100 g (2.8 – 3.5 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. D.O.J. BOOT BAND

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:

Vehicles for Europe **90 ± 3 mm (3.54 ± 0.12 in.)**

Vehicles for General Export
75 ± 3 mm (2.95 ± 0.12 in.)

