
FRONT AXLE

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E26AA-

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SPECIFICATIONS

GENERAL SPECIFICATIONS

E28CA-

Items	2WD	4WD
Wheel bearing		
Type	Double-row angular contact ball bearing	Double-row angular contact ball bearing
O.D.×I.D.	80×40 (3.15×1.57)	80×40 (3.15×1.57)
Drive shaft		
<Vehicles built up to May, 1992>		
Joint type		
Outer	R.J. or B.J.	B.J.
Inner	T.J.	D.O.J.
Length	mm (in.)	
L.H. shaft	708 (27.87)* ¹ , 707 (27.83)* ²	371 (14.61)
R.H. shaft	368 (14.49)* ¹ , 367 (14.45)* ²	377 (14.84)
<Vehicles built from June, 1992>		
Joint type		
Outer	R.J. or B.J.	B.J.
Inner	T.J.	D.O.J. or T.J.
Length	mm (in.)	
L.H. shaft	708 (27.87) <1800> 707 (27.83) <2000> 704 (27.71) <2400 – M/T> 700 (27.56) <2400 – A/T>	371 (14.61) <1800> 365 (14.37) <2000>
R.H. shaft	368 (14.49) <1800> 367 (14.45) <2000, 2400 – M/T> 371 (14.61) <2400 – A/T>	377 (14.84) <1800> 371 (14.61) <2000>

NOTE

*¹<SPACE RUNNER>*²<SPACE WAGON>

SERVICE SPECIFICATIONS

E26CB--

<Vehicles built up to May, 1992>

Items	Specifications
Standard value	
Setting of boot length	mm (in.)
2WD	
<SPACE RUNNER>	82±3 (3.23±0.12)
<SPACE WAGON>	85±3 (3.35±0.12)
4WD	90±3 (3.54±0.12)
Setting of dynamic damper length	mm (in.) 432±3 (17.01±0.12)
Limit	
Hub end play	mm (in.) 0.05 (0.0020)
Wheel bearing starting torque	Nm (kgcm, in.lbs.) 1.8 (18, 16) or less

<Vehicles built from June, 1992>

Items	Specifications
Standard value	
Setting of boot length	mm (in.)
2WD	
<1800, 2000, 2400 (R.H.)>	82±3 (3.23±0.12)
<2400 (L.H.)>	80±3 (3.15±0.12)
4WD	
<1800 (L.H.), 2000>	82±3 (3.23±0.12)
<1800 (R.H.)>	88±3 (3.46±0.12)
Setting of dynamic damper length	mm (in.)
L.H. shaft	
<Petrol-powered vehicles – 2WD>	365±3 (14.37±0.12)
<Diesel-powered vehicles – 2WD>	375±3 (14.76±0.12)
R.H. shaft	
<Petrol-powered vehicles>	200±3 (7.87±0.12)
Limit	
Hub end play	mm (in.) 0.05 (0.0020)
Wheel bearing starting torque	Nm (kgcm, in.lbs.) 1.8 (18, 16) or less

LUBRICANTS

E26CD--

Items	2WD	4WD
T.J. boot grease	Repair kit grease <1800, 2000> <2400>	110 (3.88) 130 (4.59)
D.O.J. boot grease	Repair ket grease	90 (3.17) ^{*1} 110 (3.88) ^{*2}
Inner dust seal	Multi-purpose grease	7-10 (0.25-0.35)
Outer dust seal	Multi-purpose grease	4-6 (0.14-0.21)

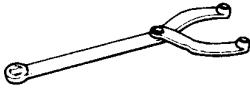

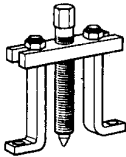
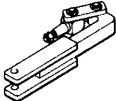
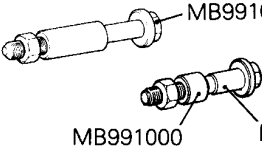
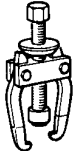
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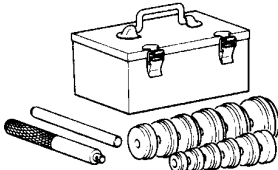
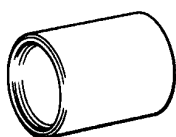

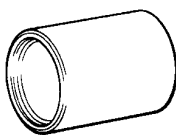

*1 : <Vehicles built up to May, 1992>



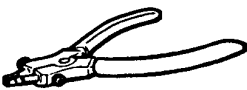
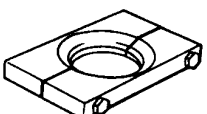
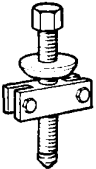

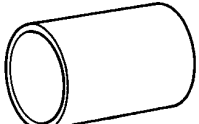
*2 : <Vehicles built from June, 1992>

SPECIAL TOOLS

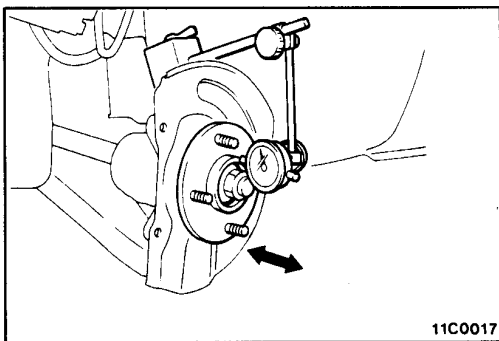
E26DA--

Tool	Number	Name	Use
	MB990767	End yoke holder	Fixing of the hub
	MB991113	Steering linkage puller	Removal of the lower arm ball joint and knuckle Removal of the knuckle and tie rod end ball joint
	MB990241	Axle shaft puller	Removal of the drive shaft
	MB991056 or MB991355	Knuckle arm bridge	Removal of the hub
 <p>MB991017 MB990998, MB991017 MB991000 MB990998</p>	MB990998, MB991017	Front hub remover and installer	Removal or press-in the hub Provisional holding of the wheel bearing Use MB991000 (Supplementary part to MB990998) as the spacer
	MB990810	Side bearing puller	Removal of the wheel bearing inner race (outside)

Tool	Number	Name	Use
	MB990925	Bearing and oil seal installer set	Removal of wheel bearing MB990932 MB990938 Press-out of center bearing <4WD> MB990930 MB990938 Press-fitting of center bearing <4WD> MB990932 MB990938 Press-fitting of dust seal outer <4WD> MB990931 MB990938 Press-fitting of the dust seal inner <4WD> MB990933 MB990938
	MB990890	Rear suspension bushing base	Press-fitting of the wheel bearing, inner oil seal
	MB990883	Rear suspension arbor	
	MB990847	Rear suspension bushing remover and installer	Press-fitting of the outer oil seal
	MB990947	Lower arm bushing arbor	

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
	MB991248 or MD998801	Inner shaft remover	Press-out of the inner shaft and press-fitting seal plate. <4WD>
	MB990197	Puller body	Press-out of the inner shaft <4WD>
	MB990302	Hook	
	MB991172	Adapter	Press-fitting of the inner shaft <4WD>

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	-



SERVICE ADJUSTMENT PROCEDURES E2&FEAG

HUB END PLAY CHECK

1. Remove the disc brake caliper and suspend it with a wire.
2. Remove the brake disc from the front hub.
3. Attach a dial gauge as shown in the illustration, and then measure the end play while moving the hub in the axial direction.

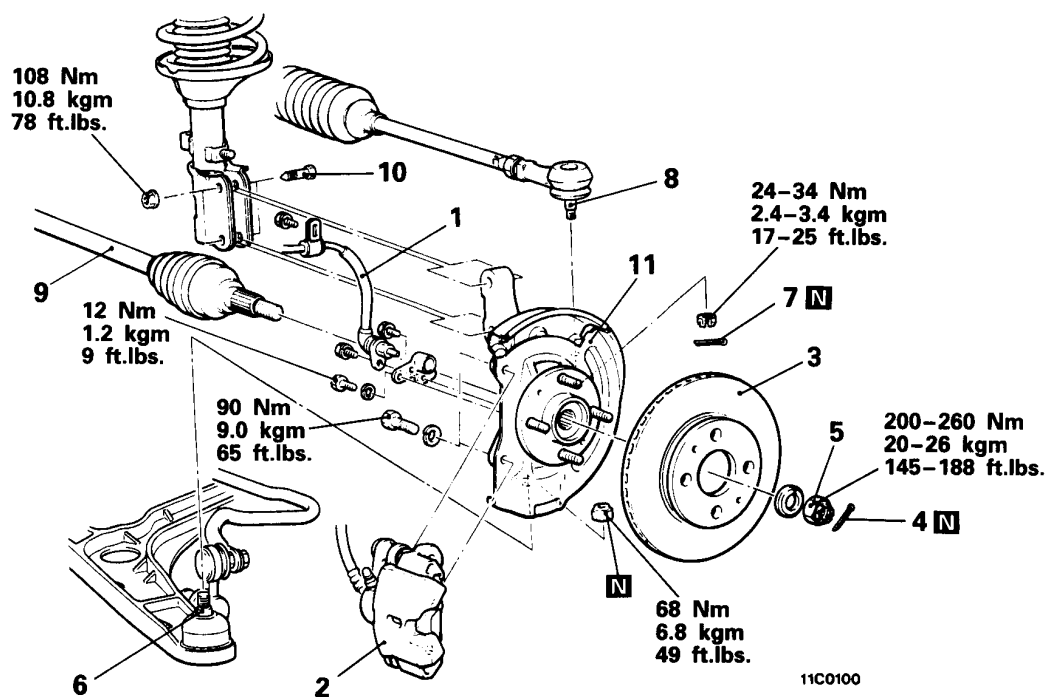
Limit: 0.05 mm (0.0020 in.)

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

AXLE HUB

REMOVAL AND INSTALLATION

E26HA-



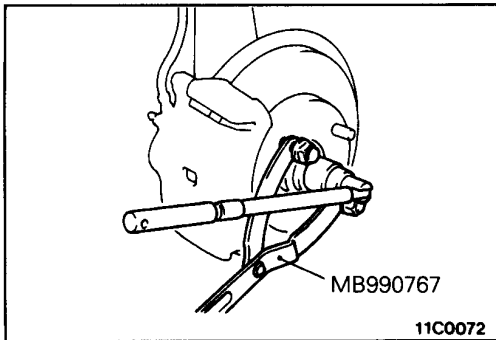
11C0100

Removal steps

- ◆◆ 1. Front speed sensor
<Vehicle with ABS>
- ◆◆ 2. Caliper assembly
- ◆◆ 3. Brake disc
- ◆◆ 4. Split pin
- ◆◆ ◆◆ 5. Drive shaft nut
- ◆◆ 6. Connection for lower arm ball joint
- ◆◆ 7. Split pin
- ◆◆ 8. Connection for tie rod end
- ◆◆ 9. Drive shaft
- ◆◆ 10. Front strut mounting bolt
- ◆◆ 11. Hub and knuckle

Caution

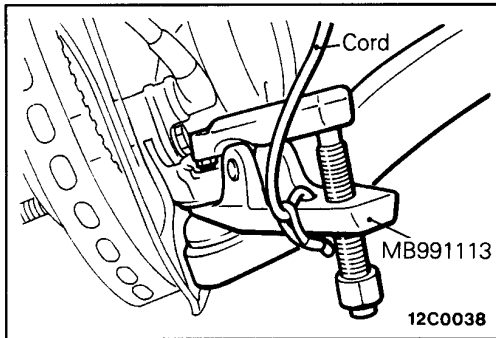
Be careful when handling the pole piece at the tip of the speed sensor and the toothed edge of the rotor so as not to damage them by striking against other parts.

**SERVICE POINTS OF REMOVAL**

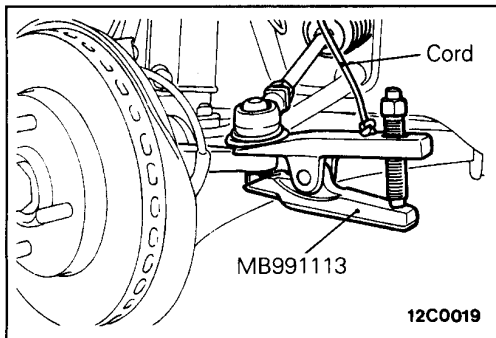
E26HBAJ

2. REMOVAL OF CALIPER ASSEMBLY

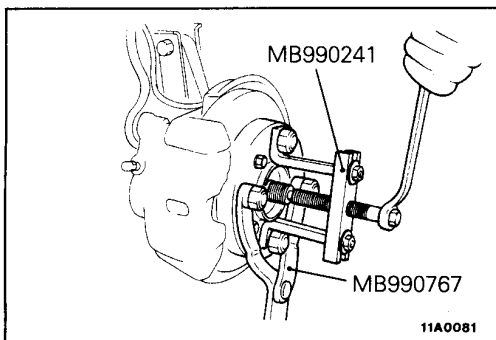
Secure the removed caliper assembly with wire, etc.

5. REMOVAL OF DRIVE SHAFT NUT**6. DISCONNECTION OF LOWER ARM BALL JOINT****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.

**8. DISCONNECTION OF TIE ROD END****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.

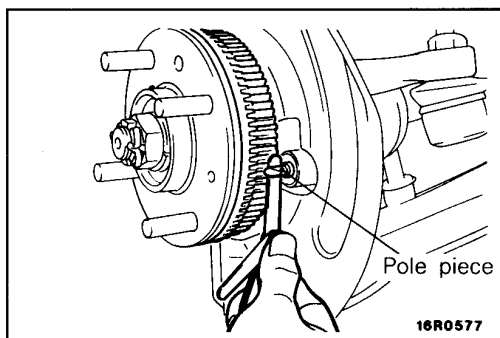
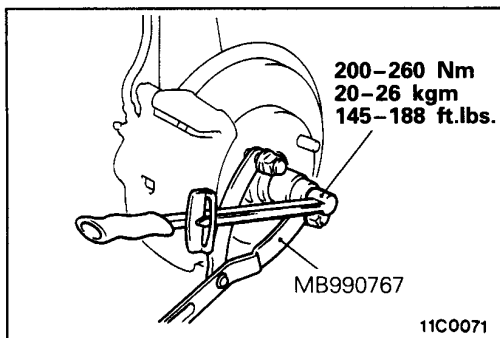
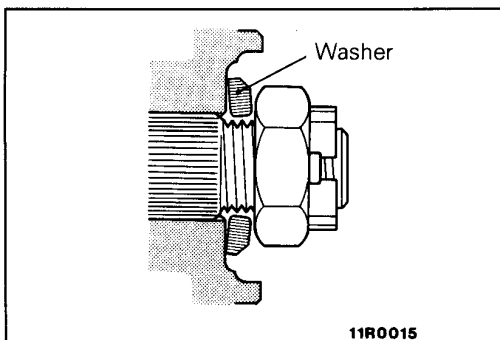
**9. REMOVAL OF DRIVE SHAFT****INSPECTION**

E26HCAD

- 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 or damaged parts.



SERVICE POINTS OF INSTALLATION

E26HDAI

5. INSTALLATION OF DRIVE SHAFT NUT

- (1) Be sure to install the washer and drive shaft nut in the specified direction.

- (2) Using the special tool, tighten the drive shaft nut.

Caution

Before securely tightening the drive shaft nuts, make sure there is no load on the wheel bearings.

- (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 <VEHICLES WITH ABS>

- (1) Temporarily install the speed sensor to the knuckle.

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

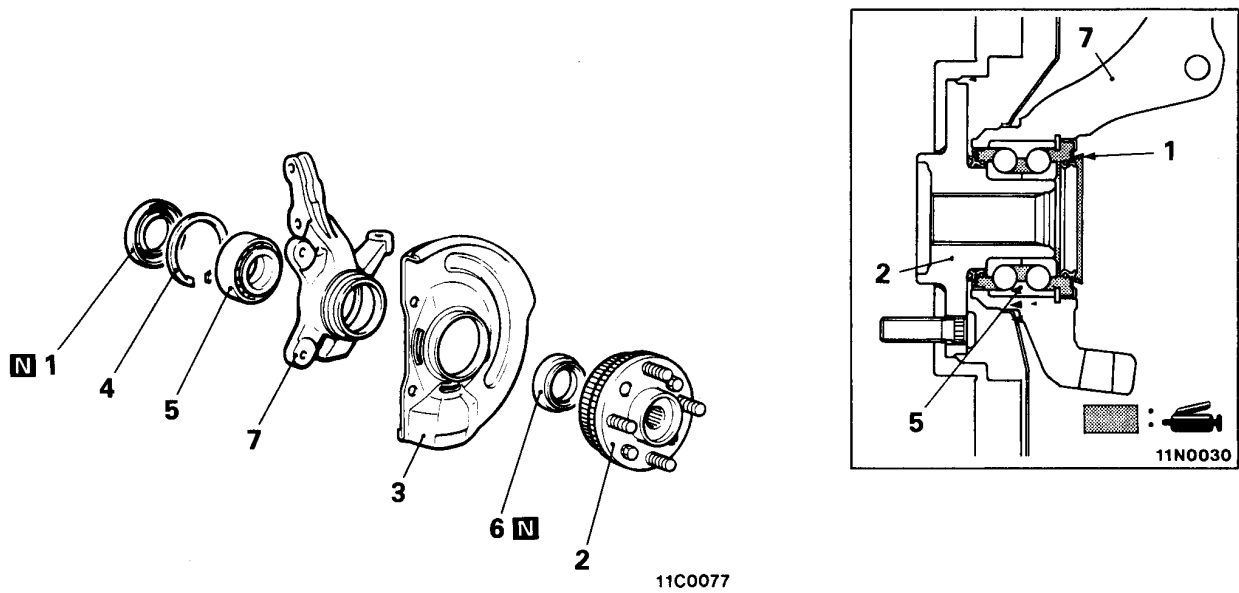
Standard value: 0.3–0.9 mm (0.012–0.035 in.)

NOTE

If the clearance between the speed sensor's pole piece and the rotor's toothed surface is not within the standard value range, it is probable that the rotor is incorrectly installed, recheck installation.

DISASSEMBLY AND REASSEMBLY

E26HI--



Disassembly steps

- ↔ 1. Inner oil seal
- ↔ 2. Hub
- ↔ 3. Dust cover
- ↔ 4. Snap ring
- ↔ 5. Wheel bearing
- ↔ 6. Outer oil seal
- ↔ 7. Knuckle

Reassembly steps

- ↔ 7. Knuckle
- ↔ 5. Wheel bearing
- ↔ 4. Snap ring
- ↔ 6. Outer oil seal
- ↔ 3. Dust cover
- ↔ 2. Hub
- ↔ ● Wheel bearing starting torque check
- ↔ ● Hub end play check
- ↔ 1. Inner oil seal

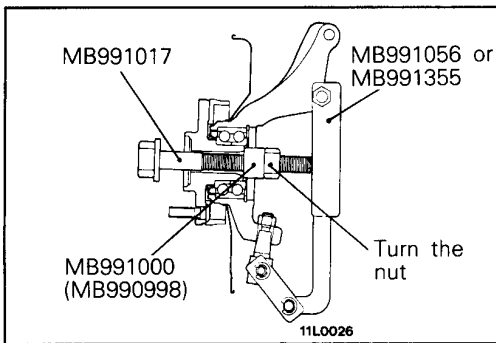
SERVICE POINTS OF DISASSEMBLY

E26HJA1

2. REMOVAL OF HUB

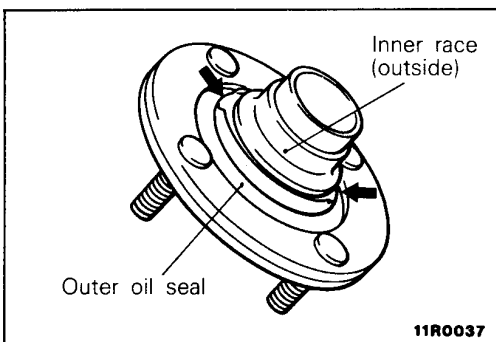
Caution

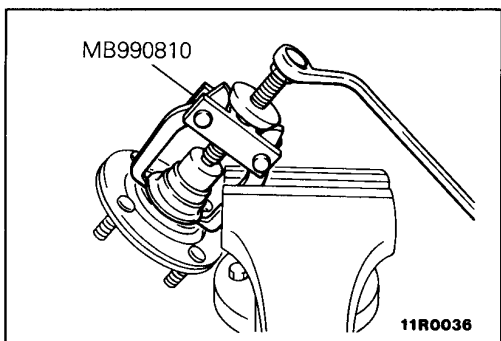
When removing the hub, always replace the wheel bearing with a new part.



5. REMOVAL OF WHEEL BEARING

- (1) Crush the oil seal in two places so that the tabs of the special tool will be caught on the wheel bearing inner race (outside).

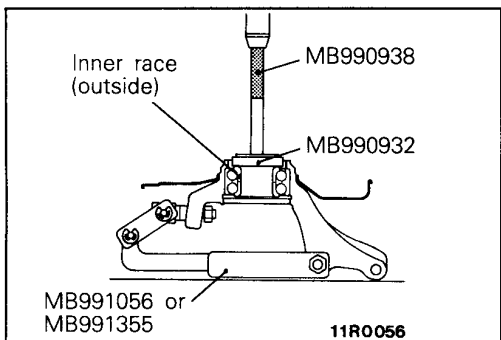




- (2) Remove the wheel bearing inner race (outside) from the front hub by using the special tool.

Caution

When removing the inner race (outside) from the hub, be careful not to let the hub drop.

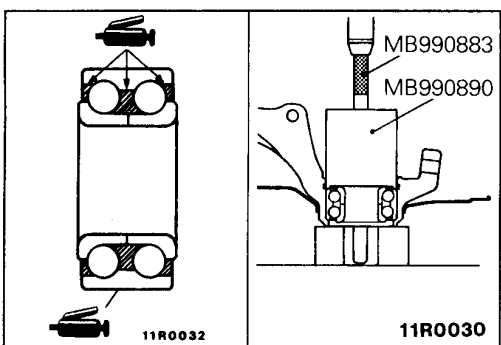


- (3) Install the inner race (outside) that was removed from the hub to the wheel bearing, and then use the special tool to remove the wheel bearing.

INSPECTION

E26HKAAb

- 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.

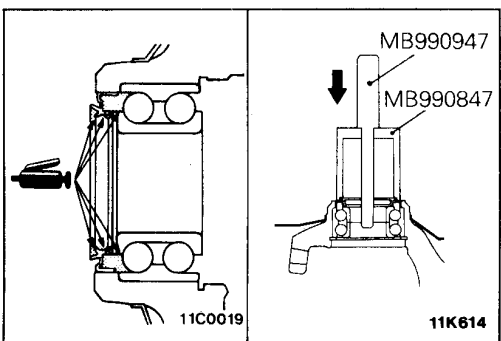


SERVICE POINTS OF REASSEMBLY

E26HOAI

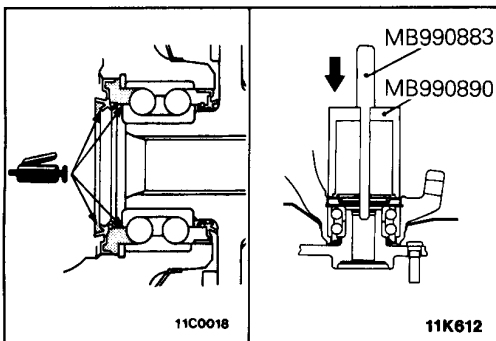
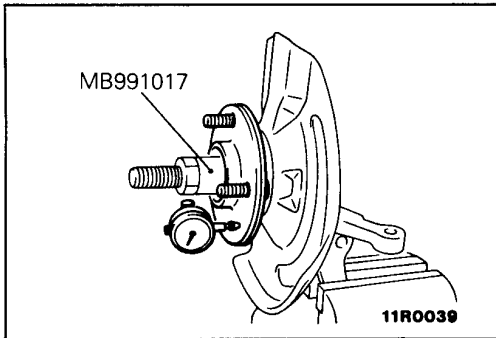
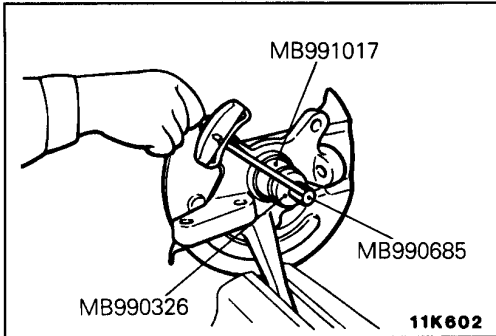
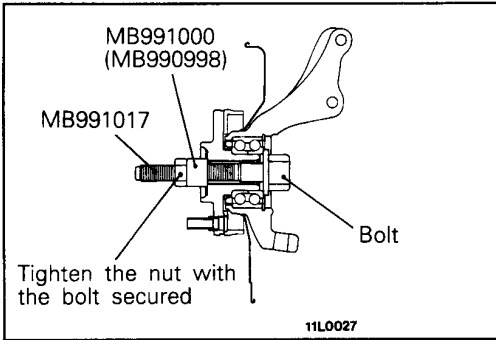
5. INSTALLATION OF WHEEL BEARING

- (1) Fill the wheel bearing with multipurpose grease.
- (2) Apply a thin coating of multipurpose grease to the knuckle and bearing contact surfaces.
- (3) Press-in the bearing by using the special tools.



6. INSTALLATION OF OUTER OIL SEAL

- (1) Drive the oil seal (hub side) into the knuckle by using the special tools until it is flush with the knuckle end surface.
- (2) Apply multipurpose grease to the lip of the oil seal and to the surfaces of the oil seal which contact the front hub.



● **WHEEL BEARING STARTING TORQUE CHECK**

- (1) Use the special tool to mount the hub onto the knuckle.
- (2) Tighten the nut of the special tool to 200–260 Nm (20–26 kgm, 145–188 ft.lbs.).
- (3) Rotate the hub in order to seat the bearing.

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

Limit: 1.8 Nm (18 kgcm, 16 in.lbs.) or less

- (5) The starting torque must be within the limit and, in addition, the bearing must not feel rough when rotated.

● **HUB END PLAY CHECK**

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

Limit: 0.05 mm (0.0020 in.)

- (2) If the starting torque and hub end play are not within the limit range while the nut is tightened to 200–260 Nm (20–26 kgm, 144–188 ft.lbs.), the bearing, hub and/or knuckle have probably not been installed correctly. Replace the bearing and re-install.

1. INSTALLATION OF INNER OIL SEAL

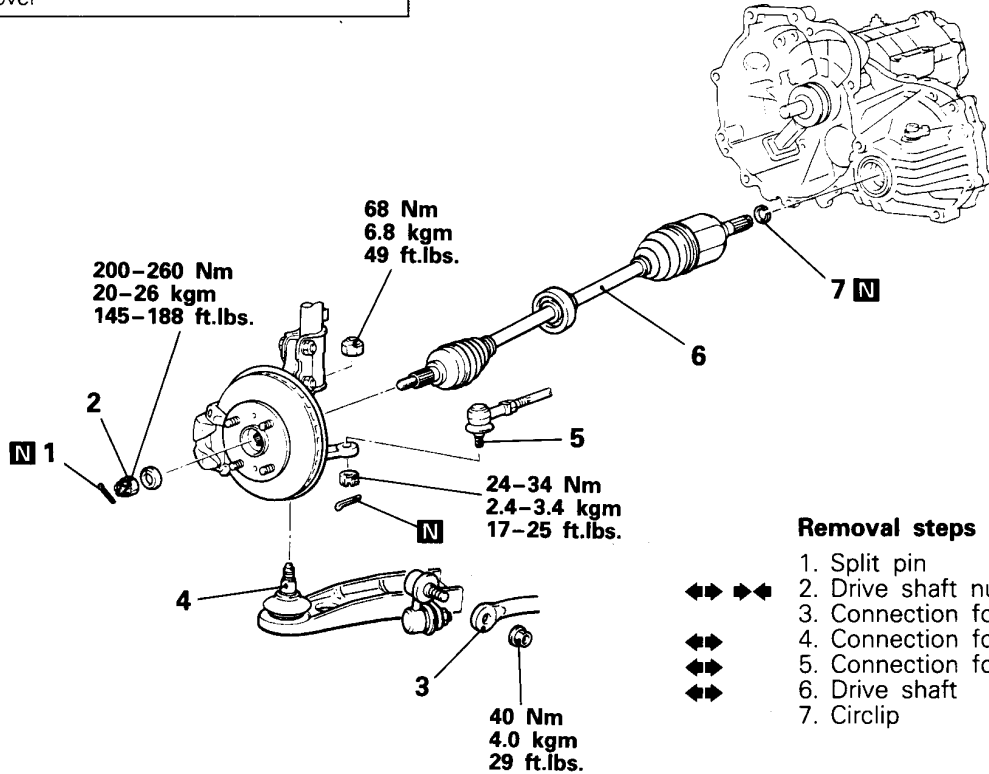
- (1) Apply multipurpose grease to the reverse side of the inner oil seal.
- (2) Drive the inner oil seal into the knuckle until it contacts the snap ring.
- (3) Apply multipurpose grease to the lip of the inner oil seal.

DRIVE SHAFT <2WD>

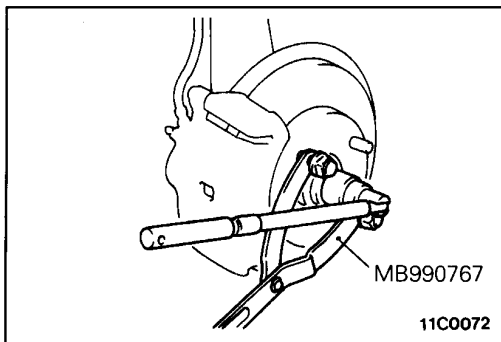
REMOVAL AND INSTALLATION

E26QA-1

Pre-removal and Post-installation Operation
 Removal and installation of Under Cover



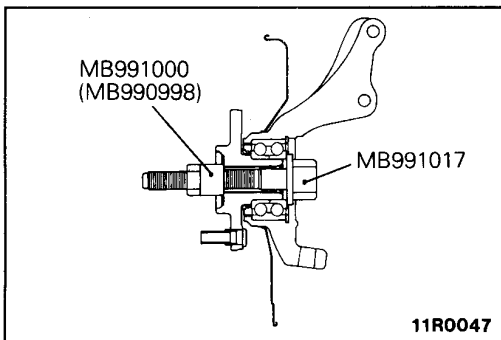
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SERVICE POINTS OF REMOVAL

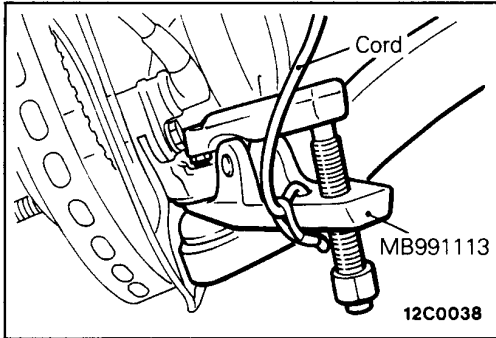
E26QBBI

2. REMOVAL OF DRIVE SHAFT NUT

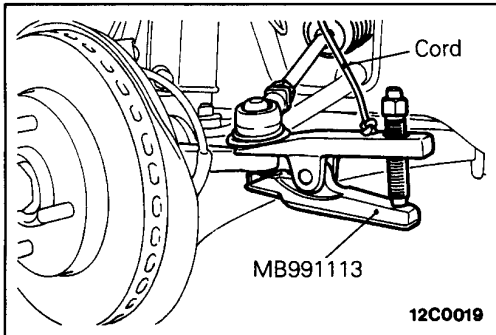


Caution

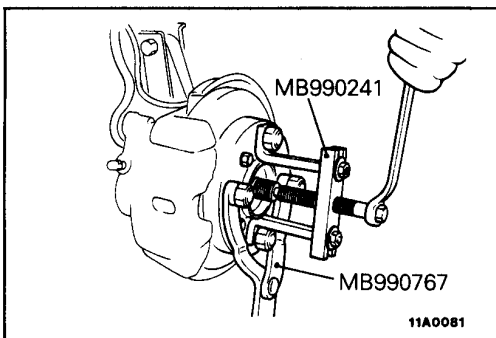
Do not apply the vehicle weight to the wheel bearing while loosening the drive shaft nut. If, however, the vehicle weight must be applied to the bearing (because of moving the vehicle), temporarily secure the wheel bearing by using the special tool, MB990998, etc.

**4. DISCONNECTION OF LOWER ARM BALL JOINT****Caution**

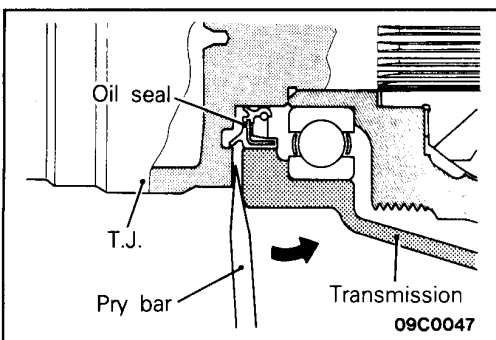
1. Be sure to tie the cord of the special tool to the nearby part.
2. Loosen the nut but do not remove it.

**5. DISCONNECTION OF TIE ROD END****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.

**6. REMOVAL OF DRIVE SHAFT**

- (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.

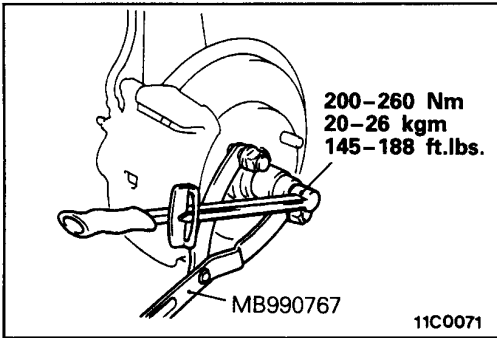
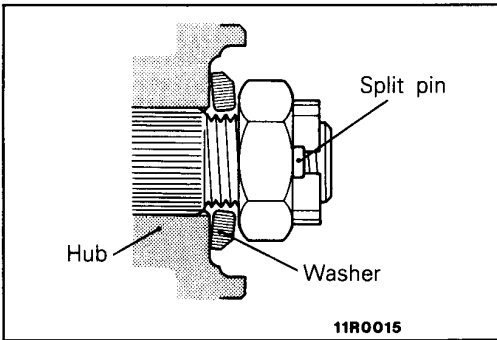
Caution

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

INSPECTION

E26QCBD

- 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**

E260DBI

2. INSTALLATION OF DRIVE SHAFT NUT

- (1) Be sure to install the washer and drive shaft nut in the specified direction.

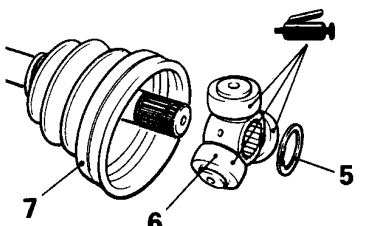
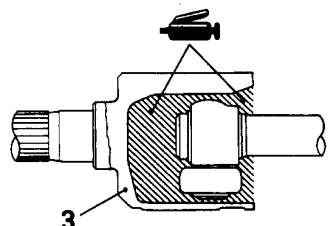
- (2) Using the special tool, tighten the drive shaft nut.

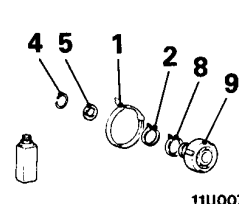
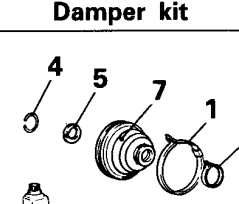
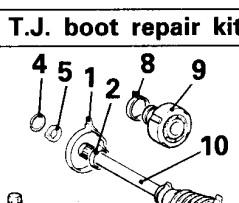
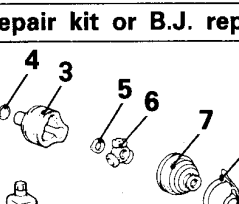
Caution

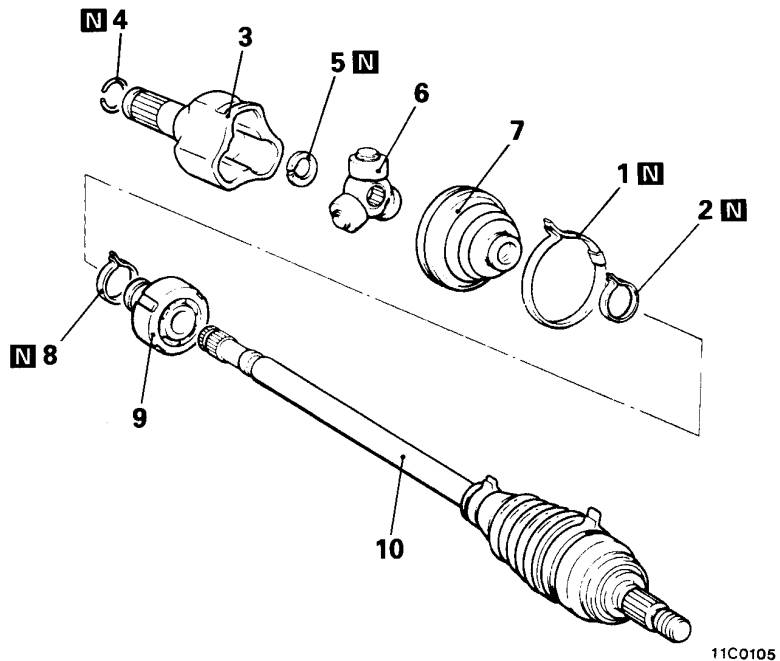
Before securely tightening the drive shaft nuts, make sure there is no load on the wheel bearings.

- (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

 <p>11E560</p>	 <p>11A0084</p>
<p>Grease: Repair kit grease</p>	<p>Grease: Repair kit grease 1800, 2000 : 110g (3.88 oz) 2400 : 130 g (4.59 oz)</p>
<p>Caution The drive shaft joint uses special grease. Do not mix old and new or different types of grease.</p>	

 <p>11U0076</p> <p>Damper kit</p>
 <p>11U0077</p> <p>T.J. boot repair kit</p>
 <p>11C0106</p> <p>R.J. repair kit or B.J. repair kit</p>
 <p>11C0022</p> <p>T.J. repair kit</p>



Disassembly steps

- ◆◆ 1. T.J. boot band (large)
- ◆◆ 2. T.J. boot band (small)
- ◆◆◆ 3. T.J. case
- ◆◆ 4. Circlip
- ◆◆ 5. Snap ring
- ◆◆◆◆ 6. Spider assembly
- ◆◆◆◆ 7. T.J. boot
- ◆◆ 8. Damper band
- ◆◆ 9. Dynamic damper
- ◆◆◆◆ 10. R.J. assembly or B.J. assembly

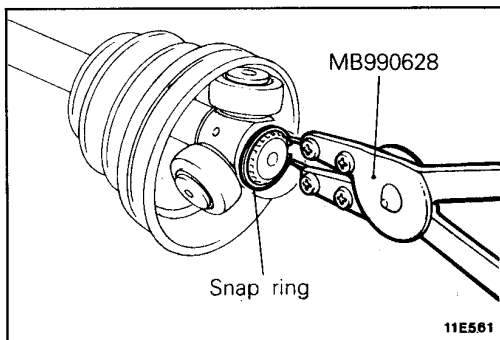
Caution
 Do not disassemble the B.J. or R.J. assembly.

SERVICE POINTS OF DISASSEMBLY

E26QFCI

3. REMOVAL OF T.J. CASE

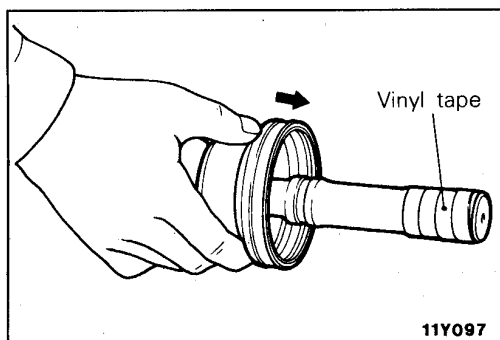
Remove the T.J. case from the R.J. assembly or B.J. assembly, and wipe off the grease inside the T.J. case.

**5. REMOVAL OF SNAP RING/6. SPIDER ASSEMBLY**

- (1) Remove the snap ring from the drive shaft with the 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.

**7. REMOVAL OF T.J. BOOT**

- (1) Wipe the grease off of the spline portion.
- (2) Remove the T.J. boot.

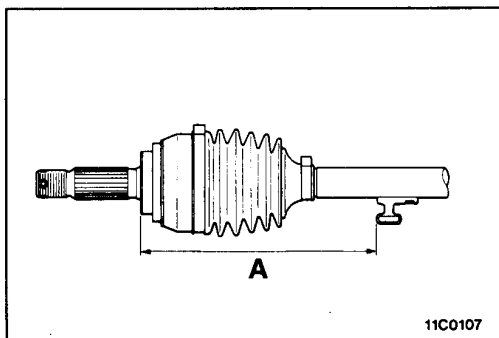
NOTE

If the boot is reused, wrap vinyl tape around the drive shaft spline so that the boot is not damaged when it is removed.

INSPECTION

E26QGCB

- 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 R.J. or 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 dynamic damper for damage or cracking.
- Check the boots for deterioration, damage or cracking.

**SERVICE POINTS OF REASSEMBLY****9. INSTALLATION OF DYNAMIC DAMPER**

Standard value (A):

<Vehicles built up to May, 1992>

432±3 mm (17.01±0.12 in.)

<Vehicles built from June, 1992>

L.H. shaft

Petrol-powered vehicles

365±3 mm (14.37±0.12 in.)

Diesel-powered vehicles

375±3 mm (14.76±0.12 in.)

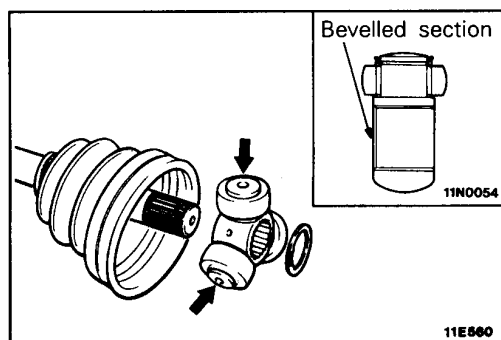
R.H. shaft

Petrol-powered vehicles

200±3 mm (7.87±0.12 in.)

7. INSTALLATION OF T.J. BOOT

Wrap vinyl tape around the spline part on the drive shaft, and then install the T.J. boot band (small) and T.J. boot.

**6. INSTALLATION OF SPIDER ASSEMBLY/3. T.J. CASE**

- (1) Apply the specified grease furnished in the repair kit to the spider assembly between the spider axle and the roller.

Specified grease: Repair kit grease

Caution

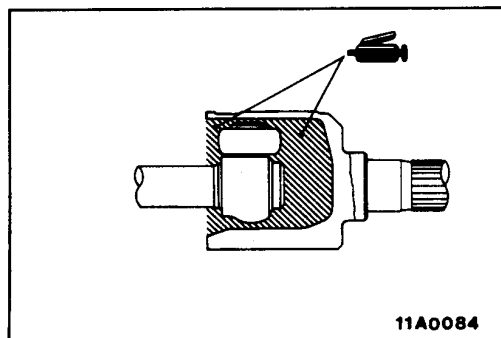
1. The drive shaft joint uses special grease. Do not mix old and new or different types of grease.
2. If the spider assembly has been cleaned, take special care to apply the specified grease.

- (2) Install the spider assembly to the shaft from the direction of the spline bevelled section.

- (3) After applying specified grease to the T.J. case, insert the drive shaft and apply grease one more time.

Specified grease: Repair kit grease

<1800, 2000>	110 g (3.88 oz)
<2400>	130 g (4.59 oz)

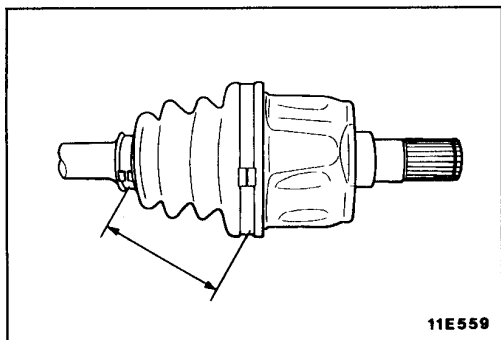


NOTE

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

Caution

The drive shaft joint use special grease. Do not mix old and new or different types of grease.

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

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 bands securely.

Standard value:**<Vehicles built up to May, 1992>**

SPACE RUNNER	82±3 mm (3.23±0.12 in.)
SPACE WAGON	85±3 mm (3.35±0.12 in.)

<Vehicles built from June, 1992>

1800, 2000,	
2400 (R.H.)	82±3 mm (3.23±0.12 in.)
2400 (L.H.)	80±3 mm (3.15±0.12 in.)

26-18-2

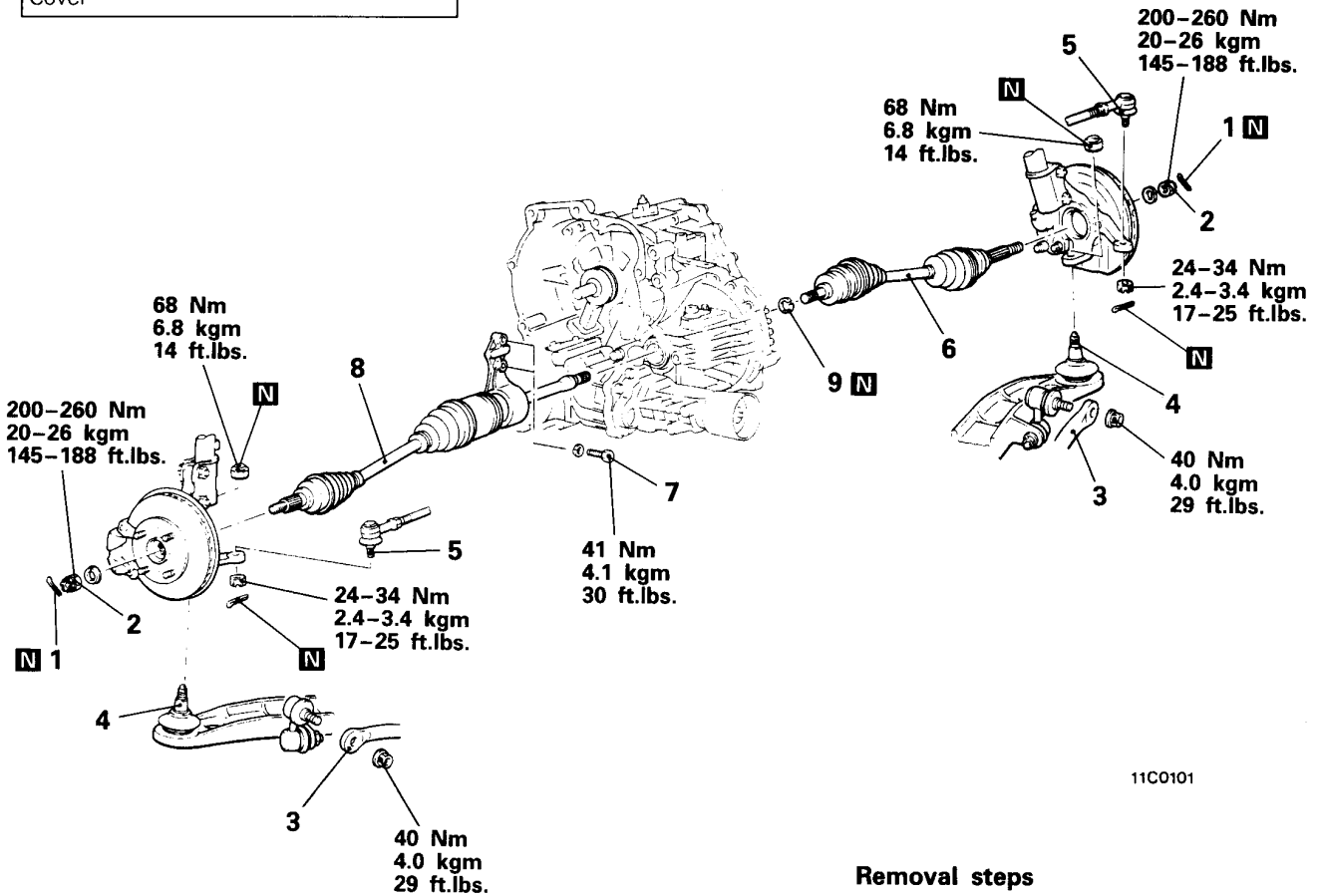
NOTES

DRIVE SHAFT <4WD>

REMOVAL AND INSTALLATION

E26QA-2

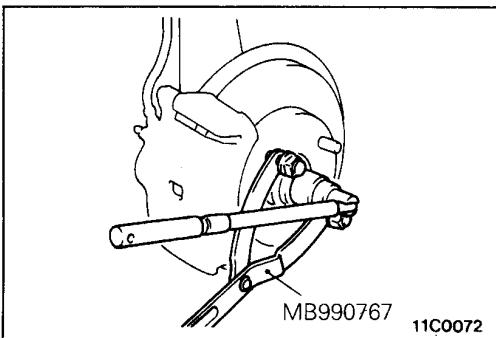
Pre-removal and Post-installation Operation
Removal and Installation of Under Cover



11C0101

Removal steps

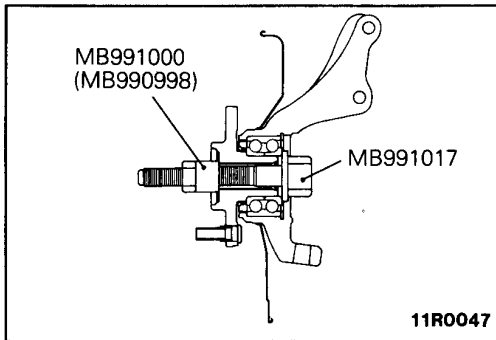
1. Split pin
2. Drive shaft nut
3. Connection for stabilizer bar
4. Connection for lower arm ball joint
5. Connection for tie rod end
6. Drive shaft (RH)
7. Bolt
8. Drive shaft and inner shaft (LH)
9. Circlip



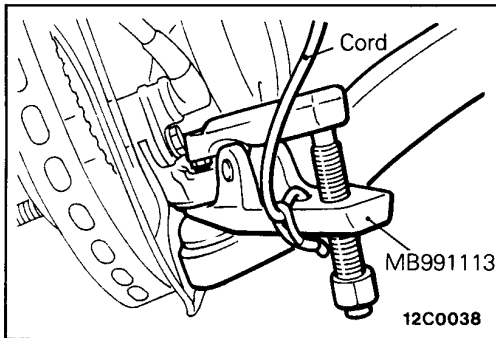
SERVICE POINTS OF REMOVAL

E26QB CD

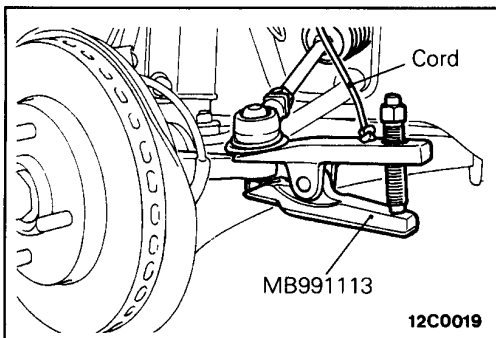
2. REMOVAL OF DRIVE SHAFT NUT

**Caution**

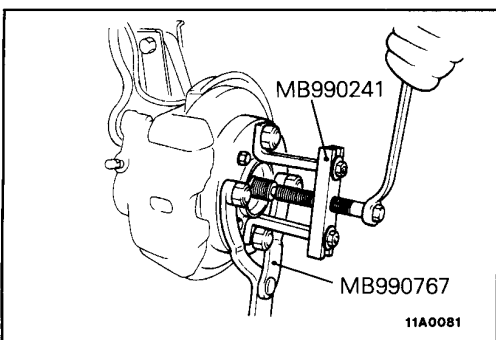
Do not apply the vehicle weight to the wheel bearing while loosening the drive shaft nut. If, however, the vehicle weight must be applied to the bearing (because of moving the vehicle), temporarily secure the wheel bearing by using the special tool, MB990998, etc.

**4. DISCONNECTION OF LOWER ARM BALL JOINT****Caution**

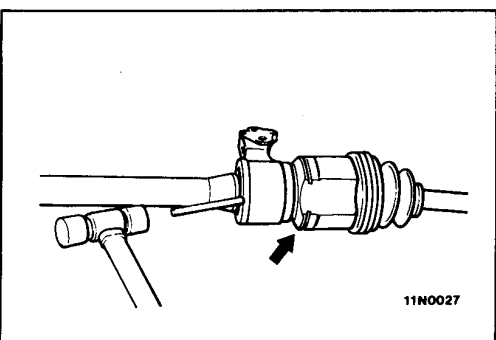
1. Be sure to tie the cord of the special tool to the nearby part.
2. Loosen the nut but do not remove it.

**5. DISCONNECTION OF TIE ROD END****Caution**

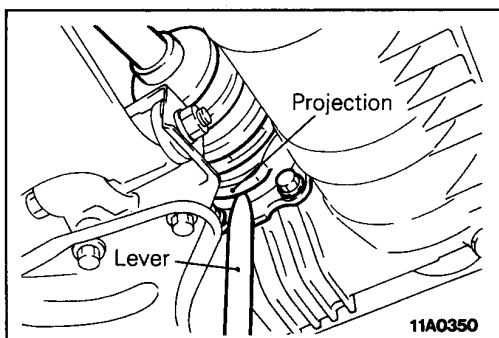
1. Be sure to tie the cord of the special tool to the nearby part.
2. Loosen the nut but do not remove it.

**6. REMOVAL OF DRIVE SHAFT (RH)/8. DRIVE SHAFT AND INNER SHAFT (LH)**

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



- (2) If the inner shaft and transmission are tightly joined, tap the center bearing bracket lightly with a plastic hammer, etc. to remove the drive shaft and inner shaft (LH) from the transmission.



- (3) Apply a lever to the projecting part of the drive shaft to remove the drive shaft from the transmission.

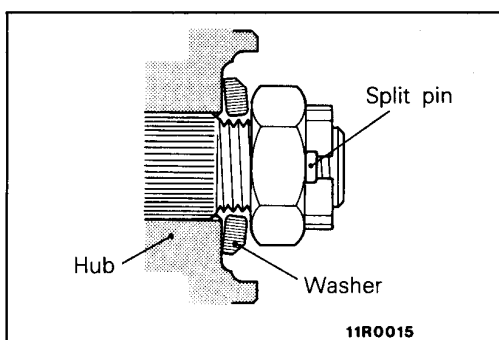
Caution

Do not pull on the drive shaft; doing so will damage the D.O.J. be sure to use the pry bar.

INSPECTION

E28QC8D

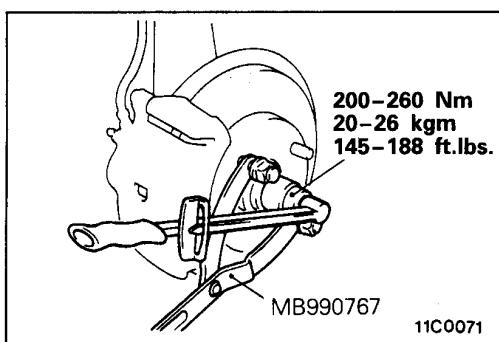
- Check the drive shaft boot for damage or deterioration.
- Check the ball joints for wear or operating condition.
- Check the spline part for wear or damage.

**SERVICE POINTS OF INSTALLATION**

E26QDCB

2. INSTALLATION OF DRIVE SHAFT NUT

- (1) Be sure to install the washer and drive shaft nut in the specified direction.



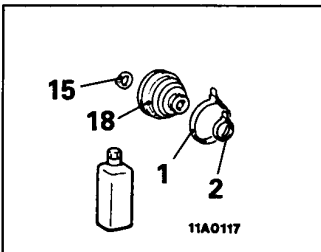
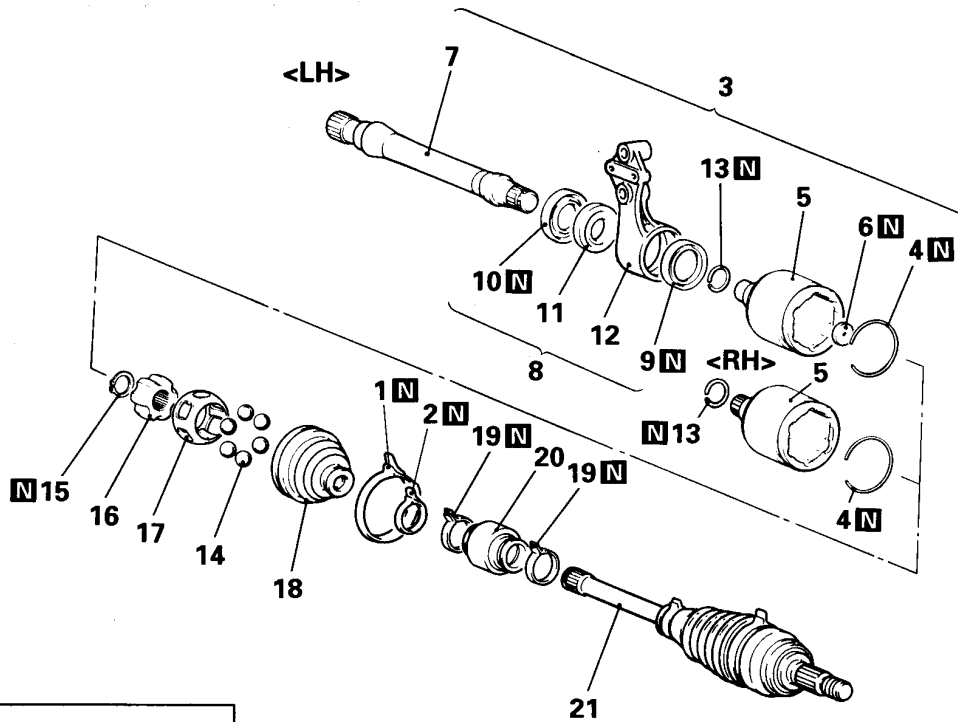
- (2) Using the special tool, tighten the drive shaft nut.

Caution

Before securely tightening the drive shaft nuts, make sure there is no load on the wheel bearings.

- (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.

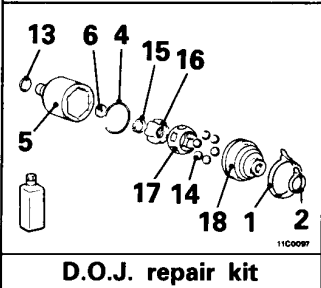
DISASSEMBLY AND REASSEMBLY <1800>



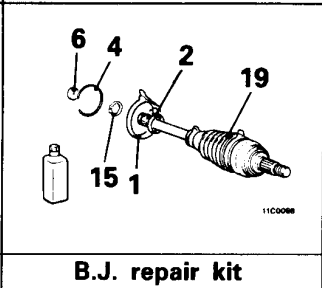
11C0128

Caution
Do not disassemble the B.J..

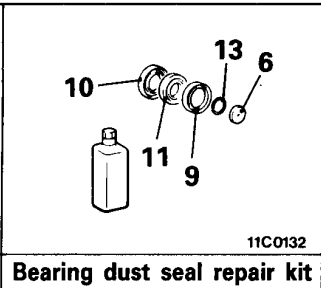
D.O.J. boot repair kit



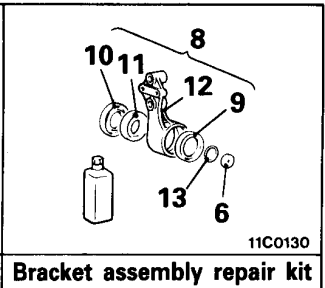
D.O.J. repair kit



B.J. repair kit



Bearing dust seal repair kit



Bracket assembly repair kit

Disassembly steps

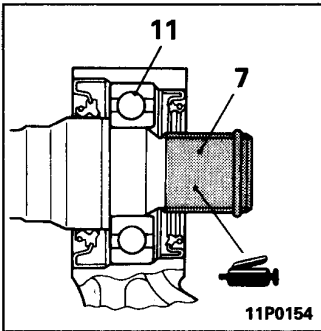
- ◆◆ 1. D.O.J. boot band (large)
- ◆◆ 2. D.O.J. boot band (small)
- ◆◆ 3. D.O.J. outer race and inner shaft assembly
- ◆◆ 4. Circlip
- ◆◆◆◆ 5. D.O.J. outer race
- ◆◆◆◆ 6. Seal plate
- ◆◆◆◆ 7. Inner shaft
- ◆◆◆◆ 8. Bracket assembly
- ◆◆ 9. Outer dust seal
- ◆◆ 10. Inner dust seal
- ◆◆◆◆ 11. Bearing

- ◆◆◆◆ 12. Bracket
- ◆◆◆◆ 13. Circlip
- ◆◆◆◆ 14. Balls
- ◆◆◆◆ 15. Snap ring
- ◆◆◆◆ 16. D.O.J. inner race
- ◆◆◆◆ 17. D.O.J. cage
- ◆◆◆◆ 18. D.O.J. boot
- ◆◆◆◆ 19. Damper band* (R.H. shaft)
- ◆◆◆◆ 20. Dynamic damper* (R.H. shaft)
- ◆◆◆◆ 21. B.J. assembly

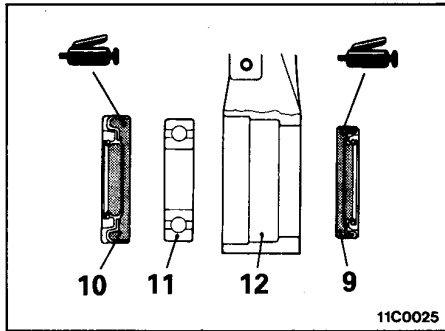
NOTE

*: <Vehicles built from June, 1992>

LUBRICANT POINTS

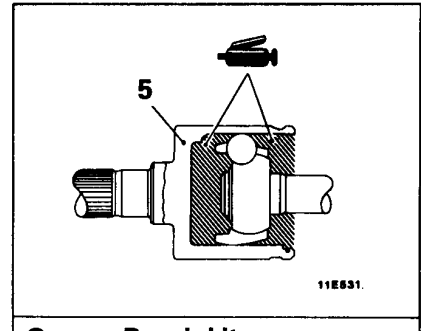


11P0154



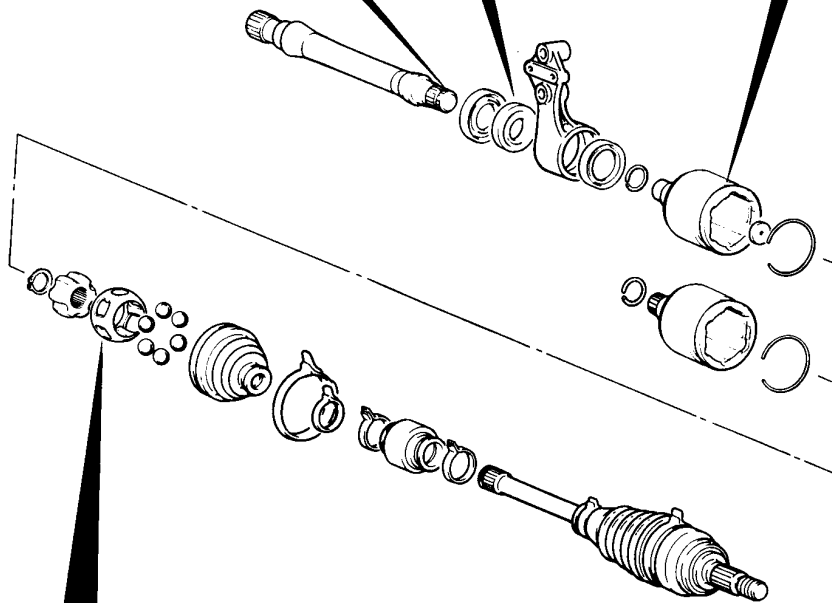
11C0025

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

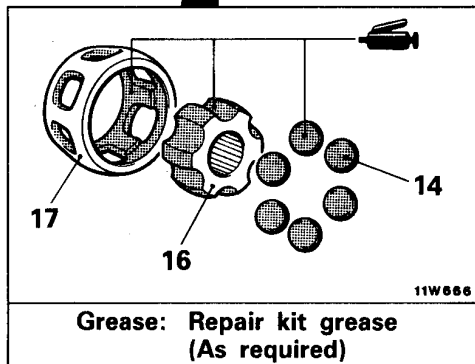


11E931

Grease: Repair kit grease
<Vehicles built up to May, 1992>
90 g (3.17 oz)
<Vehicles built from June, 1992>
110 g (3.88 oz)



11C0128



11W666

Grease: Repair kit grease
(As required)

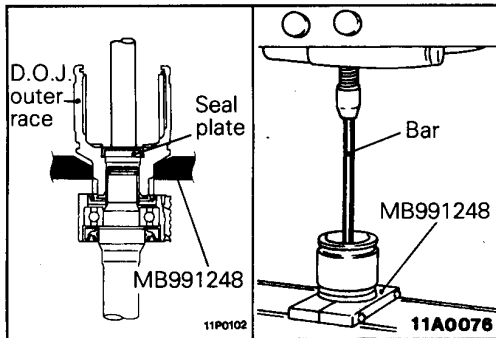
Caution
The drive shaft joint uses special grease. Do not mix old and new or different types of grease.

SERVICE POINTS OF DISASSEMBLY

E26QFAM

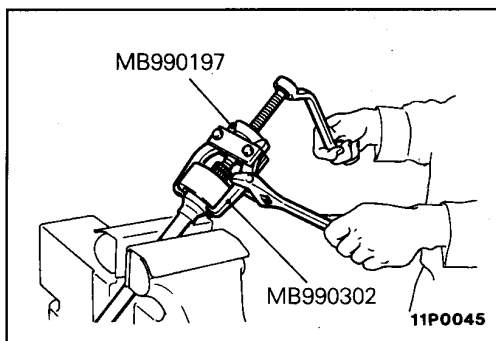
5. REMOVAL OF D.O.J. OUTER RACE

After removing the D.O.J. outer race from the B.J. assembly, wipe off the grease on the D.O.J. outer race.

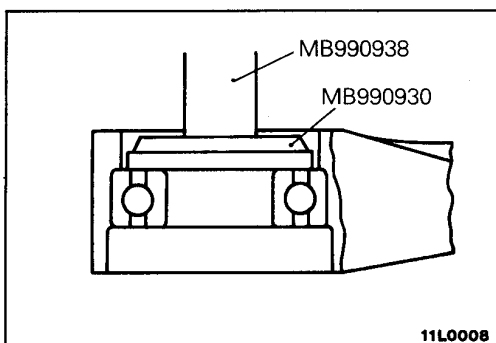


6. REMOVAL OF SEAL PLATE/7. INNER SHAFT

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

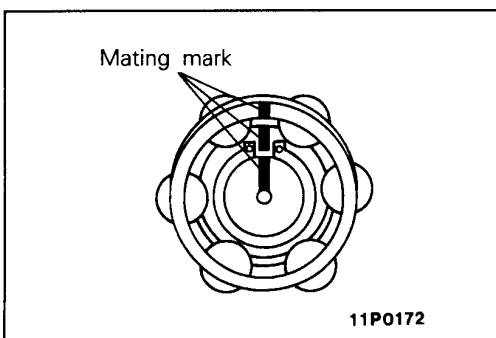


(2) Use the special tools to remove the inner shaft from the bracket.



11. REMOVAL OF BEARING

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

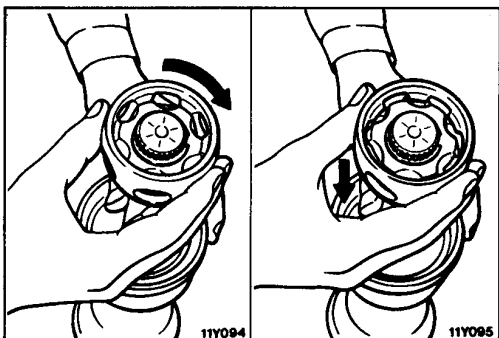


14. REMOVAL OF BALLS/15. SNAP RING/16. D.O.J. INNER RACE/17. D.O.J. CAGE

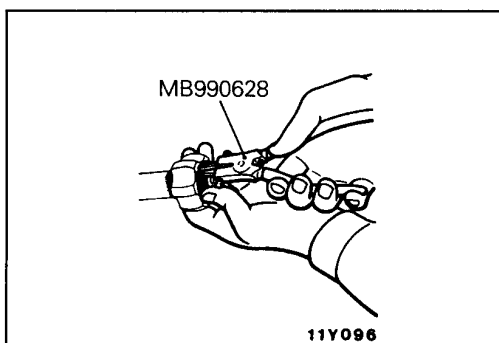
(1) Make mating marks on the drive shaft, D.O.J. inner race and D.O.J. cage.
 (2) Remove the balls from the D.O.J. cage.

Caution

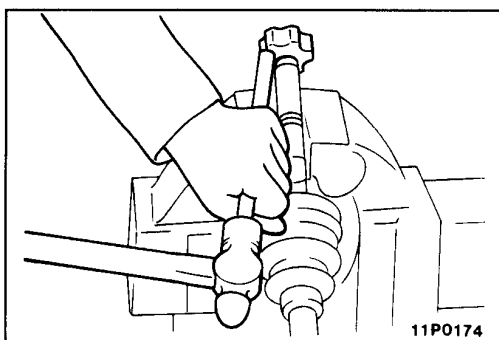
Do not use a screwdriver or similar tool.



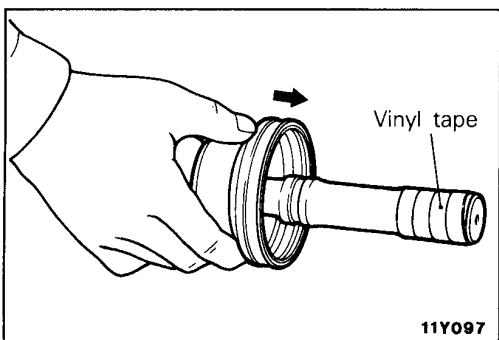
- (3) Remove the D.O.J. cage from the D.O.J. inner race in the direction of the B.J.



- (4) Remove the snap ring from the drive shaft with snap ring pliers or the special tool, and then withdraw the D.O.J. inner race and D.O.J. cage from the drive shaft.



- (5) Use a brass bar to lightly and evenly tap the D.O.J. inner race in order to remove it from the shaft.



18. REMOVAL OF D.O.J. BOOT

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

NOTE

If the boot is reused, wrap vinyl tape around the drive shaft spline so that the boot is not damaged when it is removed.

INSPECTION

E26QGA1

- Check the drive shaft for damage, bending or corrosion.
- Check the inner shaft for damage, bending or corrosion.
- Check the drive shaft spline part for wear or damage.
- Check the inner shaft spline for wear or damage.
- 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.
- Check the center bearing for seizure, discoloration or roughness of rolling surface.

SERVICE POINTS OF REASSEMBLY

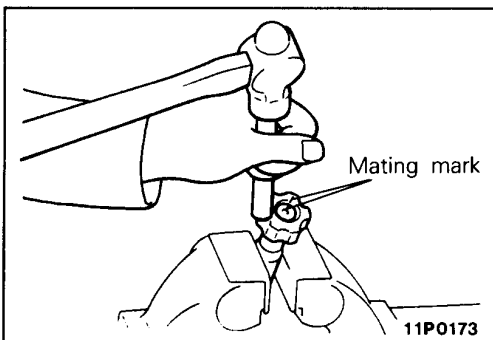
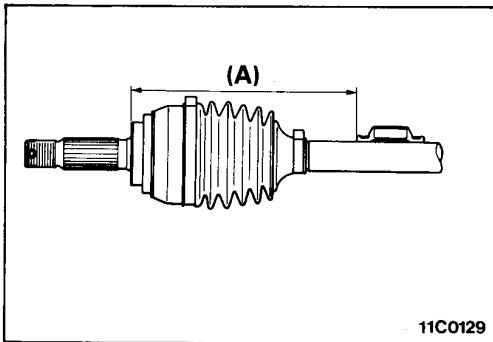
E26QHAN

20. INSTALLATION OF DYNAMIC DAMPER

Standard value (A): 200±3 mm (7.87±0.12 in.)

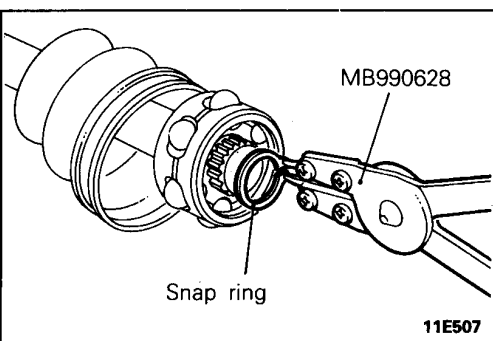
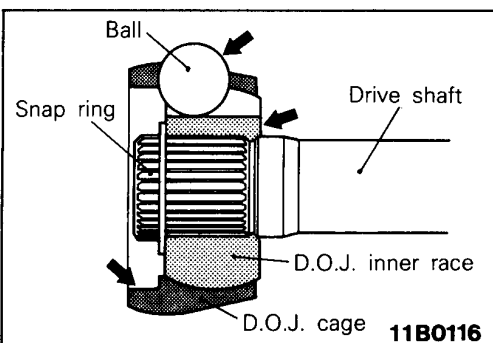
18. INSTALLATION OF D.O.J. BOOT

Wrap vinyl tape around the spline part on the drive shaft, and then install the D.O.J. boot band (small) and D.O.J. boot.

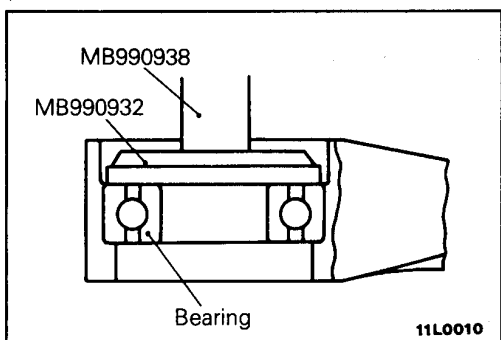
**17. INSTALLATION OF D.O.J. CAGE/16. D.O.J. INNER RACE/15. SNAP RING/14. BALLS**

- (1) Install the D.O.J. cage to the shaft and slide it across to the B.J. assembly.
- (2) Align the mating marks on the D.O.J. inner race and the shaft.
- (3) Use a brass bar to press fit the inner race by lightly and evenly tapping it until it touches the shaft projection.
- (4) Apply the specified grease to the D.O.J. cage, the balls and the D.O.J. inner race.

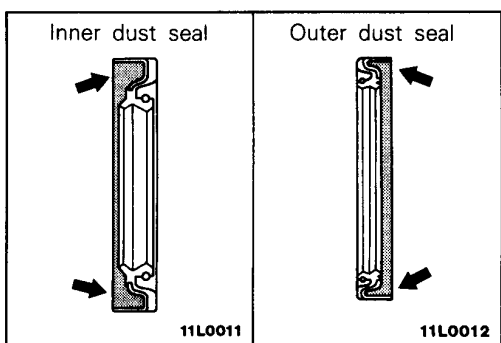
Specified grease: Repair kit grease (As required)



- (5) Install the cage, balls and inner race to the drive shaft, then, using the snap ring pliers or the special tool, fit the snap ring securely into the groove in the shaft.



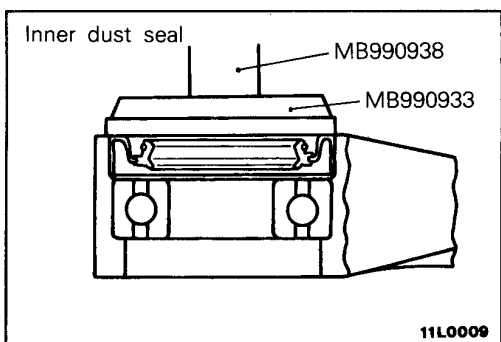
11. INSTALLATION OF BEARING



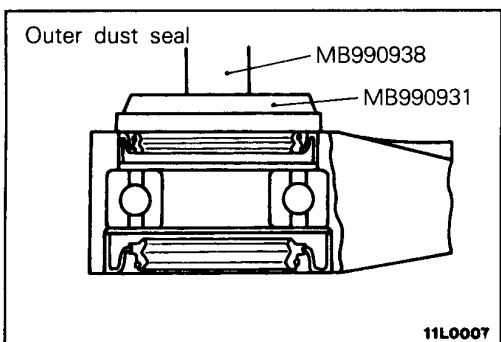
10./9. INSTALLATION OF DUST SEALS

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

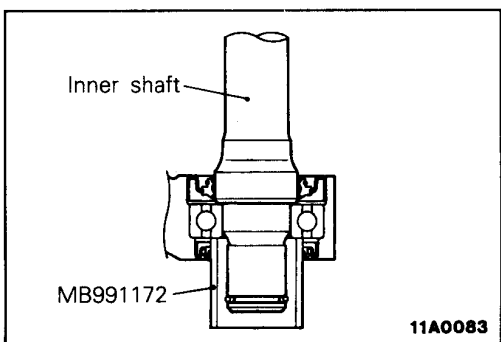
Inner dust seal 7-10 g (0.25-0.35 oz)
Outer dust seal 4-6 g (0.14-0.21 oz)



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

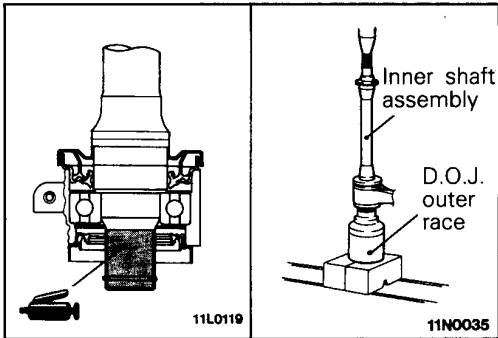


NOTE
 When applying grease, make sure that it does not adhere to anything outside the lip.



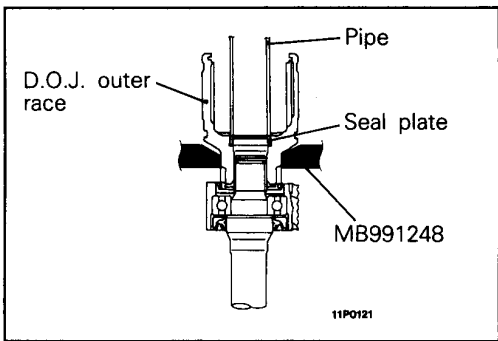
7. INSTALLATION OF INNER SHAFT

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

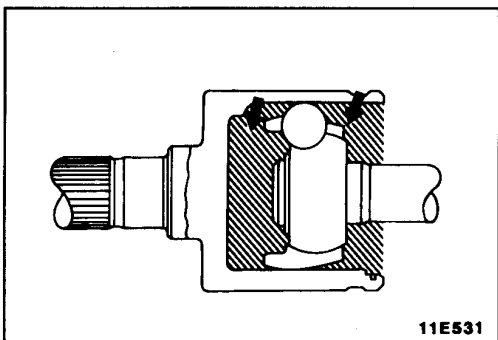


6. INSTALLATION OF SEAL PLATE/5. D.O.J. OUTER RACE/3. D.O.J. OUTER RACE AND INNER SHAFT ASSEMBLY

(1) Apply multipurpose grease to the inner shaft spline, then press fit it 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

<Vehicles built up to May, 1992>

90 g (3.17 oz)

<Vehicles built from June, 1992>

110 g (3.88 oz)

NOTE

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

Caution

The drive shaft joint use special grease. Do not mix old and new or different types of grease.

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

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 bands securely.

Standard value:

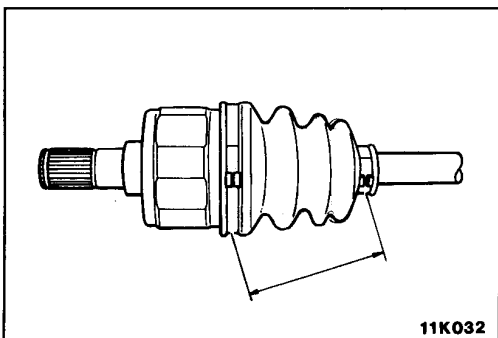
<Vehicles built up May, 1992>

90±3 mm (3.54±0.12 in.)

<Vehicles built from June, 1992>

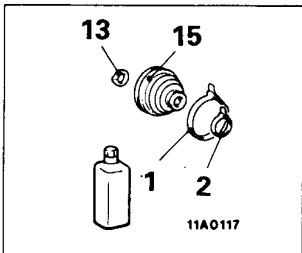
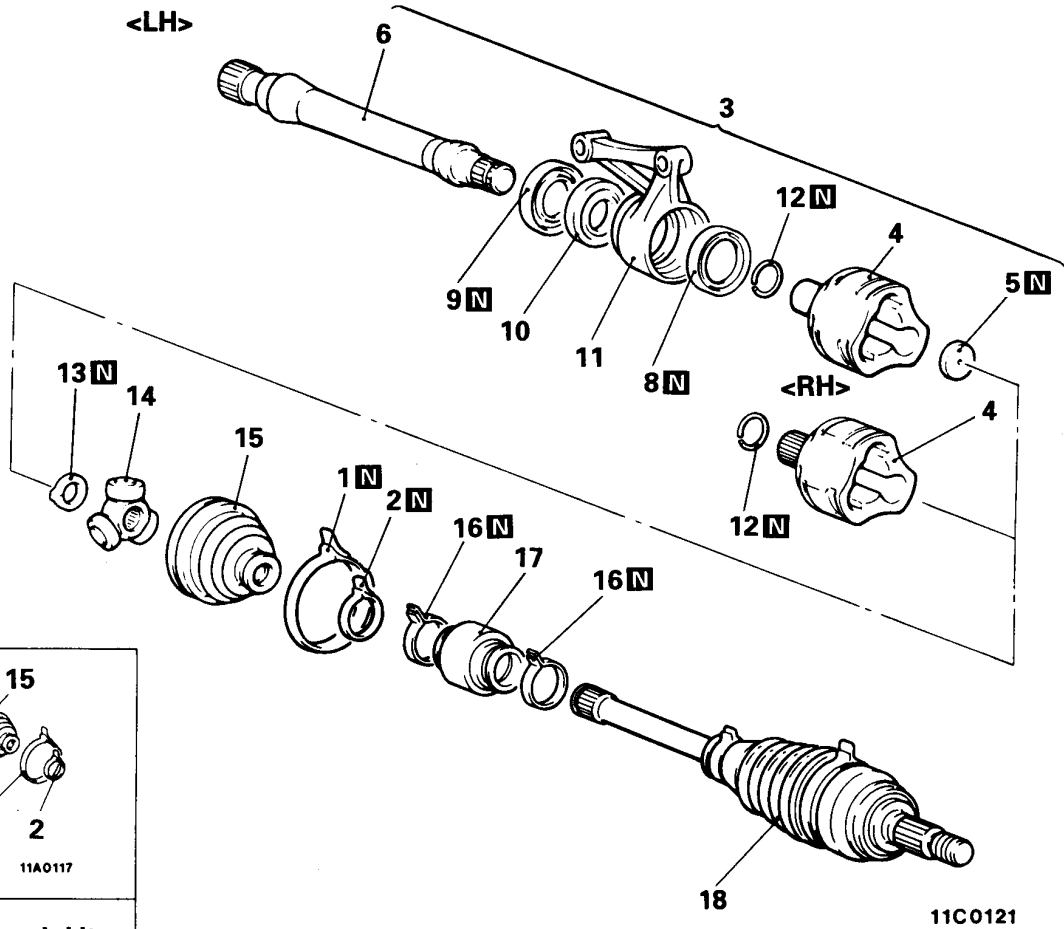
L.H. shaft 82±3 mm (3.23±0.12 in.)

R.H. shaft 88±3 mm (3.46±0.12 in.)

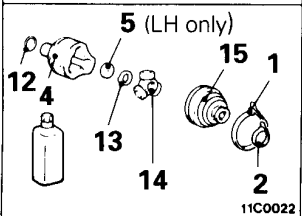


DISASSEMBLY AND REASSEMBLY <2000>

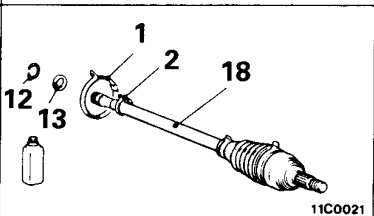
E26QE-3



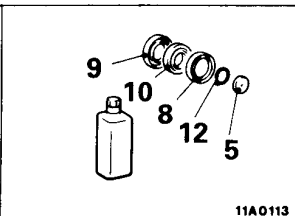
T. J. boot repair kit



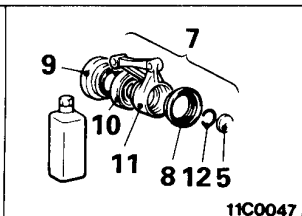
T.J. repair kit



B.J. repair kit



Bearing dust seal repair kit



Bracket assembly repair kit

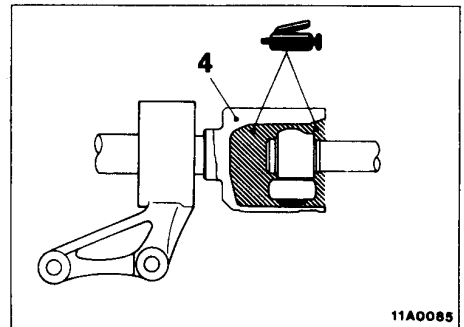
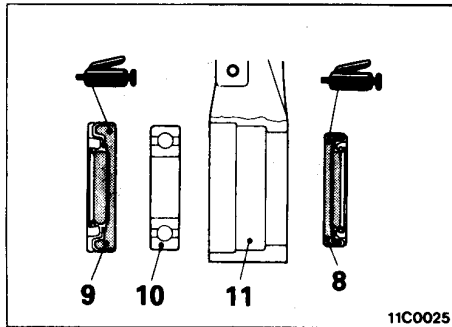
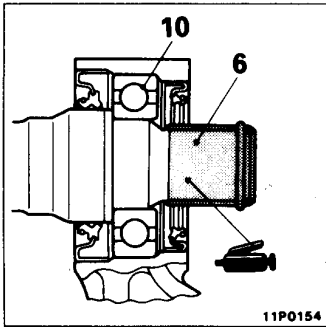
Disassembly steps

- ◆◆ 1. T.J. boot band
- ◆◆ 2. Boot band (small)
- ◆◆ 3. T.J. case and inner shaft assembly
- ◆◆ 4. T.J. case
- ◆◆ 5. Seal plate
- ◆◆ ◆◆ 6. Inner shaft
- ◆◆ ◆◆ 7. Bracket assembly
- ◆◆ 8. Outer dust seal <Refer to P. 26 – 27>
- ◆◆ 9. Inner dust seal <Refer to P. 26 – 27>
- ◆◆ ◆◆ 10. Bearing

- ◆◆ 11. Center bearing bracket
 - ◆◆ 12. Circlip
 - ◆◆ 13. Snap ring
 - ◆◆ 14. Spider assembly
 - ◆◆ 15. T.J. boot
 - ◆◆ ◆◆ 16. Damper band (R.H. shaft)
 - ◆◆ ◆◆ 17. Dynamic damper (R.H. shaft)
 - ◆◆ ◆◆ 18. B.J. assembly
- } <Refer to P.26 – 17>

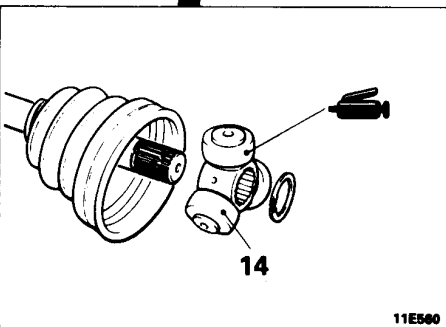
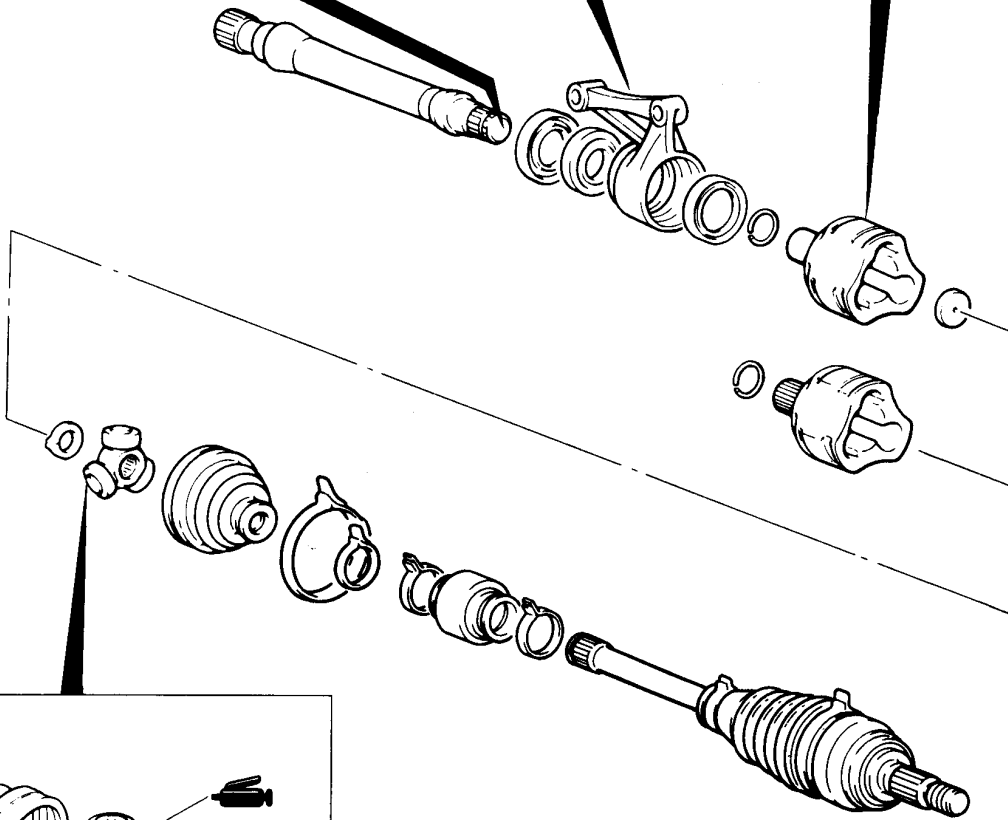
Caution
Do not disassembly the B.J.

LUBRICANT POINTS



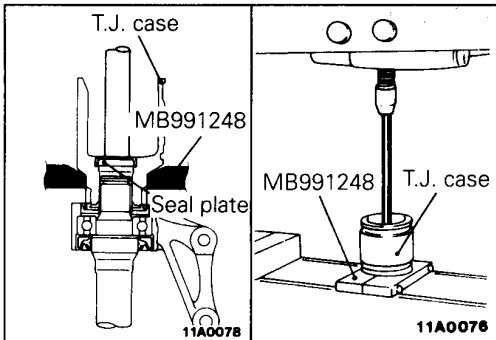
Grease: Multipurpose grease
 Inner dust seal 7-10 g (0.25-0.35 oz.)
 Outer dust seal 4-6 g (0.14-0.21 oz.)

Grease: Repair kit grease
 110 g (3.88 oz.)



Grease: Repair kit grease
 (as required)

Caution
 The drive shaft joint uses special grease. Do not mix old and new or different types of grease.



SERVICE POINTS OF DISASSEMBLY

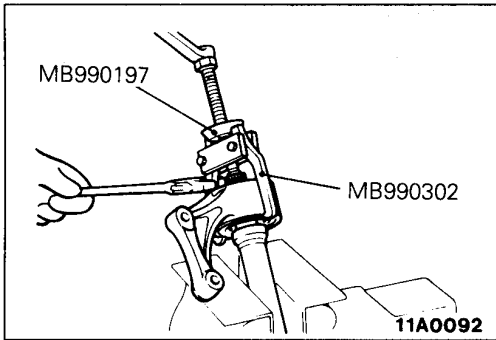
E26QFEE

4. REMOVAL OF T.J. CASE

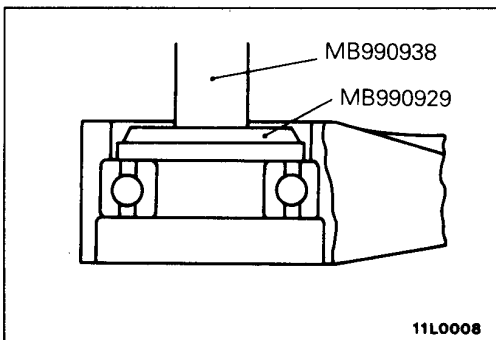
Pull out the T. J. case from the B. J. assembly to wipe out the grease inside the T. J. case.

5. REMOVAL OF SEAL PLATE/6. INNER SHAFT

(1) Using the special tool, remove the inner shaft assembly, together with the seal plate, from the T.J. case.



(2) Use the special tools to remove the inner shaft form the center bearing bracket.



10. REMOVAL OF BEARING

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

INSPECTION

E26GEC

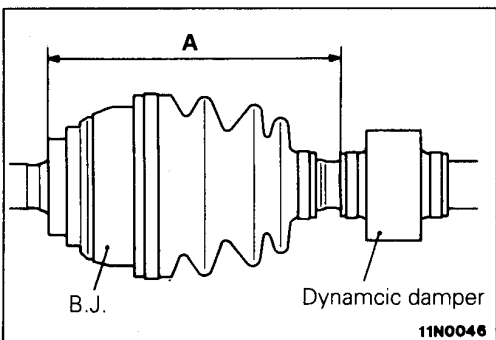
- Check the drive shaft for damage, bending or corrosion.
- Check the inner shaft for damage, bending or corrosion.
- Check the drive shaft splines for wear or damage.
- Check the inner shaft splines for wear or damage.
- Check spider assembly for roller rotation, wear or corrosion.
- Check the groove inside T.J. case for wear or corrosion.
- Check the boots for deterioration, damage or cracking.
- Check the center bearing for seizure, discoloration or roughness of rolling surface.

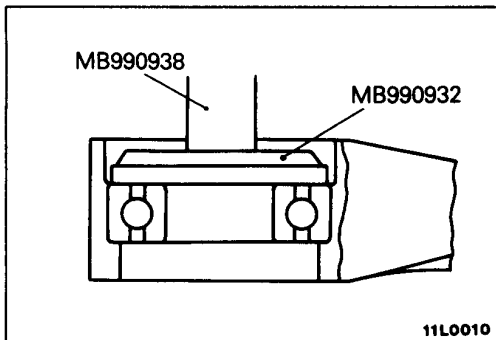
SERVICE POINTS OF REASSEMBLY

E26AHEE

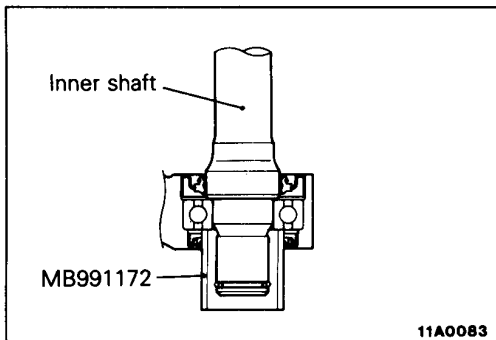
17. INSTALLATION OF DYNAMIC DAMPER

Standard value (A): 200±3 mm (7.87±0.12 in.)



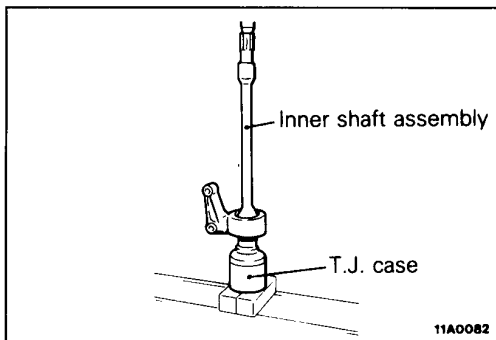


10. INSTALLATION OF BEARING



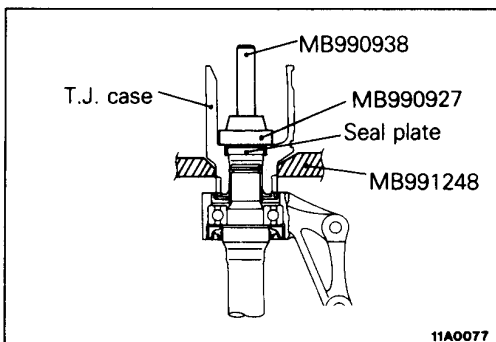
6. INSTALLATION OF INNER SHAFT

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

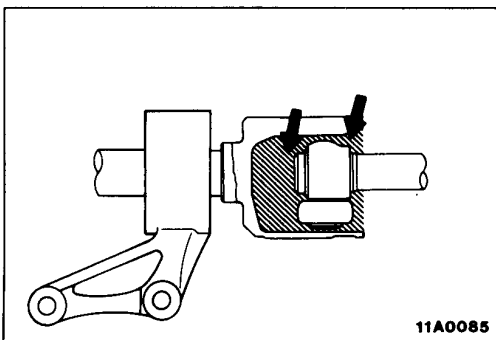


3. INSTALLATION OF T.J. CASE AND INNER SHAFT ASSEMBLY

(1) Apply multipurpose grease to the inner shaft spline, then press fit it into the T.J. case.



(2) Using the special tools, press the seal plate into the T.J. case.



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

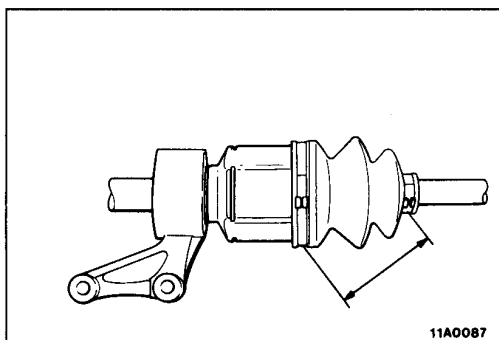
Specified grease: Repair kit grease 110 g (3.88 oz.)

NOTE

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

Caution

The drive shaft joint uses special grease. Do not mix old and new or different types of grease.



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: 82 ± 3 mm (3.23 ± 0.12 in.)