SERVICE BULLETIN

QUALITY INFORMATION ANALYSIS
OVERSEAS SERVICE DEPT. MITSUBISHI MOTORS CORPORATION

SERVICE BULLETIN	**No.:** MSB-98E27-001	
	Date: 1998-06-15	**<Model>** / **<M/Y>**
Subject: CHANGE OF ABS REAR ROTOR		(EC,EXP)L300(P5T) 95-10 (EC,EXP)L400(PA0V) 95-10 (EC,EXP)PAJERO (V10,V20,V30,V40) 96-10
Group: REAR AXLE	**Draftno:** 97-SY-001	
INFORMATION	**OVERSEAS SERVICE DEPT**	R. USAMI - MANAGER QUALITY INFORMATION ANALYSIS

1. Description:

The rear rotor for the anti-lock brake system (ABS) equipped car has been changed to a sheet metal one. Accordingly, the applicable service procedures have been changed as described on the following pages.

2. Applicable Manuals:

Manual	Pub. No.	Language	Page(s)
'96 PAJERO Workshop Manual Chassis SUPPLEMENT	PWJE9086-G	(English)	27-2, 3, 6, 11
	PWJF9088-G	(French)	
	PWJG9089-G	(German)	
	PWJD9090-G	(Dutch)	
	PWJW9091-G	(Swedish)	
'96 MONTERO Workshop Manual Chassis SUPPLEMENT	PWJS9087-G	(Spanish)	
'95 L400 Workshop Manual Chassis	PWWE9410	(English)	27-5, 20, 24, 27, 30
	PWWS9411	(Spanish)	
	PWWF9412	(French)	
	PWWG9413	(German)	
	PWWD9414	(Dutch)	
	PWWW9415	(Swedish)	
'95 L300 Workshop Manual Chassis	PWWE9404	(English)	27-3, 5, 14, 18
	PWWG9405	(German)	

3. Effective Date:

From June 2, 1997

4. Interchangeability:

Not interchangeable

GENERAL

OUTLINE OF CHANGES

- The dust cover of the rear axle shaft and the ABS wheel-sped sensor rotor have been redesigned.
  With this change, the service procedure for the axle shaft has been added.
- Vehicles with 3500 petrol engine and 2800D Diesel engine has used a hybrid type LSD.
  With this change, the service procedure has been added.

SPECIFICATIONS

GENERAL SPECIFICATION

Items	Standard wheelbase 2800D, 3500	Long wheelbase 2800D
Differential		
Differential size	No. 7.5	No. 7.5
Reduction gear type	Hypoid gear (fine pitch type)	Hypoid gear (fine pitch type)
Reduction ratio	4.636	4.900
LSD type	Hybrid type (Helical gear + VCU*)	Hybrid type (Helical gear + VCU*)

NOTE
* : Viscous Coupling Unit

SERVICES SPECIFICATION

Items	Specifications
Standard value	
Press-fitting force of retainer N	
Initial press-fitting force	49,000
Final press-fitting force	98,000-108,00
Clearance of snap ring and retainer mm	0-0,166
Final drive gear backlash mm	0.13-0.18
Drive pinion turning torque	
Without oil seal Nm	
With anti-rust agent (new)	0.6-0.9
With gear oil applied (new or used)	0.4-0.5
Without oil seal Nm	
With anti-rust agent (new)	0.85-1.15
With gear oil applied (new or used)	0.65-0.75
Limit	
Drive gear runout mm	0.05

<Added>

Distance between bearing case and rotor mm	**19.4-20.0**

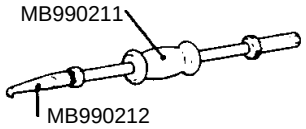
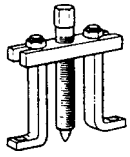
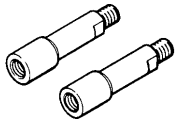
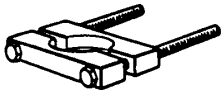
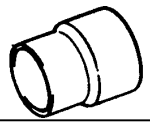
LUBRICANTS

Items	Specified lubricant	Quantity
Rear axle gear oil Hybrid type LSD	Hypoid gear oil API classification GL-5 or higher SAE viscosity No. 90, 80 W	3.2

SEALANT AND ADHESIVES

Items	Specified lubricant	Quantity
Bearing case Differential carrier mounting surface of axle housing	3M ATD Part No. 8663 or equivalent	Semi-drying sealant
Drive gear threaded hole	3M Stud Locking 4170 or equivalent	Anaerobic sealant

SPECIAL TOOLS

Tool	Number	Name	Use
	MB990590	Sliding hammer	Removal of axle shaft (Use together with MB990241) Removal of axle housing oil seal
	MB990241	Rear axle shaft puller	Removal of axle shaft (Use together with MB990590)
	MB991552	Axle shaft bearing and case remover	Removal of the axle shaft bearing and bearing case
	MB991601	Extension bar	
	MB990560	Axle shaft bearing remover	Removal of the axle shaft bearing inner case
	MB990799	Bearing inner race installer	Press-fitting of the axle shaft bearing inner race Press-fitting of the axle shaft retainer

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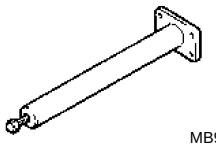
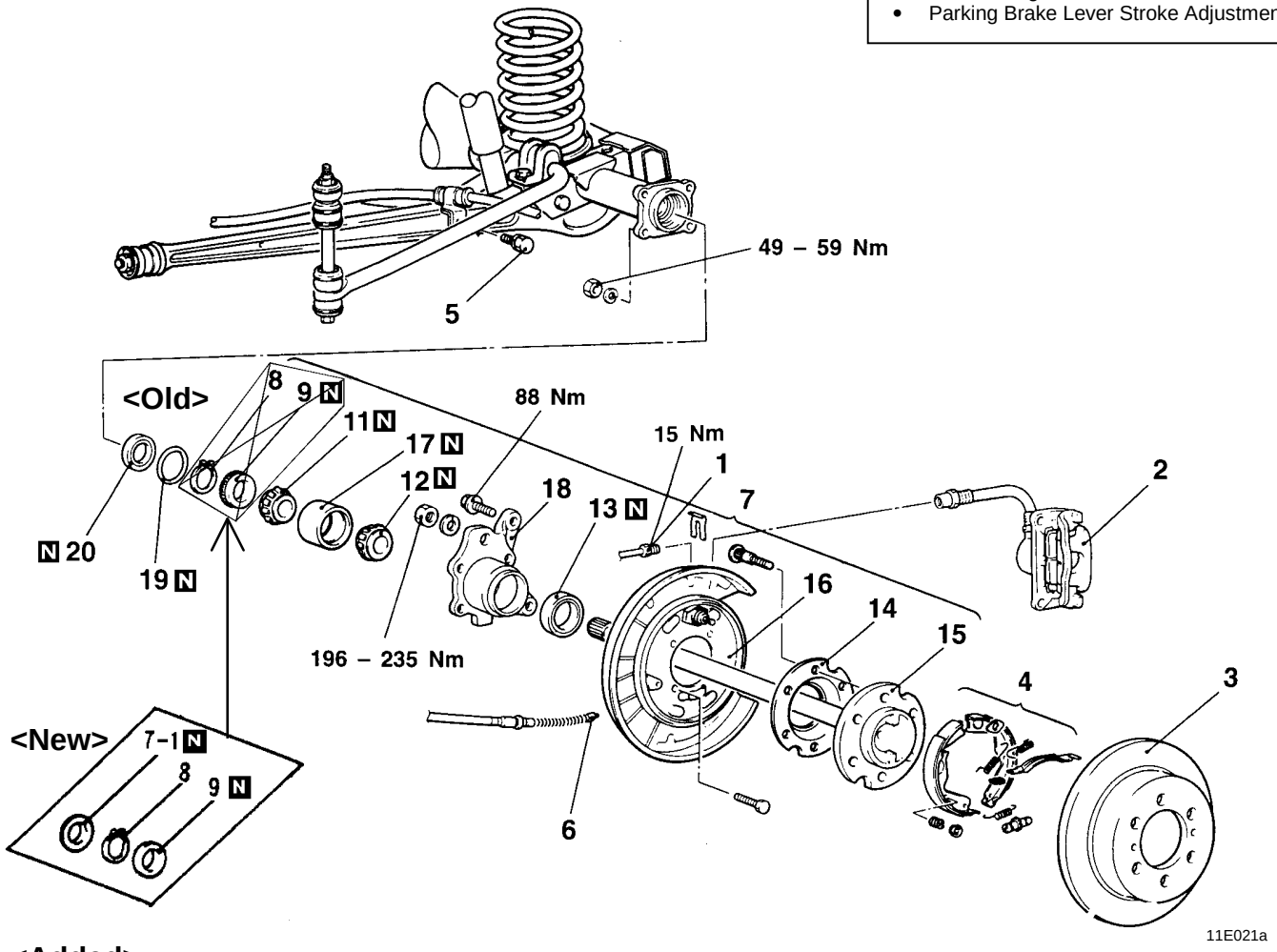
	MB990787	Axle shaft bearing remover	Installation of rotor

AXLE SHAFT

REMOVAL AND INSTALLATION

Post-installation Operation
- Air Bleeding from Brake Lines
- Parking Brake Lever Stroke Adjustment



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7-1. Rotor

Removal steps
1. Brake tube connection
2. Rear brake assembly
3. Brake disc
4. Parking brake assembly
5. Parking brake cable attaching bolt
6. Parking brake cable end
◀A▶ 7. Axle shaft assembly
8. Snap ring
◀B▶ 9. Retainer ☒ ← <Deleted>
◀C▶ 10. Axle shaft sub assembly
(Parts from step12 to step 15)
11. Bearing inner race (inner)
◀D▶ 12. Bearing inner race (outer)
13. Oil seal
14. Dust cover
15. Axle shaft
16. Backing plate
◀E▶ 17. Bearing outer race
18. Bearing case
19. O-ring
◀F▶ 20. Oil seal

Installation steps
▶A◀ 20. Oil seal
19. O-ring
18. Bearing case
▶B◀ 17. Bearing outer race
16. Backing plate
15. Axle shaft
14. Dust cover
12. Bearing inner race (outer)
▶C◀ 13. Oil seal
▶D◀ 11. Bearing inner race (inner)
▶E◀ 9. Retainer
▶F◀ 8. Snap ring
7. Axle shaft assembly
6. Parking brake cable end
5. Parking brake cable attaching bolt
4. Parking brake assembly
3. Brake disc
2. Rear brake assembly
1. Brake tube connection

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▶G◀ 7-1. Rotor

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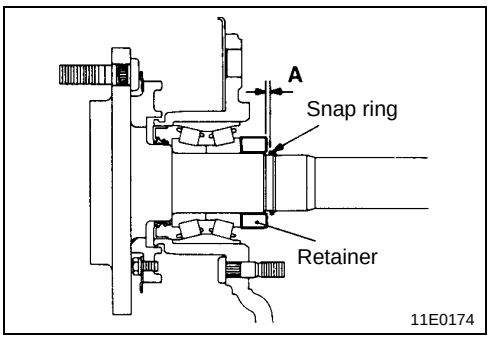
NOTE
* :For vehicles with ~~ABS, the sensor rotor has been~~ integrated.



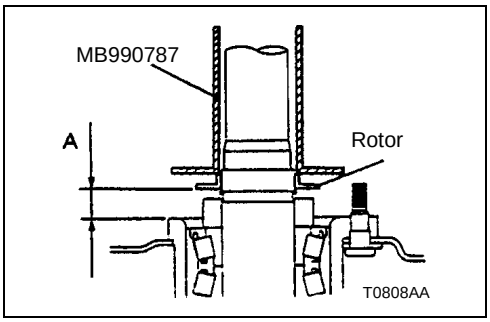
▶F◀ SNAP RING INSTALLATION

(1) After installing the snap ring, measure the clearance (A) between the snap ring and the retainer with a thickness gauge, and check that it is within the standard values.

Standard value (A): 0-0.166 mm

(2) If the clearance exceeds the standard value, change the snap ring so that the clearance is at the standard value.

Thickness of snap ring mm	Identification colour
2.17	–
2.01	Yellow
1.85	Blue
1.69	Purple
1.53	Red



▶G◀ ROTOR INSTALLATION

Using the special tool, install the rotor until the standard dimension between the rotor and the bearing case is obtained.

Standard value (A): 19.4-20.0 mm

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