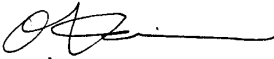




SERVICE BULLETIN

SERVICE GROUP, WARRANTY & SERVICE DEP.
MITSUBISHI MOTOR SALES EUROPE BV

SERVICE BULLETIN		No.: ESB-96E35-001	
		Date: 1997-02-28	
Subject: FRONT BRAKE DISASSEMBLY AND REASSEMBLY PROCEDURES		<Model> CARISMA	<M/Y> 96-10
Group: SERVICE BRAKE			
Correction	 O. Kai - E.V.P. After Sales Service		

1. Description:

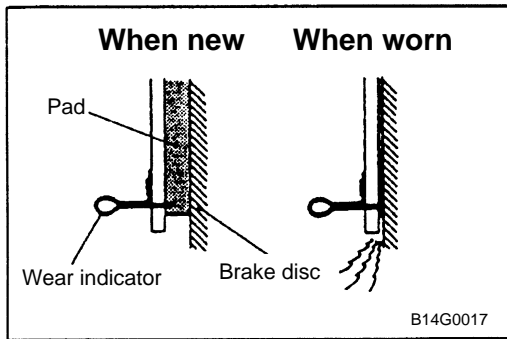
Procedures for disassembling and reassembling the front disc brake caliper assemblies
Have been established as shown in this Service Bulletin.

2. Applicable Manual:

Manual	Pub. No.	Language	Page(s)
'96 CARISMA Workshop Manual	PWDE9502	(English)	35A-11, 35A-21
	PWDS9503	(Spanish)	
	PWDF9504	(French)	
	PWDG9505	(German)	
	PWDD9506	(Dutch)	
	PWDW9507	(Swedish)	
	PWDI96E1	(Italian)	

3. Details:

Please refer to the attached page(s).

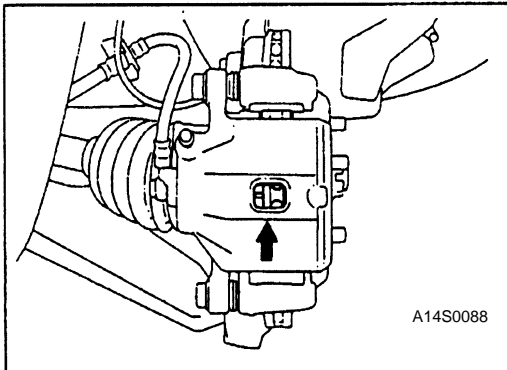


FRONT DISC BRAKE PAD CHECK AND REPLACEMENT

35100150044

NOTE

The brake pads have wear indicators that contact the brake disc when the brake pad thickness becomes 2 mm and emit a squealing sound to warn the driver.



1. Check brake pad thickness through caliper body check port.

Standard value: 10 mm

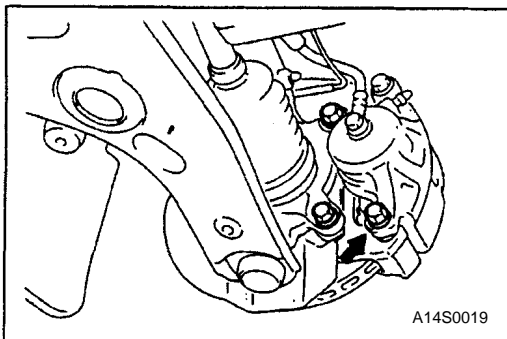
Limit: 2.0 mm

Caution

1. When the limit is exceeded, replace the pads at both sides, and also the brake pads for the wheels on the opposite side at the same time.
2. If there is a significant difference in the thickness of the pads on the left and right sides, check the sliding condition of the piston, lock pin and guide pin

<Changed>

guide pins



2. Remove lock pin. Lift caliper assembly and retain with wires.

<Changed>

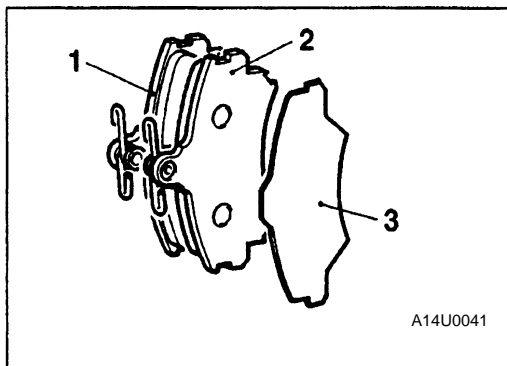
Remove the bolt indicated by arrow.

body

<Changed>

Caution <Deleted>

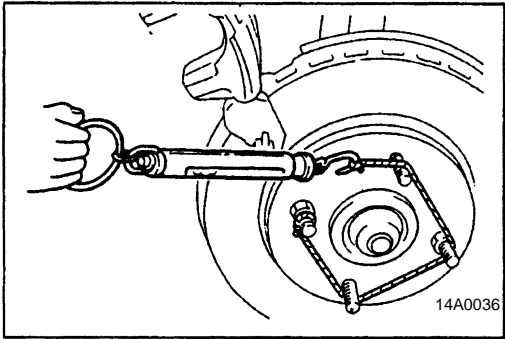
~~do not wipe off the special grease that is on the lock pin or allow it to contaminate the lock pin.~~



3. Remove the following parts from caliper support

1. Pad & wear indicator assembly
2. Pad assembly
3. Outer shim

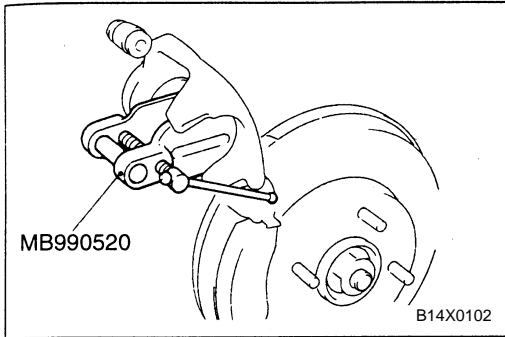
4. In order to measure the brake drag torque after pad installation, measure the rotary-sliding resistance of the hub (A) with the pads removed. (Refer to P.35A-20.)
5. Install the pads and the caliper assembly, and then check the brake drag torque. (Refer to P.35A-20.)



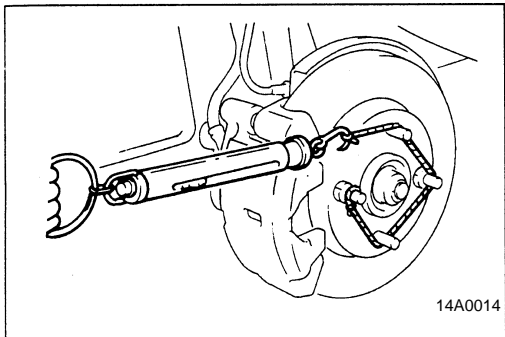
2. After installing the caliper support to the knuckle, install the pad clips and the pads to the caliper support.

Caution

- Do not let any oil, grease or other contamination get onto the friction surfaces of the pads and brake disc.



3. Clean piston and insert into cylinder with special tool.
4. Be careful that the piston boot does not become caught, when lowering the caliper assembly and install the lock pin. ◀ **guide pins** <Changed>
5. Check brake drag torque as follows.
 - (1) Start the engine and then depress the brake pedal 2-3 times
 - (2) Stop engine.
 - (3) Turn brake disc forward 10 times.

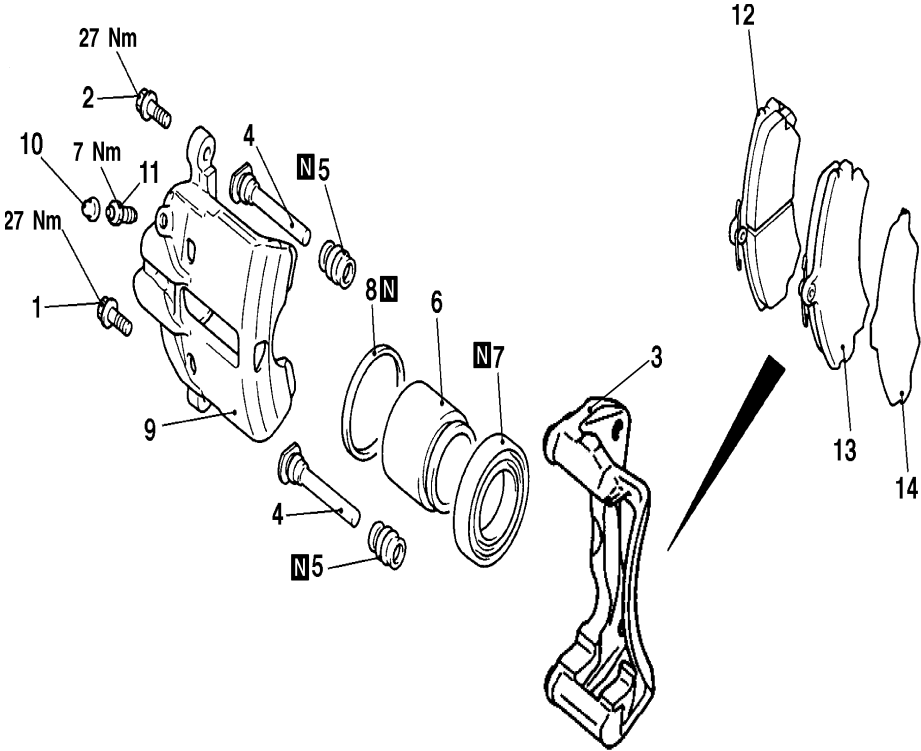


6. Check hub torque (B) with spring balance.
7. Calculate the drag torque of the disc brake [difference between hub torque (B) and hub torque (A)].

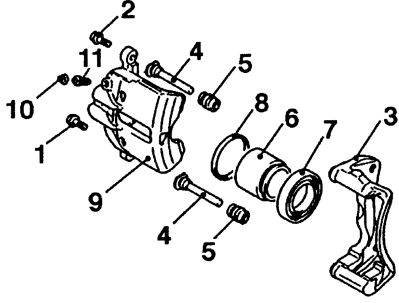
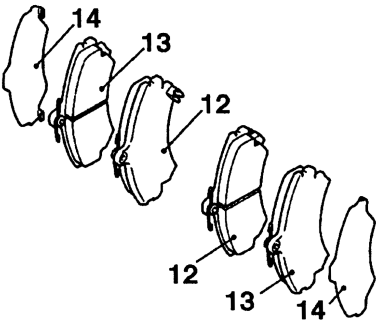
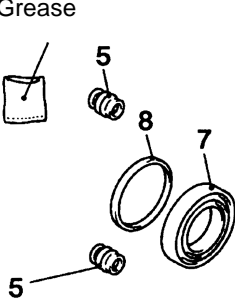
Standard value: 40 N or less

8. If the difference between brake drag torque and hub torque exceeds the standard value, replace the disc brake assembly.

DISASSEMBLY AND REASSEMBLY



14U0109

Brake caliper kit	Brake pad kit	Brake caliper piston seal kit
 <p>14U0108</p>	 <p>14U0110</p>	 <p>14U0111</p>

Caliper assembly disassembly steps

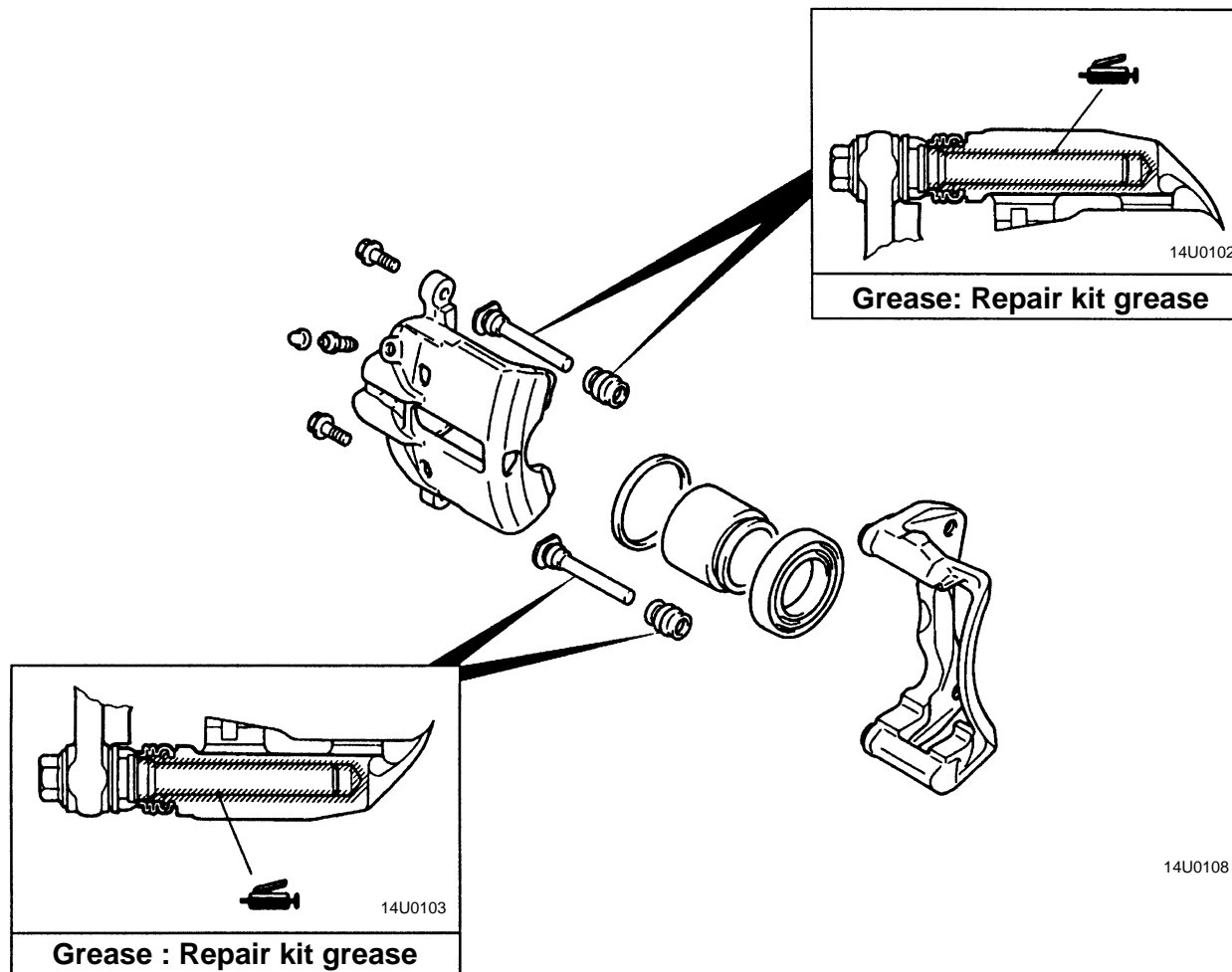
- 1. Bolt
- 2. Bolt
- 3. Caliper support
- 4. Guide pin
- 5. Boot
- 6. Piston
- 7. Piston boot
- 8. Piston seal
- 9. Caliper body
- 10. Caliper bleeder cap
- 11. Caliper bleeder

◀ A ▶
◀ A ▶
◀ B ▶

Pad assembly disassembly steps

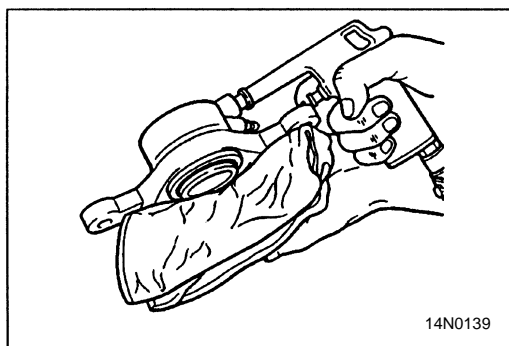
- 1. Bolt
- 12. Pad and wear indicator assembly
- 13. Pad assembly
- 14. Outer shim

LUBRICATION POINTS



DISASSEMBLY SERVICE POINTS

When disassembling the front disc brakes, disassemble both sides (left and right) as a set.



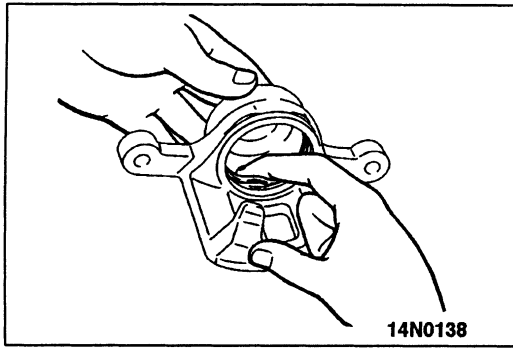
◀ A ▶ PISTON /PISTON BOOT REMOVAL

Protect caliper body with cloth. Blow compressed air through brake hose to remove piston and piston boot.

Caution

Blow compressed air gently

<Added>

**◀ B ▶ PISTON SEAL REMOVAL**

- (1) Remove piston seal with finger tip.

Caution

Do not use a flat-tipped screwdriver or other tool to prevent damage to inner cylinder.

- (2) Clean piston surface and inner cylinder with trichloroethylene, alcohol or specified brake fluid.

Specified brake fluid: DOT3 or DOT4

INSPECTION

35100630081

- Check cylinder for wear, damage or rust.
- Check piston surface for wear, damage or rust.
- Check caliper body or sleeve for wear.
- Check pad for damage or adhesion of grease, check backing metal for damage.

<Added>