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# BASIC BRAKE SYSTEM

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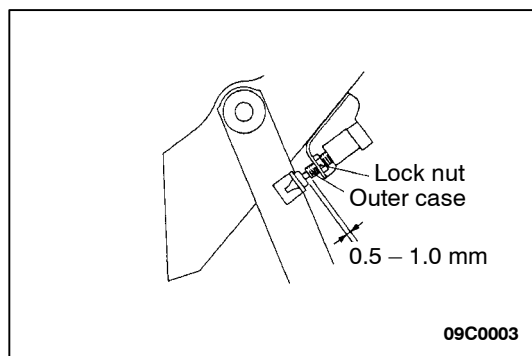
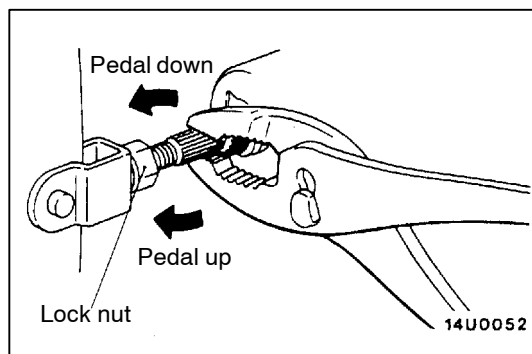
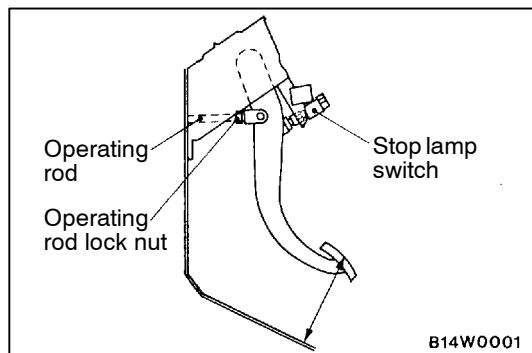
## GENERAL

### OUTLINE OF CHANGES

- A/T key interlock and shift lock mechanisms have been newly used. Accordingly, service procedures for the brake pedal have been added. <A/T>
- A vacuum sensor has been newly used. Accordingly, the service procedures for the brake booster have been revised. <4G64>
- The specifications of the proportioning valve have been modified. Accordingly, the inspection procedures for the proportioning valve have been revised. <4G64, 6A13>

### SERVICE SPECIFICATIONS <4G64, 6A13>

Items			Standard value	Limit
Proportioning valve	Split point MPa	Sedan	$3.43 \pm 0.25$	—
		Wagon	$3.92 \pm 0.25$	—
	Output fluid pressure (Input fluid pressure) MPa	Sedan	$5.80 \pm 0.39$ (9.81)	—
		Wagon	$6.10 \pm 0.39$ (9.81)	—
	Output fluid pressure difference between left and right MPa		—	0.39



## ON-VEHICLE SERVICE

### BRAKE PEDAL CHECK AND ADJUSTMENT

#### BRAKE PEDAL HEIGHT <A/T>

1. Turn up the carpet and so on under the brake pedal.
2. Measure the brake pedal height as illustrated. If the brake pedal height is not within the standard value, follow the procedure below.

**Standard value: 162.8 – 165.8 mm**

- (1) Disconnect the stop lamp switch connector.
  - (2) Adjust the brake pedal height by turning the operating rod with pliers (with the operating rod lock nut loosened), until the correct brake pedal height is obtained.
  - (3) Secure by tightening the lock nut of the operating rod.
  - (4) Push the stop lamp switch in the direction of the pedal stroke until it stops. (The switch will slide if it is pushed firmly.)
  - (5) Lift up the pedal until the operating rod is fully extended, and then slide the stop lamp switch back to the required position. Adjust the position of the switch by turning it until the distance shown in the illustration is correct.
  - (6) Connect the connector of the stop lamp switch.
  - (7) Check that the stop lamp is not illuminated with the brake pedal unpressed.
3. Check the key interlock and shift lock mechanisms. (Refer to GROUP 23 – On-vehicle Service.)
  4. Return the carpet and so on.

**PROPORTIONING VALVE FUNCTION TEST  
<4G64, 6A13>**

Standard values have been set as follows. The inspection procedure is the same as before.

**Standard value:**

MPa

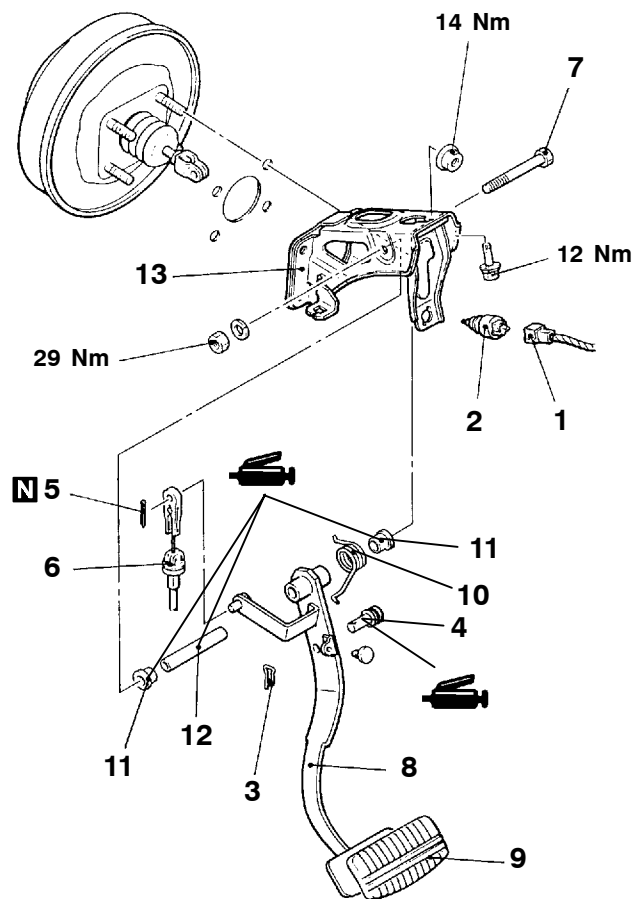
	Sedan	Wagon
Split point	$3.43 \pm 0.25$	$3.92 \pm 0.25$
Output fluid pressure (Input fluid pressure)	$3.43 \pm 0.39$ (9.81)	$6.10 \pm 0.39$ (9.81)

## BRAKE PEDAL &lt;A/T&gt;

## REMOVAL AND INSTALLATION

**Post-installation Operation**

Brake Pedal Adjustment (Refer to P.35A-3.)



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**Removal steps**

1. Stop lamp switch connector
2. Stop lamp switch
3. Snap pin
4. Pin assembly
5. Split pin
6. Shift lock cable
7. Brake pedal shaft bolt

8. Brake pedal
9. Brake pedal pad
10. Brake pedal return spring
11. Bushing
12. Pipe
13. Pedal support member

## MASTER CYLINDER AND BRAKE BOOSTER<4G64>

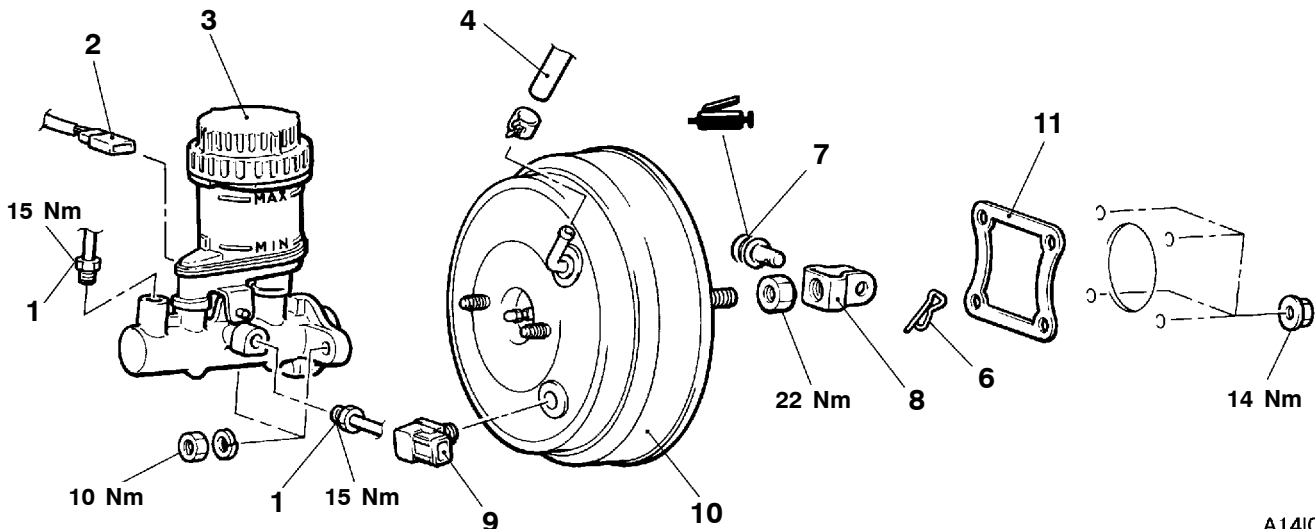
### REMOVAL AND INSTALLATION

#### Pre-removal Operation

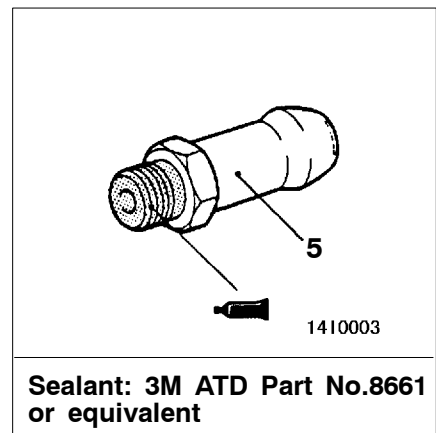
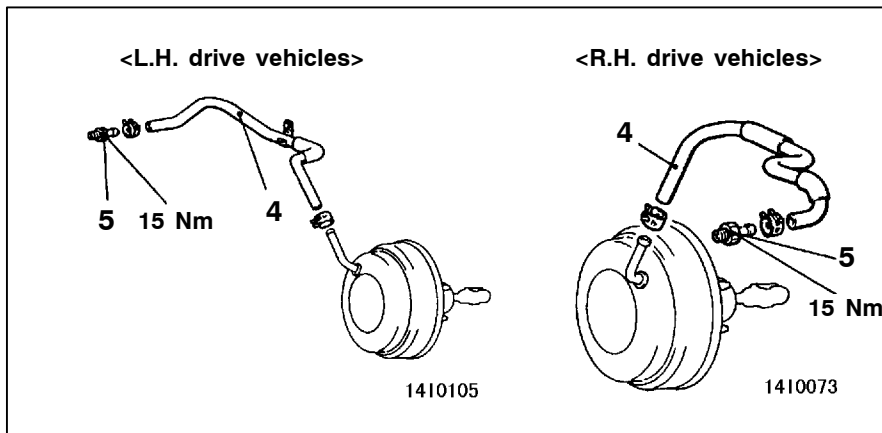
Brake Fluid Draining

#### Post-installation Operation

- Brake Fluid Supplying
- Brake Line Bleeding
- Brake Pedal Adjustment (Refer to P.35A-3.)



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#### Removal steps

1. Brake pipe connection
2. Brake fluid level sensor connector
3. Master cylinder assembly
4. Vacuum hose
5. Fitting

6. Snap pin
7. Pin assembly
8. Clevis
9. Vacuum sensor
10. Brake booster
11. Sealer

#### NOTE

For service points, refer to the Basic Manual.

### INSPECTION

#### VACUUM SENSOR CHECK

Refer to GROUP 13 – Troubleshooting.

#### NOTE

The engine-ECU monitors the vacuum sensor. If it is defective, a diagnosis code will be displayed on the MUT-II.