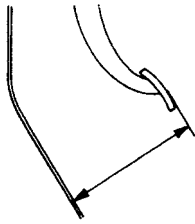
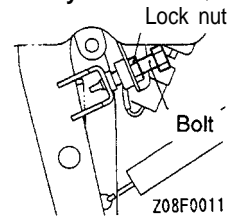


## Clutch pedal height



Z08Y041

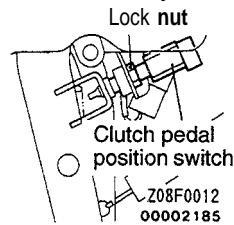
## &lt;FWD&gt;

Vehicles without  
auto-cruise  
control system

Lock nut

Bolt

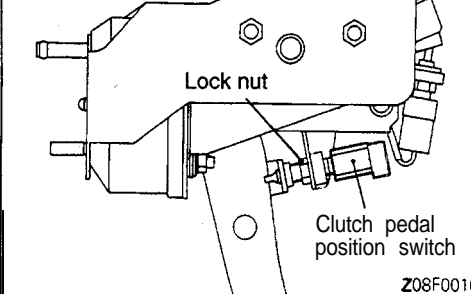
Z08F0011

Vehicles with  
auto-cruise  
control system

Lock nut

Clutch pedal  
position switchZ08F0012  
00002185

## &lt;AWD&gt;

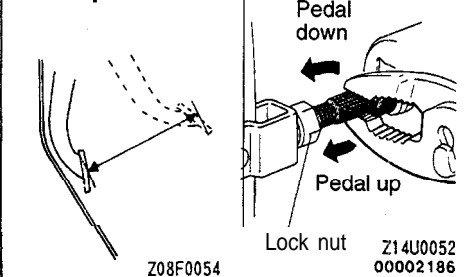


Lock nut

Clutch pedal  
position switch

Z08F0013

## Clutch pedal stroke

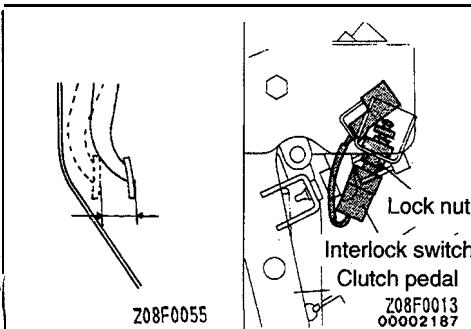


Pedal down

Pedal up

Lock nut

Z08F0054

Z14U0052  
00002186

Lock nut

Interlock switch

Clutch pedal

Z08F0055

Z08F0013  
00002187

## ON-VEHICLE SERVICE

## CLUTCH PEDAL CHECK AND ADJUSTMENT

1. Take off the carpet at under the clutch pedal. Measure the clutch pedal height (from the face of the pedal pad to the firewall).

**Standard value:**

&lt;FWD&gt; 177–182 mm (6.97–7.17 in.)

&lt;AWD&gt; 183–188 mm (7.20–7.40 in.)

If the clutch pedal height is not within the standard value range, adjust as follows:

For vehicles without auto-cruise control system, turn and adjust the bolt so that the pedal height is the standard value, and then secure by tightening the lock nut to the specified torque.

Vehicles with auto-cruise control system, disconnect the clutch pedal position switch connector and turn the switch for standard clutch pedal height. Tighten the lock nut to the specified torque.

**Specified torque: 13 Nm (9 ft.lbs.)****NOTE**

When the pedal height is lower than the standard value, loosen the bolt or clutch pedal position switch, and then turn the push rod to make the adjustment. After making the adjustment, tighten the bolt or clutch pedal position switch to reach the pedal stopper, and then lock with the lock nut.

2. Measure the clutch pedal stroke.

**Standard value: 160 mm (6.29 in.) or more**

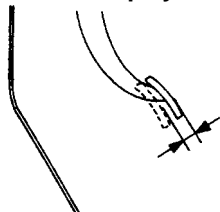
If the clutch pedal stroke deviates from the standard value, turn the push rod to adjust the stroke.

3. Return the clutch pedal gradually from its full-stroke position to measure amount of the return made by the pedal until, the interlock switch makes an operating sound.

**Standard value: 10–15 mm (.394–.591 in.)**

If the amount of pedal return deviates from the standard value, adjust it by loosening the lock nut and turning the interlock switch.

Clutch pedal clevis pin play and clutch pedal free play



Z08Y043

4. Measure the clutch pedal clevis pin play.

**Clutch pedal clevis pin play**

**Standard value: 1–3 mm (.04–.12 in.)**

If the clutch pedal clevis pin play is outside the standard value, adjust with the push rod.

**Caution**

**Do not push in the master cylinder push rod at this time.**

5. Measure pedal play. In the case of AWD vehicles, depress the pedal 2 or 3 times to eliminate booster negative pressure with the engine stopped and then push the pedal with a finger to measure the play.

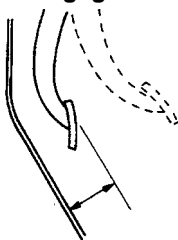
**Clutch pedal play**

**Standard value:**

**<FWD> 6–13 mm (.24–.51 in.)**

**<AWD> 12–20 mm (.49–.79 in.)**

Distance between the clutch pedal and the firewall when the clutch is disengaged



Z08N0010

6. Measure the clearance to the toe board (or pedal stopper) when the clutch disengages. In the case of AWD vehicles, measure with the engine running.

**Clearance to toe board when clutch disengages:**

**Standard value: 55 mm (2.2 in.) or more**

7. If the play and/or clearance is out of specification, bleed the hydraulic system or check the master cylinder, release cylinder or clutch proper.
8. Return the carpet to the original position.

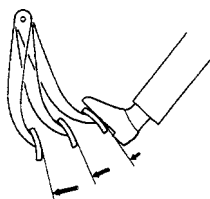
**CLUTCH BOOSTER OPERATING CHECK**

**<AWD>**

For simple checking of clutch booster operation, carry out the following tests.

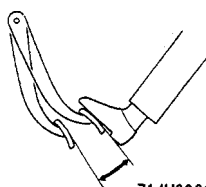
- (1) Run the engine for one or two minutes, and then stop it.
- (2) Step on the clutch pedal several times with normal pressure.  
If the pedal depressed fully the first time but gradually becomes higher when depressed succeeding times, the booster is operating properly.  
If the pedal height remains unchanged, the booster is faulty.
- (3) With the engine stopped, step on the clutch pedal several times with the same foot pressure to make sure that the pedal height will not change.  
Then step on the clutch pedal and start the engine.  
If the pedal moves downward slightly, the booster is in good condition. If there is no change, the booster is faulty.

Good

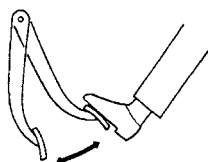


Z14U0061

No good

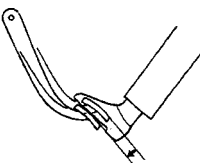
Z14U0060  
00002188

When engine is stopped



Z14U0059

When engine is started

Z14U0060  
00002189

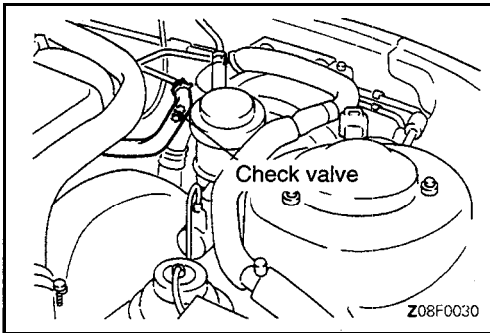
- (4) With the engine running, step on the clutch pedal and then stop the engine.

Hold the pedal depressed for 30 seconds. If the pedal height does not change, the booster is in good condition.

If the pedal rises, the booster is faulty.

If the above three tests are okay, the booster performance can be determined as good.

If one of the above three tests is not okay at last, the check valve, vacuum hose, or booster will be faulty.



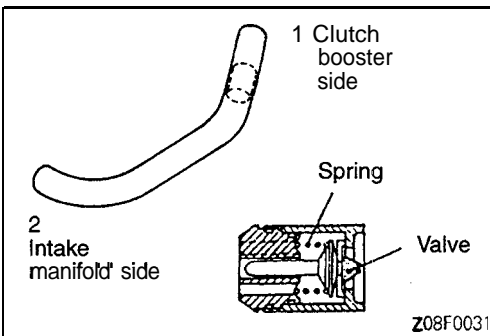
### CHECK VALVE OPERATION CHECK <AWD>

When checking the check valve, keep the check valve fit in the vacuum hose.

1. Remove the vacuum hose.

#### Caution

**The check valve is press-fit inside the vacuum hose and do not remove the check valve from the vacuum hose.**

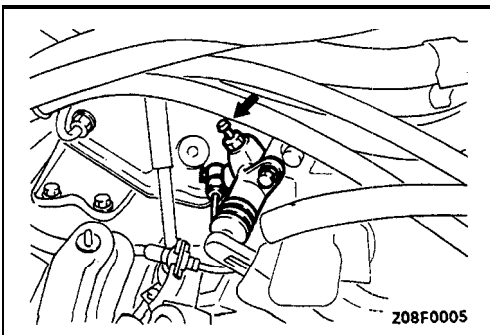


2. Check the operation of the check valve by using a vacuum pump.

Vacuum pump connection	Accept/reject criteria
Connection at the clutch booster side (1)	A negative pressure (vacuum) is created and held.
Connection at the intake manifold side (2)	A negative pressure (vacuum) is not created.

#### Caution

**If the check valve is defective, replace it as an assembly unit together with the vacuum hose.**



### BLEEDING

Whenever the clutch tube, the clutch hose, and/or the clutch master cylinder have been removed, or if the clutch pedal is spongy, bleed the system.

**Specified fluid: Conforming to DOT3 or DOT4**

#### Caution

**Use the specified fluid. Avoid using a mixture of the specified fluid and other fluid.**