

# PEDAL SYSTEM AND CONTROL CABLES

**4-5**

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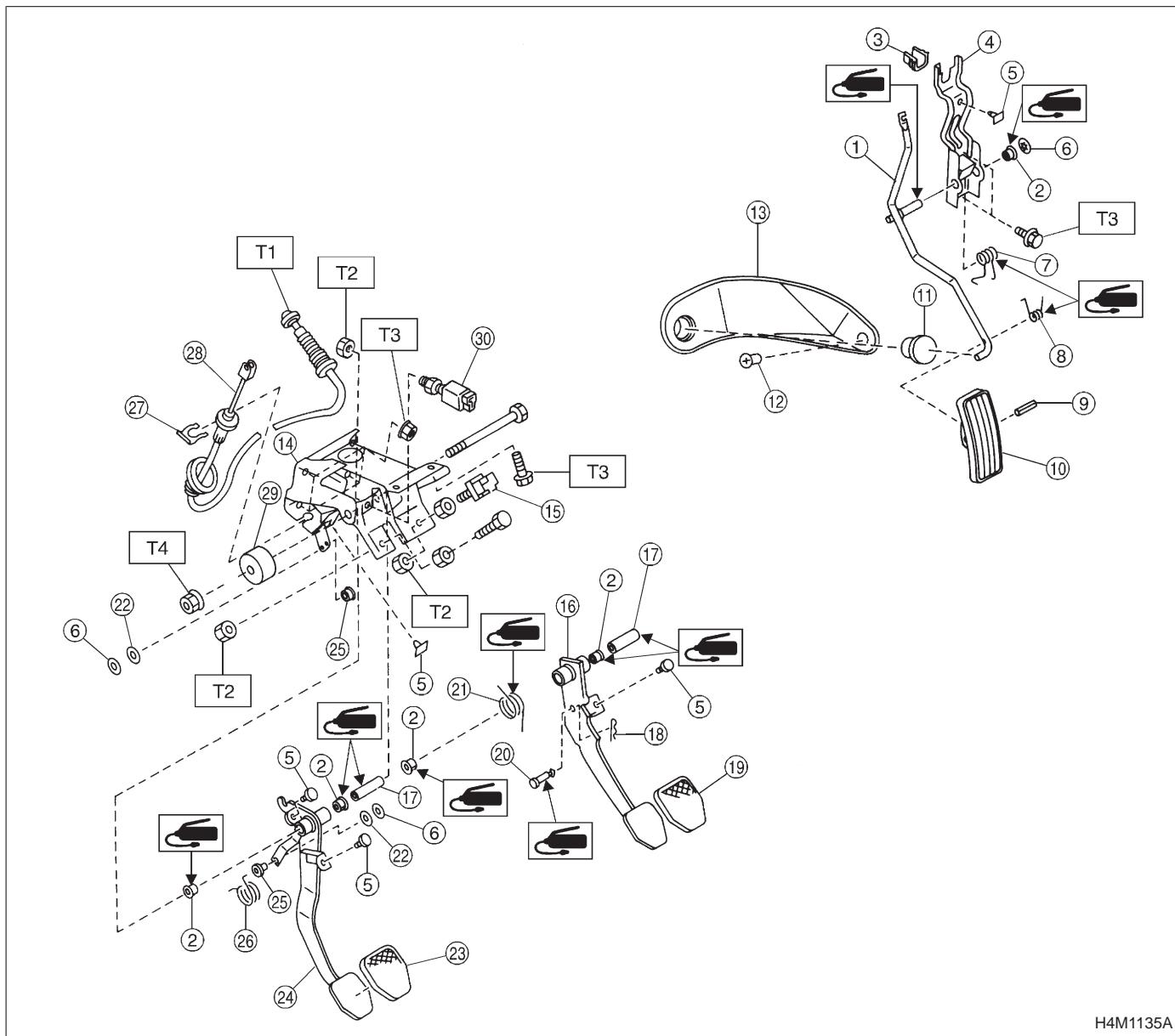
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## 1. Service Data

Brake pedal	Free play		1 — 3 mm (0.04 — 0.12 in) [Depress brake pedal pad with a force of less than 10 N (1 kg, 2 lb).]
Clutch pedal	Free play	At clutch pedal pad	10 — 20 mm (0.39 — 0.79 in)
	Full stroke	At clutch pedal pad	140 — 145 mm (5.51 — 5.71 in)
Accelerator pedal	Free play	At pedal pad	1 — 4 mm (0.04 — 0.16 in)
	Stroke	At pedal pad	46 — 50 mm (1.81 — 1.97 in)

# 1. Pedal

## A: MT MODEL



H4M1135A

- ① Accelerator pedal
- ② Bushing
- ③ Holder
- ④ Accelerator bracket
- ⑤ Stopper
- ⑥ Clip
- ⑦ Accelerator spring
- ⑧ Accelerator pedal spring
- ⑨ Spring pin
- ⑩ Accelerator pedal pad
- ⑪ Accelerator stopper
- ⑫ Clip

- ⑬ Accelerator plate
- ⑭ Pedal bracket
- ⑮ Stop light switch
- ⑯ Brake pedal
- ⑰ Spacer
- ⑱ Snap pin
- ⑲ Brake pedal pad
- ⑳ Clevis pin
- ㉑ Brake pedal spring
- ㉒ Washer
- ㉓ Clutch pedal pad
- ㉔ Clutch pedal

- ㉕ Bushing assist
- ㉖ Spring assist
- ㉗ Clutch cable clamp
- ㉘ Clutch cable
- ㉙ Mass damper
- ㉚ Clutch switch (Starter interlock)

**Tightening torque: N·m (kg·m, ft·lb)**

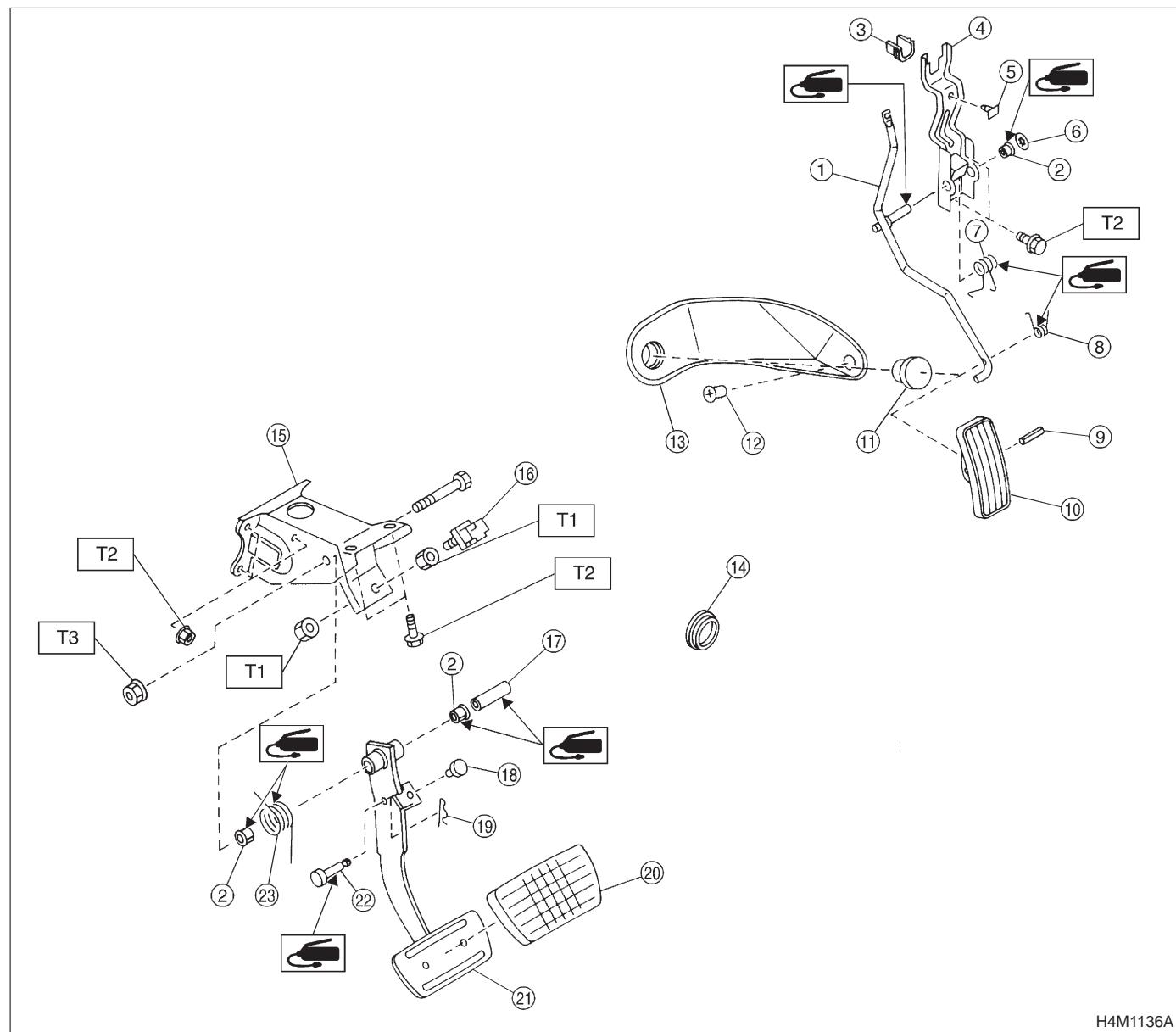
T1:  $5.9 \pm 1.5$  (0.60  $\pm$  0.15, 4.3  $\pm$  1.1)

T2:  $8 \pm 2$  (0.8  $\pm$  0.2, 5.8  $\pm$  1.4)

T3:  $18 \pm 5$  (1.8  $\pm$  0.5, 13.0  $\pm$  3.6)

T4:  $29 \pm 7$  (3.0  $\pm$  0.7, 21.7  $\pm$  5.1)

## B: AT MODEL



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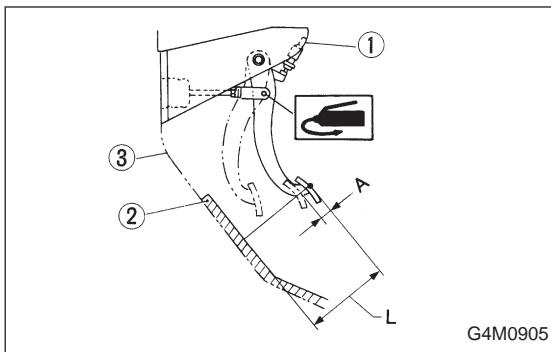
- ① Accelerator pedal
- ② Bushing
- ③ Holder
- ④ Accelerator bracket
- ⑤ Stopper
- ⑥ Clip
- ⑦ Accelerator spring
- ⑧ Accelerator pedal spring
- ⑨ Spring pin
- ⑩ Accelerator pedal

- ⑪ Accelerator stopper
- ⑫ Clip
- ⑬ Accelerator plate
- ⑭ Plug
- ⑮ Pedal bracket
- ⑯ Stop light switch
- ⑰ Spacer
- ⑯ Stopper
- ⑯ Snap pin
- ⑳ Brake pedal pad

- ㉑ Brake pedal
- ㉒ Clevis pin
- ㉓ Brake pedal spring

**Tightening torque: N·m (kg·m, ft·lb)**

T1:  $8\pm2$  ( $0.8\pm0.2$ ,  $5.8\pm1.4$ )  
 T2:  $18\pm5$  ( $1.8\pm0.5$ ,  $13.0\pm3.6$ )  
 T3:  $29\pm7$  ( $3.0\pm0.7$ ,  $21.7\pm5.1$ )



## 1. Pedal

### A: ON-CAR SERVICE

#### 1. BRAKE PEDAL

1) Check position of pedal pad.

① Stop light switch

② Mat

③ Toe board

**Pedal height: L**

**158 mm (6.22 in)**

2) If it is not in specified value, adjust it by adjusting brake booster operating rod length.

3) Check free play by operating pedal by hand.

If it is not in specified value, adjust it by adjusting position of stop light switch.

#### CAUTION:

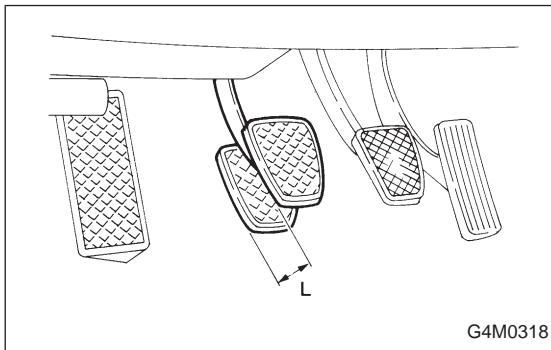
Be careful not to rotate stop light switch.

**Brake pedal free play: A**

**1 — 3 mm (0.04 — 0.12 in)**

**[Depress brake pedal pad with a force of less than 10 N (1 kg, 2 lb).]**

4) Apply grease to operating rod connecting pin to prevent it from wearing.

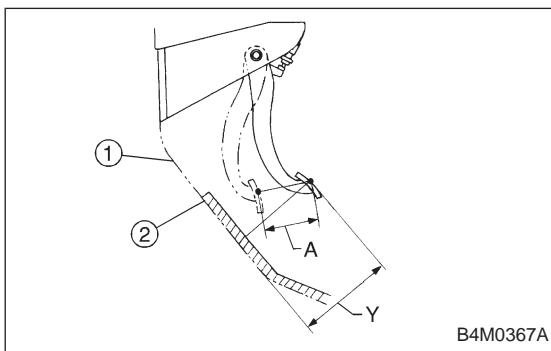


## 2. CLUTCH PEDAL

1) Check clutch pedal free play by operating pedal by hand.

**Free play: L (At clutch pedal pad)**

**10 — 20 mm (0.39 — 0.79 in)**



**Pedal height: Y**

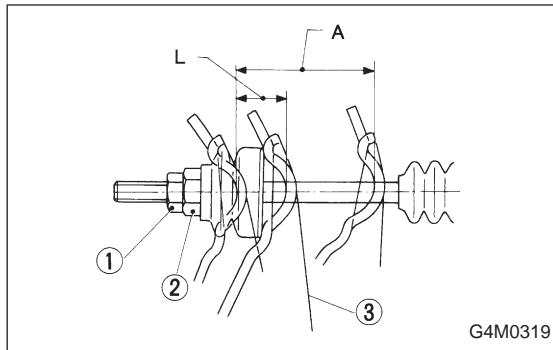
**158 mm (6.22 in)**

**Pedal stroke: A**

**140 — 145 mm (5.51 — 5.71 in)**

① Toe board

② Mat



2) If it is not in specified value, adjust it by turning adjusting nut on engine side end of clutch cable.

**Free play: L**

$2 - 4 \text{ mm (0.08 - 0.16 in)}$

**Full stroke: A**

$25.5 - 27 \text{ mm (1.004 - 1.063 in)}$

3) Apply grease to connecting portion of clutch pedal and clutch cable.

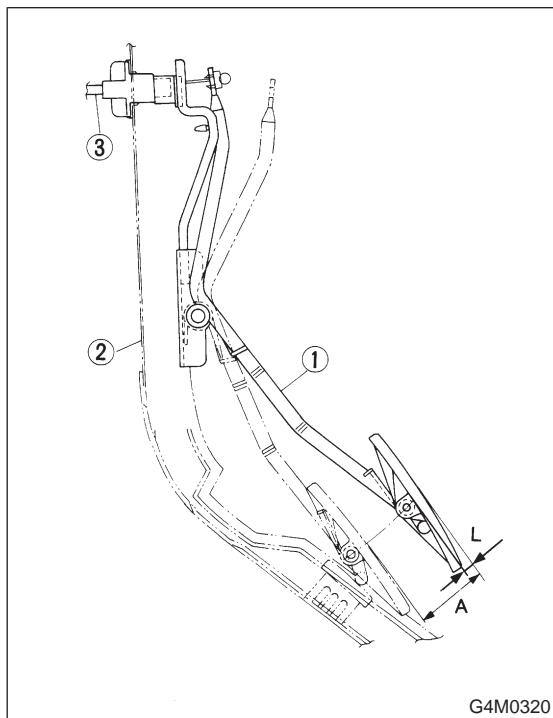
① Lock nut

② Adjusting nut

③ Release fork

**Lock nut tightening torque:**

$5.9 \pm 1.5 \text{ N}\cdot\text{m (0.60} \pm 0.15 \text{ kg}\cdot\text{m, 4.3} \pm 1.1 \text{ ft-lb)}$



### 3. ACCELERATOR PEDAL

Check pedal stroke and free play by operating accelerator pedal by hand.

If it is not within specified value, adjust it by turning nut connecting accelerator cable to throttle body.

**Free play at pedal pad: L**

$1 - 4 \text{ mm (0.04 - 0.16 in)}$

**Stroke at pedal pad: A**

$46 - 50 \text{ mm (1.81 - 1.97 in)}$

① Accelerator pedal

② Toe board

③ Accelerator cable

**Accelerator cable lock nut tightening torque:**

$14 \pm 4 \text{ N}\cdot\text{m (1.4} \pm 0.4 \text{ kg}\cdot\text{m, 10.1} \pm 2.9 \text{ ft-lb)}$

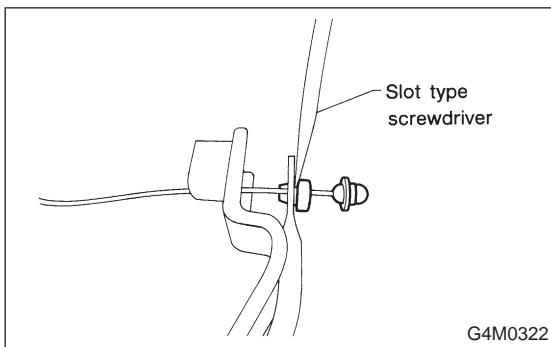
**B: REMOVAL****1. ACCELERATOR PEDAL**

- 1) Disconnect ground cable from battery.
- 2) Disconnect accelerator cable from throttle body.

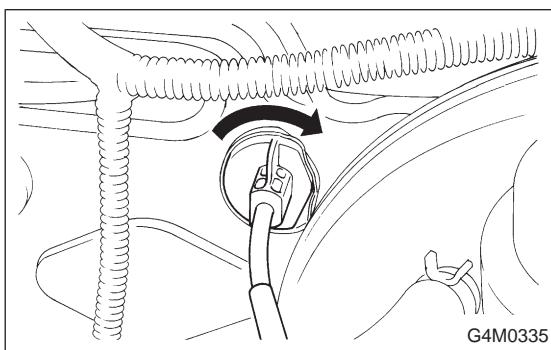
**CAUTION:**

**Be careful not to kink accelerator cable.**

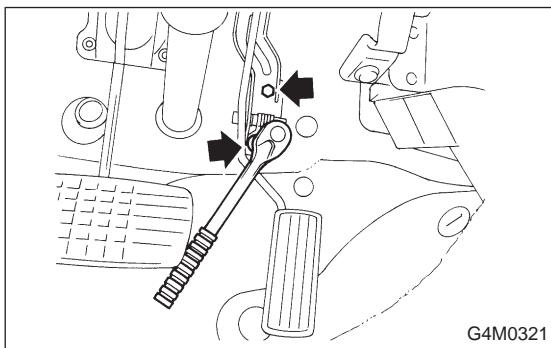
- 3) Remove instrument panel lower cover from instrument panel, and connector.



- 4) Disconnect accelerator cable from accelerator pedal lever.



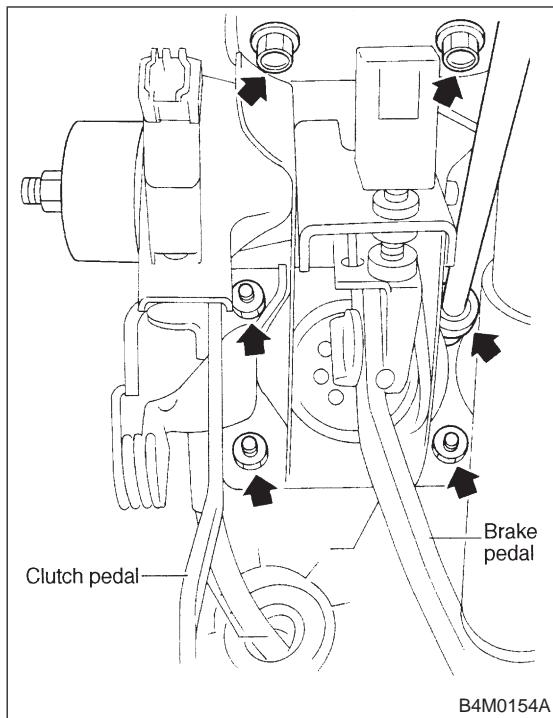
- 5) Working inside engine compartment, remove casing cap out of the toe board by turning it clockwise.
- 6) Pull out the cable from the toe board hole.



- 7) Remove accelerator pedal connecting bolt from accelerator pedal bracket.

**2. BRAKE AND CLUTCH PEDAL (MT model)**

- 1) Disconnect ground cable from battery.
- 2) Disconnect clutch cable from release lever.
- 3) Remove instrument panel lower cover from instrument panel.
- 4) Disconnect the following parts from pedal bracket.
  - (1) Operating rod of brake booster
  - (2) Electrical connectors (for stop light switch, etc.)
- 5) Remove clevis pin which secures pedal to push rod.

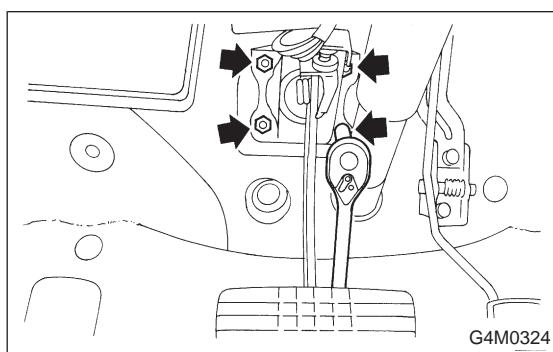


6) Remove bolts and nuts which secure brake and clutch pedals, and remove pedal bracket and clutch cable as a unit.

**CAUTION:**

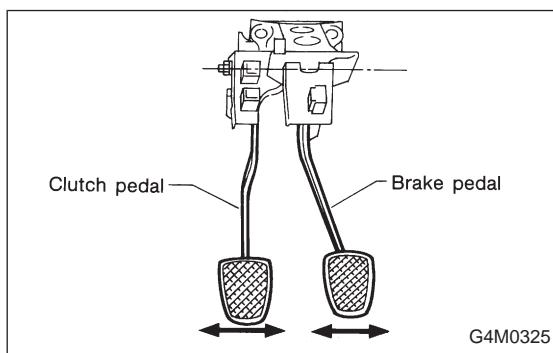
Before removing clutch cable from toe board, remove grommet. Slowly remove clutch cable, being careful not to scratch it.

7) Depress clutch pedal, disconnect clutch cable from clutch pedal.



**3. BRAKE PEDAL (AT model)**

- 1) Disconnect ground cable from battery.
- 2) Remove instrument panel lower cover from instrument panel.
- 3) Remove clevis pin which secures brake pedal to brake booster operating rod. Also disconnect stop lamp switch connector.
- 4) Remove two bolts and four nuts which secure brake pedal to pedal.



**C: INSPECTION**

**1. BRAKE AND CLUTCH PEDALS**

Move brake and clutch pedal pads in the lateral direction with a force of approximately 10 N (1 kg, 2 lb) to ensure pedal deflection is in specified range.

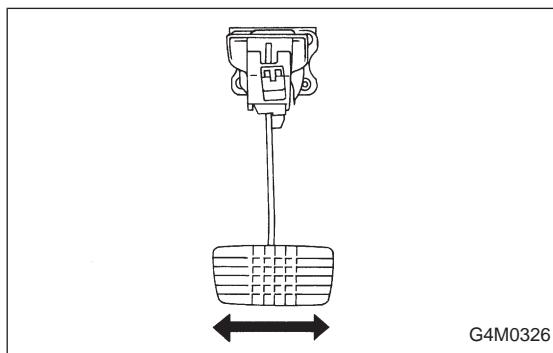
**Deflection of brake and clutch pedal:**

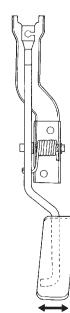
**Service limit**

**5.0 mm (0.197 in) or less**

**CAUTION:**

If excessive deflection is noted, replace bushings with new ones.





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## 2. ACCELERATOR PEDAL

Lightly move pedal pad in lateral the direction to ensure pedal deflection is in specified range.

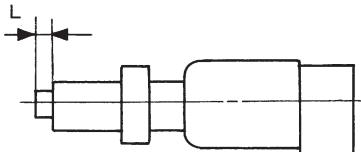
### Deflection of accelerator pedal:

#### Service limit

$5.0 \text{ mm (0.197 in) or less}$

### CAUTION:

If excessive deflection is noted, replace bushing and clip with new ones.



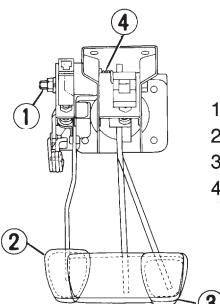
G4M0327

## 3. STOP LIGHT SWITCH

If stop light switch does not operate properly (or if it does not stop at the specified position), replace with a new one.

### Specified position: L

$2^{+1.5}_{-0} \text{ mm (0.079}^{+0.059}_{-0} \text{ in)}$



1 Bolt  
2 Clutch pedal  
3 Brake pedal  
4 Brake pedal return spring

G4M0328

## D: ASSEMBLY

### 1. BRAKE AND CLUTCH PEDAL

- 1) Attach stop light switch, etc. to pedal bracket temporarily.
- 2) Clean inside of bores of clutch pedal and brake pedal, apply grease, and set bushings into bores.
- 3) Align bores of pedal bracket, clutch pedal and brake pedal, attach brake pedal return spring and clutch pedal effort reducing spring (vehicle with Hill holder), and then install pedal bolt.

### Tightening torque:

$T2: 29 \pm 7 \text{ N}\cdot\text{m (3.0} \pm 0.7 \text{ kg}\cdot\text{m, 21.7} \pm 5.1 \text{ ft}\cdot\text{lb)}$

### NOTE:

Clean up inside of bushings and apply grease before installing spacer.

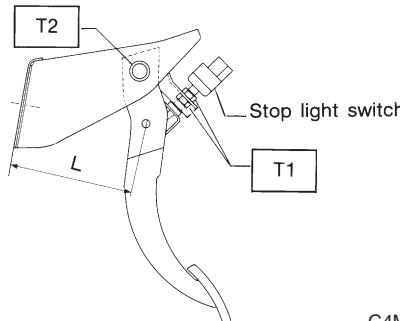
- 4) Set brake pedal position by adjusting position of stop light switch.

### Pedal position: L

$125.9 \text{ mm (4.96 in)}$

### Tightening torque:

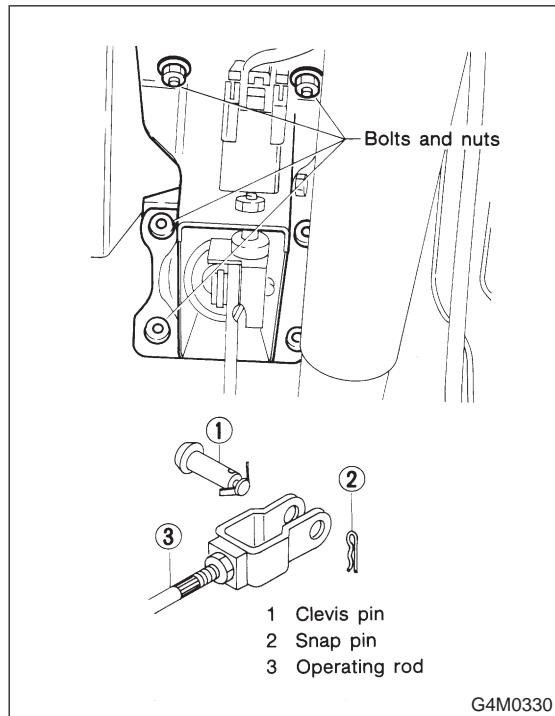
$T1: 8 \pm 2 \text{ N}\cdot\text{m (0.8} \pm 0.2 \text{ kg}\cdot\text{m, 5.8} \pm 1.4 \text{ ft}\cdot\text{lb)}$



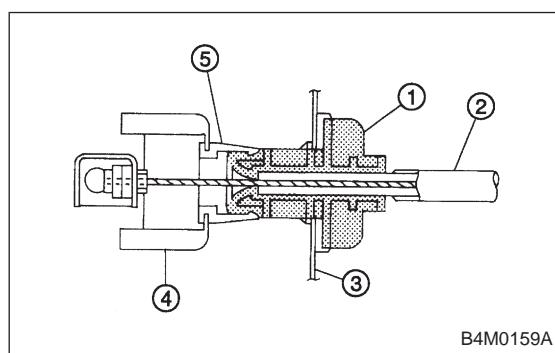
G4M0329

## 2. ACCELERATOR PEDAL

Clean and apply grease to spacer and inside bore of accelerator pedal. Install accelerator pedal onto pedal bracket.



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B4M0159A

- Make sure that holder and casing cap are securely connected.

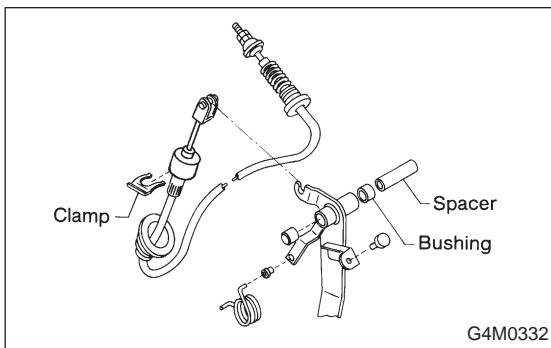
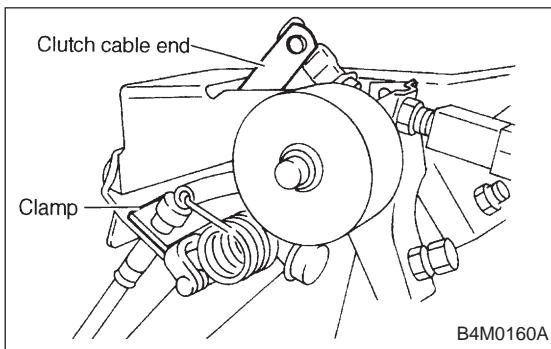
- ① Casing cap
- ② Accelerator cable
- ③ Toe board
- ④ Accelerator pedal bracket
- ⑤ Holder

- 2) Adjustment after pedal installation <Ref. to 4-5 [W1A0].>

## 2. Clutch Cable

### A: REMOVAL

- 1) Disconnect clutch cable from release lever.



- 2) Remove clutch cable clamp from pedal bracket.
- 3) Disconnect clutch cable from pedal bracket and pedal end.
- 4) Remove clutch cable from body.

#### CAUTION:

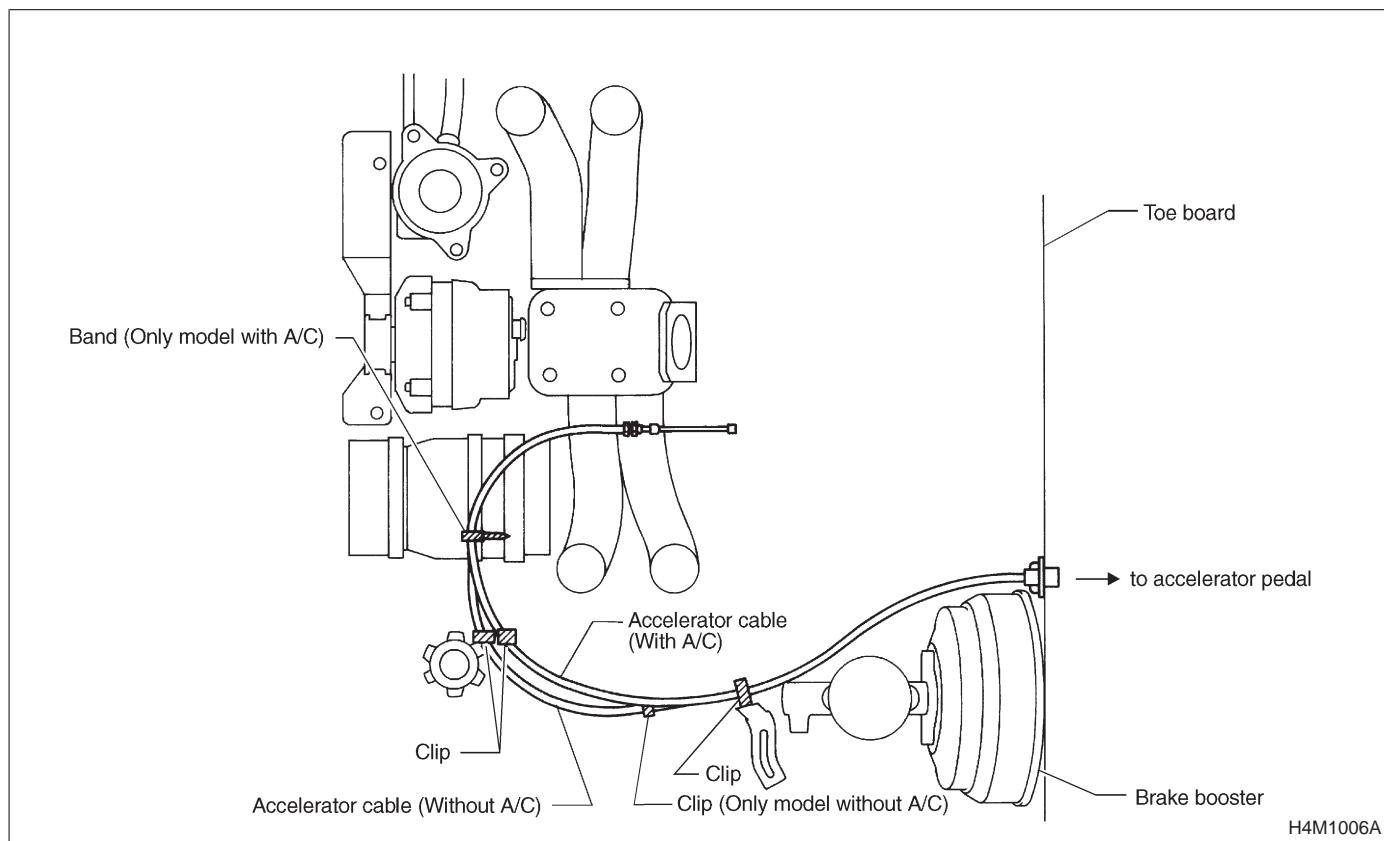
**Before removing clutch cable from toe board, remove grommet. Slowly remove clutch cable, being careful not to scratch it.**

### B: INSTALLATION

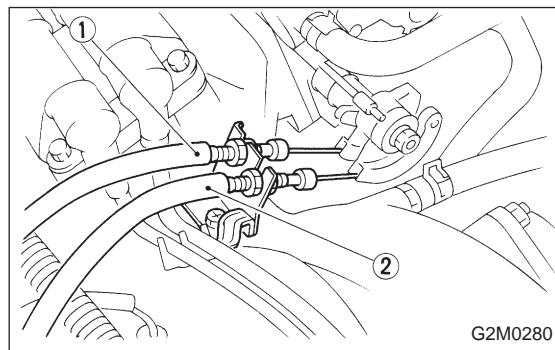
- 1) Clean clutch pedal fitting hole, and apply grease. Connect clutch cable to clutch pedal.
- 2) Fit clutch pedal to pedal bolt, and connect clutch cable to bracket with clamp.
- 3) Connect clutch cable end to pedal end.
- 4) Connect clutch cable from release lever.
- 5) Install grommet to toe board.
- 6) Adjustment after cable installation <Ref. to 4-5 [W1A2].>

### 3. Accelerator Cable

#### A: REMOVAL



1) Disconnect accelerator cable from connector inside engine compartment first.

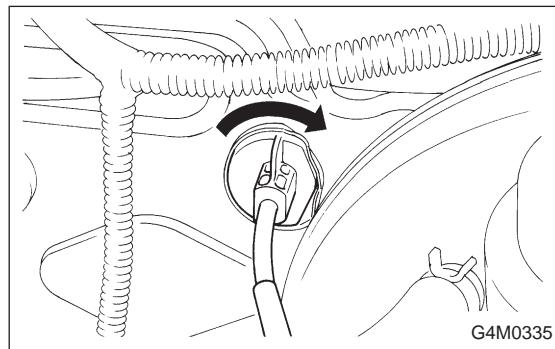


2) Remove lock nut from accelerator cable bracket.  
 3) Separate accelerator cable ① from bracket, then unlock inner cable.  
 4) Remove cable end from throttle cam using your fingertips.

**CAUTION:**

**Be careful not to bend inner cable.**

5) Disconnect cable end from accelerator cable bracket inside driver compartment.  
 6) Remove clip inside engine compartment.



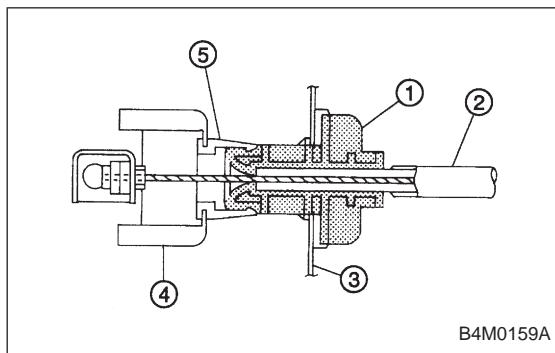
7) Working inside engine compartment, remove cable connection by turning toe board clockwise.  
 8) Pull out the cable from the toe board hole.

**B: INSTALLATION**

1) Installation is in the reverse order of removal procedures.

**CAUTION:**

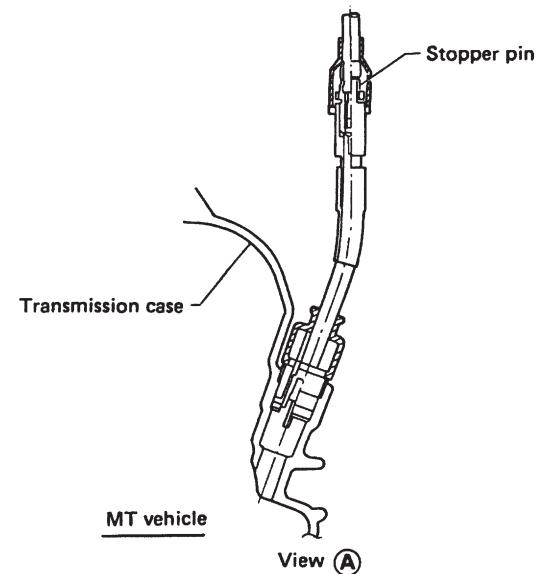
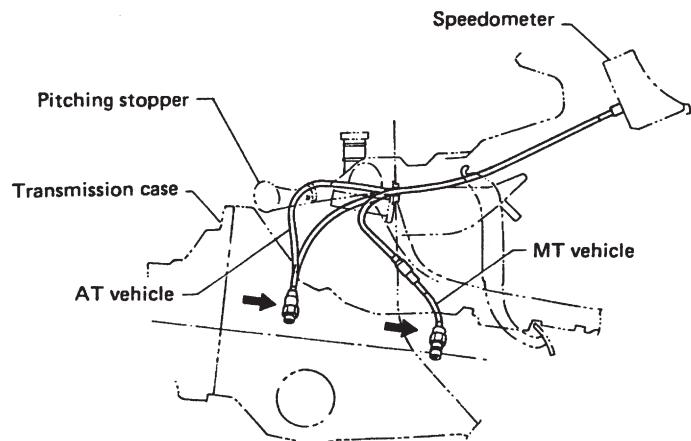
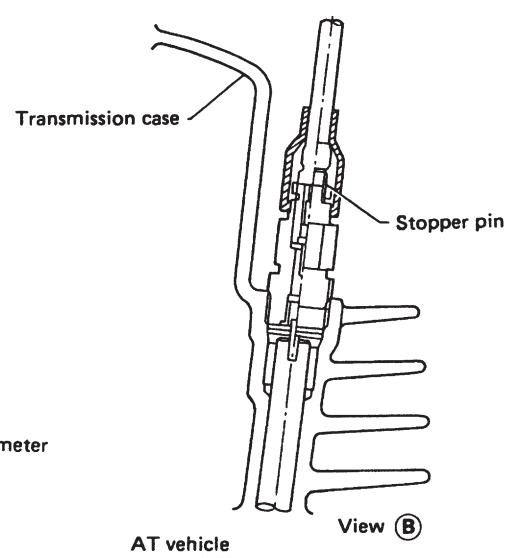
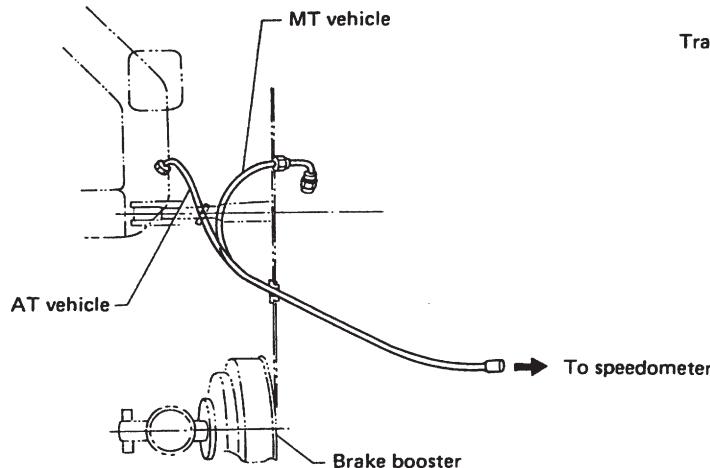
- Be careful not to kink accelerator cable.
- Make sure that holder and casing cap are securely connected.



- ① Casing cap
- ② Accelerator cable
- ③ Toe board
- ④ Accelerator pedal bracket
- ⑤ Holder

2) Adjustment after cable installation <Ref. to 4-4 [W1A3].>

## 4. Speedometer Cable



G4M0336

**A: REMOVAL**

- 1) Remove speedometer cable, starting with its midpoint connection inside engine compartment.
- 2) While holding up boot located at speedometer cable connection, slightly expand clip. Extract speedometer cable by pulling it upward 2 to 3 mm (0.08 to 0.12 in) on speedometer side. Then, release clip and remove speedometer cable.
- 3) After disconnecting cable from speedometer, pull it out of toe board.
- 4) Remove screw which secures speedometer cable to transmission side.

**B: INSTALLATION**

- 1) After manually screwing speedometer cable on transmission side, tighten it 45 to 90° using a wrench.
- 2) Securely install boot onto midpoint connection of speedometer cable to prevent entry of water.

## 1. Pedal System and Control Cables

Trouble	Corrective action
Excessively worn brake pedal pad	Replace.
Failure of clutch and/or accelerator pedals to operate	Connect cables correctly.
Speedometer does not work.	Connect speedometer cable correctly.
Stop light switch does not light up.	Adjust position of stop light switch.
Stop light switch is not smooth and/or stroke is not correct.	Replace.
Insufficient pedal play	Adjust pedal play.
Clutch and/or brake pedal free play insufficient	Adjust pedal free play.
Maladjustment of brake pedal or booster push rod	Inspect and adjust.
Excessively worn and damaged pedal shaft and/or bushing	Replace bushing and/or shaft with new one.