

## 01-20 CRUISE CONTROL SYSTEM

### CRUISE CONTROL SYSTEM LOCATION

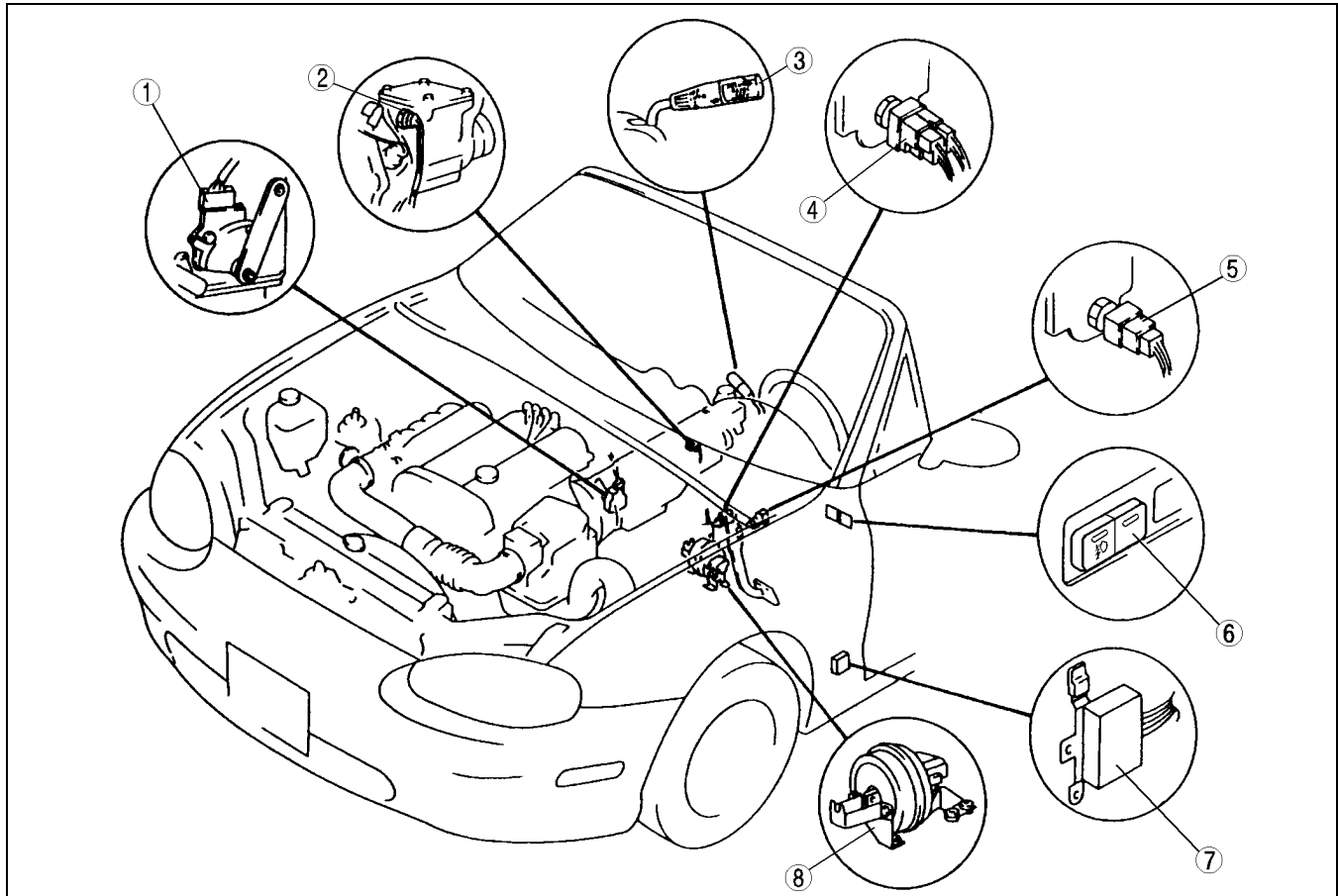
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### CRUISE CONTROL SYSTEM LOCATION INDEX

A5U012001011W01



A5U0120W101

1	Transmission range (TR) switch (AT) (See 05-13-15 TRANSMISSION RANGE (TR) SWITCH REMOVAL/INSTALLATION) (See 05-13-14 TRANSMISSION RANGE (TR) SWITCH INSPECTION) (See 05-13-16 TRANSMISSION RANGE (TR) SWITCH ADJUSTMENT)
2	Neutral switch (MT) (See 01-40-34 NEUTRAL SWITCH INSPECTION)
3	Cruise control switch (See 01-20-9 CRUISE CONTROL SWITCH REMOVAL/INSTALLATION) (See 01-20-10 CRUISE CONTROL SWITCH INSPECTION)
4	Brake switch (See 04-11-5 BRAKE SWITCH INSPECTION)

5	Clutch switch (MT) (See 01-40-33 CLUTCH SWITCH INSPECTION)
6	Cruise control main switch (See 01-20-9 CRUISE CONTROL MAIN SWITCH REMOVAL/INSTALLATION) (See 01-20-9 CRUISE CONTROL MAIN SWITCH INSPECTION)
7	Cruise control module (See 01-20-2 CRUISE CONTROL MODULE REMOVAL/INSTALLATION) (See 01-20-2 CRUISE CONTROL MODULE INSPECTION)
8	Cruise actuator (See 01-20-5 CRUISE ACTUATOR REMOVAL/INSTALLATION) (See 01-20-5 CRUISE ACTUATOR INSPECTION)

# CRUISE CONTROL SYSTEM

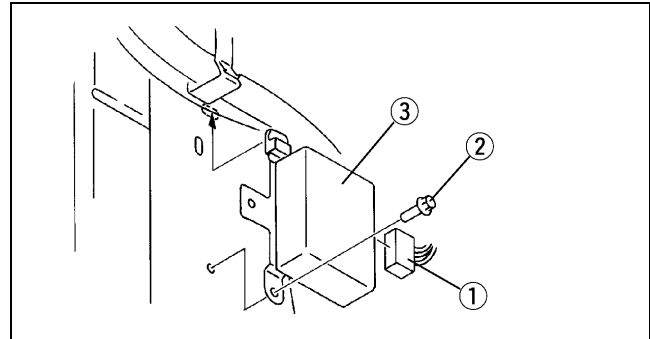
## CRUISE CONTROL MODULE REMOVAL/INSTALLATION

A5U012066320W01

1. Disconnect the negative battery cable.
2. Remove the lower panel.
3. Remove the key interlock unit. (See 05-14-3 KEY INTERLOCK UNIT REMOVAL/INSTALLATION.)
4. Remove in the order indicated in the table.

1	Connector
2	Bolt
3	Cruise control module

5. Install in the reverse order of removal.



X5U120WA0

## CRUISE CONTROL MODULE INSPECTION

A5U012066320W02

1. Remove the lower panel.
2. Remove the key interlock unit. (See 05-14-3 KEY INTERLOCK UNIT REMOVAL/INSTALLATION.)
3. Remove the cruise control module with the connector connected.
4. Measure the voltage at the cruise control module terminals as indicated below.
5. Disconnect the cruise control module connector before inspecting for continuity at terminal T.
  - If not as specified, inspect the parts listed under "Action."
  - If the parts and wiring harnesses are okay but the system still does not work properly, replace the cruise control module.

### Terminal Voltage Table (Reference)

*	*	O	M	*	I	G	E	C	A
T	*	P	N	*	J	H	*	D	B

HARNESS SIDE CONNECTOR (VIEW FROM HARNESS SIDE)

Y5U120WA2

Terminal	Signal	Connected to	Test condition		Voltage (V)/Continuity	Action
A	Cruise actuator control	Cruise actuator (Vent 1)	Ignition switch at ON position	Cruise control main switch on	B+	<ul style="list-style-type: none"> <li>Inspect brake switch (See 04-11-5 BRAKE SWITCH INSPECTION)</li> <li>Inspect cruise actuator (See 01-20-5 CRUISE ACTUATOR INSPECTION)</li> <li>Inspect related harness</li> </ul>
				Other	0	

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Terminal	Signal	Connected to	Test condition		Voltage (V)/ Continuity	Action
B	Cruise actuator control	Cruise actuator (Vacuum)	Ignition switch at ON position	Cruise control main switch on	B+	<ul style="list-style-type: none"> <li>Inspect brake switch (See 04-11-5 BRAKE SWITCH INSPECTION)</li> <li>Inspect cruise actuator (See 01-20-5 CRUISE ACTUATOR INSPECTION)</li> <li>Inspect related harness</li> </ul>
				Other	0	
C	Cruise actuator control	Cruise actuator (Vent 2)	Ignition switch at ON position	Cruise control main switch on	B+	<ul style="list-style-type: none"> <li>Inspect brake switch (See 04-11-5 BRAKE SWITCH INSPECTION)</li> <li>Inspect cruise actuator (See 01-20-5 CRUISE ACTUATOR INSPECTION)</li> <li>Inspect related harness</li> </ul>
				Other	0	
D	Cruise set indicator light output	Cruise set indicator light	Ignition switch at ON position		B+	<ul style="list-style-type: none"> <li>Inspect METER 15 A fuse</li> <li>Inspect instrument cluster (See 09-22-3 INSTRUMENT CLUSTER INSPECTION)</li> <li>Inspect related harness</li> </ul>
			Ignition switch at LOCK or ACC position		0	
E	Cruise control main switch on/off	Cruise control main switch	Ignition switch at ON position	Cruise control main switch on	B+	<ul style="list-style-type: none"> <li>Inspect METER 15 A fuse</li> <li>Inspect cruise control main switch (See 01-20-9 CRUISE CONTROL MAIN SWITCH INSPECTION)</li> <li>Inspect related harness</li> </ul>
				Other	0	
F	—	—	—		—	—
G	O/D off	TCM	Ignition switch at ON position		B+	<ul style="list-style-type: none"> <li>Inspect TCM (See 05-13-20 TRANSMISSION CONTROL MODULE (TCM) INSPECTION)</li> <li>Inspect related harness</li> </ul>
			Ignition switch at LOCK or ACC position		0	
H	Cruise actuator power supply	Brake switch	Ignition switch at ON position	Cruise control main switch on	B+	—
				Other	0	
I	Test	DLC	—		—	—

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Terminal	Signal		Connected to	Test condition		Voltage (V)/ Continuity	Action
J	AT	Selector lever position	TR switch	Ignition switch at ON position	Selector lever at N or P range	0	<ul style="list-style-type: none"><li>Inspect TR switch (See 05–13–16 TRANSMISSION RANGE (TR) SWITCH ADJUSTMENT)</li><li>Inspect related harness</li></ul>
					Other	B+	
	MT	Clutch switch on/off	Clutch switch	Ignition switch at ON position	Depress clutch pedal	0	<ul style="list-style-type: none"><li>Inspect clutch switch (See 01–40–33 CLUTCH SWITCH INSPECTION)</li><li>Inspect related harness</li></ul>
					Other	B+	
K	—		—	—		—	—
L	—		—	—		—	—
M	Brake switch on/off		Brake switch	Depress brake pedal		B+	<ul style="list-style-type: none"><li>Inspect brake switch (See 04–11–5 BRAKE SWITCH INSPECTION)</li><li>Inspect related harness</li></ul>
				Release brake pedal		0	
N	Cruise control switch position		Cruise control switch	Ignition switch at ON position and cruise control main switch on	SET/COAST switch hold on	Approx. 1.5	<ul style="list-style-type: none"><li>Inspect cruise control switch (See 01–20–10 CRUISE CONTROL SWITCH INSPECTION)</li><li>Inspect related harness</li></ul>
					RESUME/ACCEL switch hold on	Approx. 3.1	
					Other	Approx. 5	
O	Brake switch on/off		Brake switch	Ignition switch at ON position and cruise control main switch on	Depress brake pedal	0	<ul style="list-style-type: none"><li>Inspect brake switch (See 04–11–5 BRAKE SWITCH INSPECTION)</li><li>Inspect related harness</li></ul>
					Release brake pedal	B+	
P	Vehicle speed		Vehicle speedometer sensor	Ignition switch at ON position and cruise control main switch on	Rear tires rotating	Alternates between 0 and 5	<ul style="list-style-type: none"><li>Inspect METER 15 A fuse</li><li>Inspect instrument cluster (See 09–22–3 INSTRUMENT CLUSTER INSPECTION)</li><li>Inspect related harness</li></ul>
					Other	0 or 5	
Q	—		—	—		—	—
R	—		—	—		—	—
S	—		—	—		—	—
T	Cruise control module ground		GND	Under any condition: inspect for continuity to ground		Yes	<ul style="list-style-type: none"><li>Inspect GND</li></ul>

# CRUISE CONTROL SYSTEM

## CRUISE ACTUATOR REMOVAL/INSTALLATION

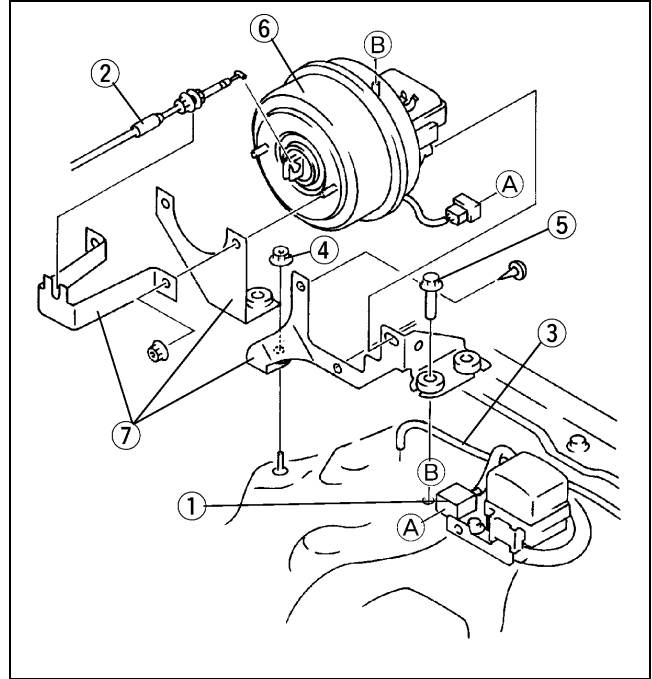
A5U012066310W01

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1. Disconnect the negative battery cable.
2. Remove in the order indicated in the table.

1	Connector
2	Actuator cable
3	Vacuum hose
4	Nut
5	Bolt
6	Cruise actuator
7	Bracket

3. Install in the reverse order of removal.

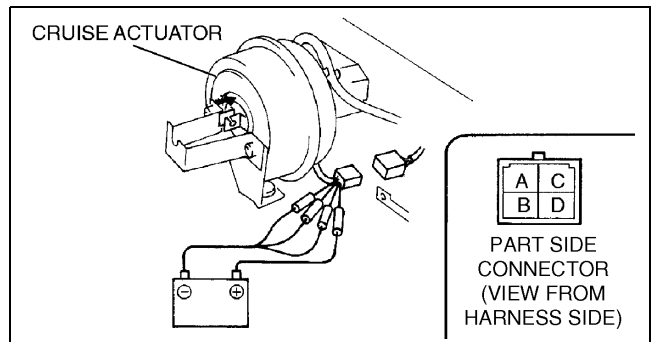


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## CRUISE ACTUATOR INSPECTION

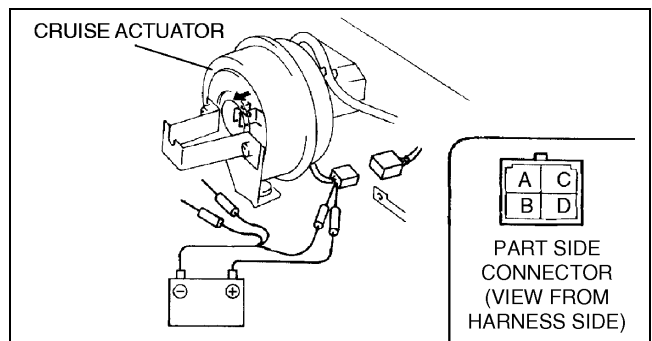
A5U012066310W02

1. Disconnect the cruise actuator connector.
2. Disconnect the actuator cable from the cruise actuator.
3. Start the engine and run it idle.
4. Confirm that the diaphragm is drawn into the cruise actuator when battery positive voltage is connected to terminal C and terminals A, B and D are connected to the ground.



Y5U120WA3

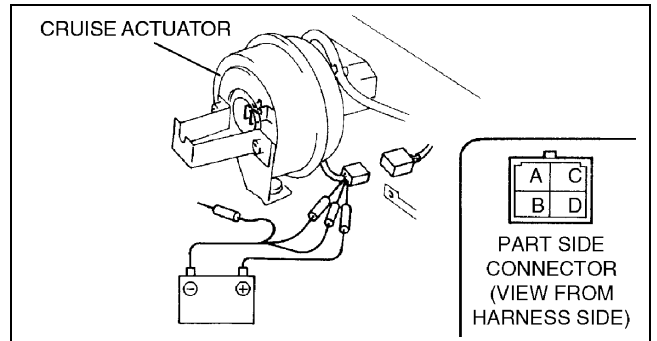
5. With the diaphragm being drawn into the cruise actuator, confirm that the diaphragm returns to its original position when terminals B and D are disconnected from the ground.



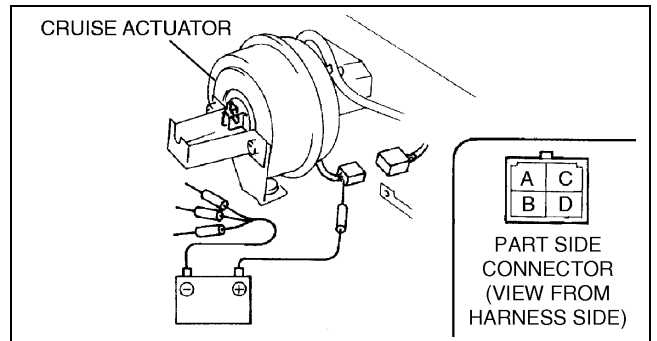
Y5U120WA4

## CRUISE CONTROL SYSTEM

6. With the diaphragm returning to its original position, confirm that the diaphragm stops moving when terminal D is reconnected to the ground.

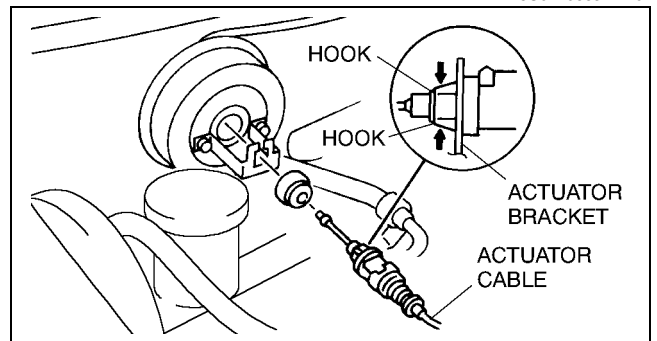


7. With the movement of the diaphragm stopped, confirm that the diaphragm returns completely to its original position when all terminals connected to the ground are disconnected.
  - If not as specified, replace the cruise actuator.

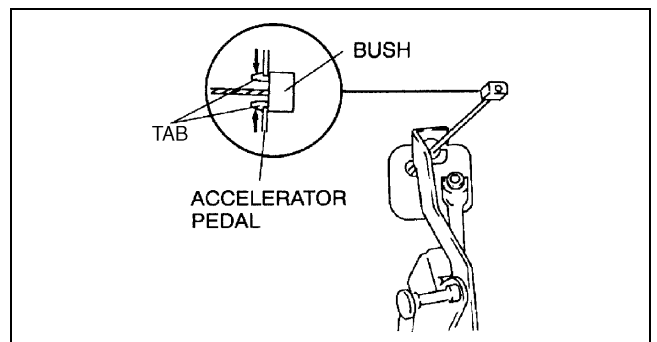


### ACTUATOR CABLE REMOVAL

1. Loosen the nut, and remove the actuator cable.

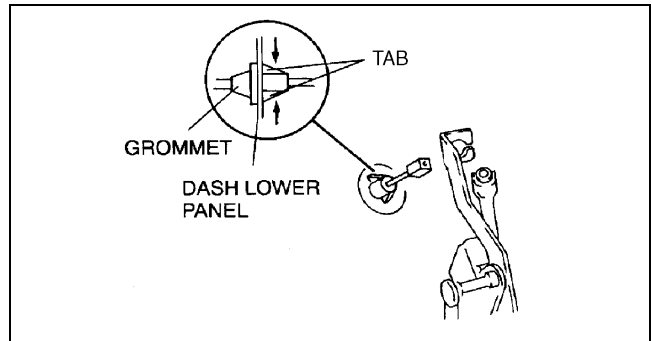


2. Press the tabs of the bush, and remove it from the accelerator pedal.



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3. Press the tabs of the grommet, and remove it from the dash lower panel.
4. Push the actuator cable through the dash lower panel to remove it.

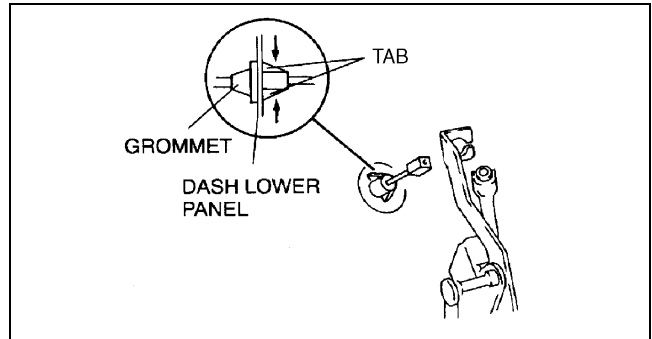


Y5U120WA9

### ACTUATOR CABLE INSTALLATION

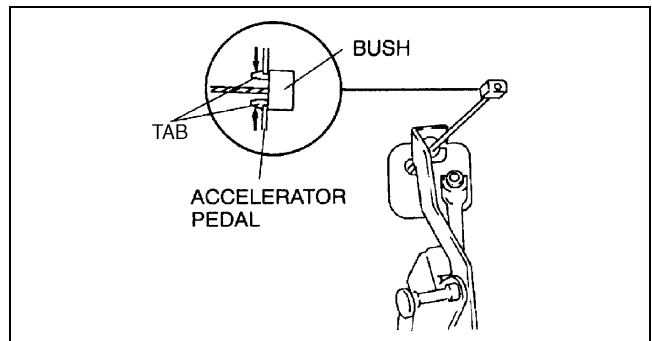
1. Install the grommet to the dash lower panel.

A5U012066311W02



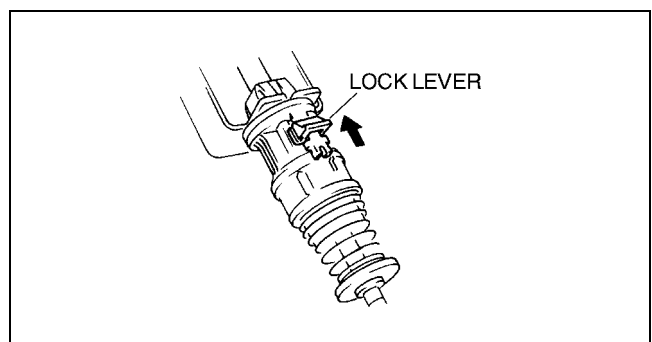
Y5U120WA9

2. Install the actuator cable to the accelerator pedal.



Y5U120WA8

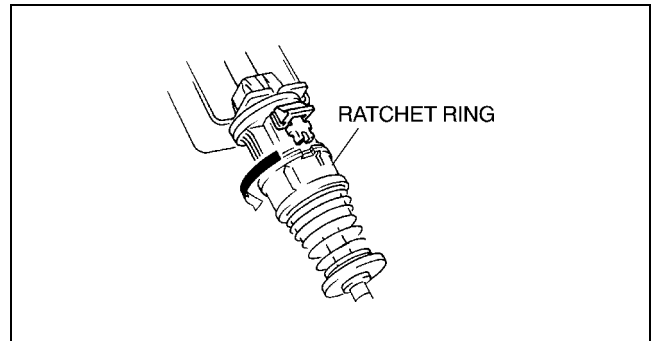
3. Slide the lock lever in the direction shown by the arrow to unlock the adjuster.



YMU120WAA

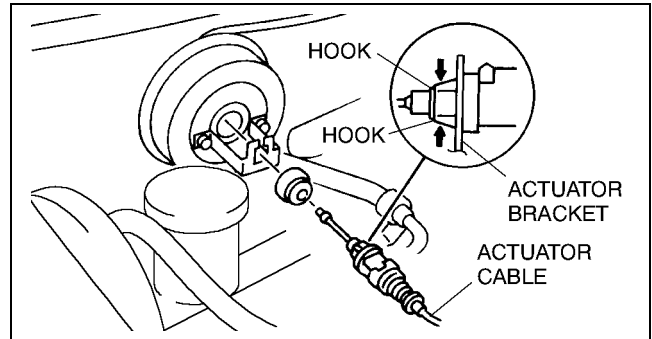
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4. Turn the ratchet ring to release lock in the direction shown by the arrow.



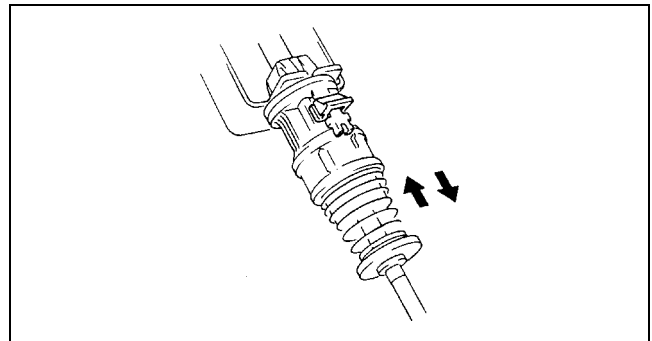
YMU120WAB

5. Insert the grommet into the actuator bracket.



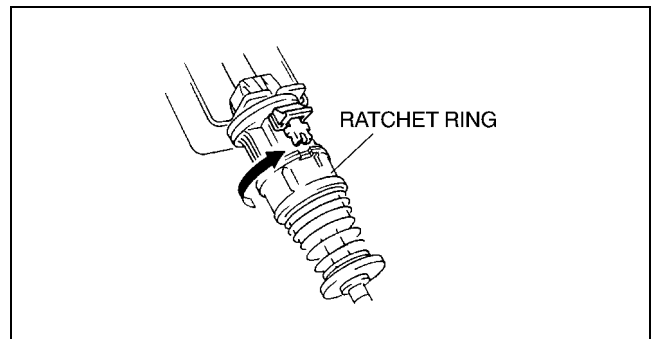
Z5U120WAO

6. To adjust the free play, push or pull the actuator cable directly behind the spring **two times**.



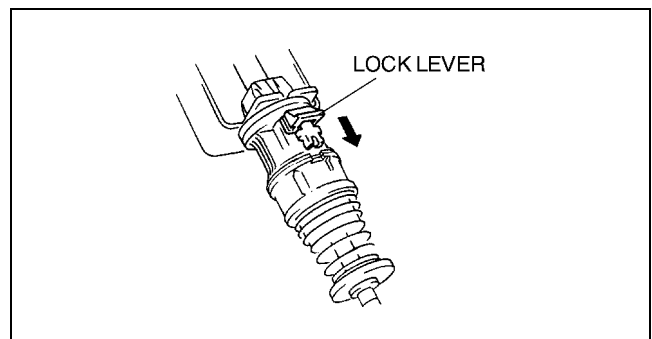
YMU120WAJ

7. Turn the ratchet ring in the direction shown by the arrow to lock it.



YMU120WAC

8. Slide the lock lever in the direction shown by the arrow to lock the adjuster.



YMU120WAD

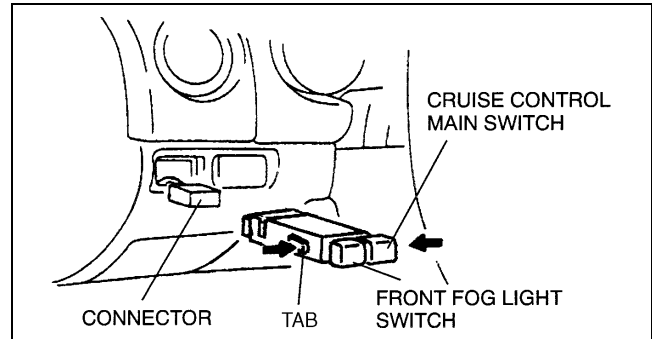


# CRUISE CONTROL SYSTEM

## CRUISE CONTROL MAIN SWITCH REMOVAL/INSTALLATION

A5U012066340W01

1. Disconnect the negative battery cable.
2. Remove the fuse block cover.
3. Remove the panel light control switch. (See 09-18-19 PANEL LIGHT CONTROL SWITCH REMOVAL/INSTALLATION.)
4. Push the tabs of the cruise control main switch and pull the switch out from inside of the dashboard.
5. Disconnect the cruise control main switch connector to remove the cruise control main switch.
6. Install in the reverse order of removal.



Y5U120WAA

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## CRUISE CONTROL MAIN SWITCH INSPECTION

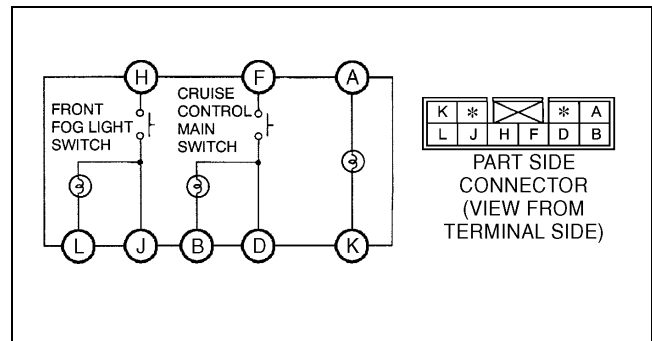
A5U012066340W02

1. Remove the cruise control main switch. (See 01-20-9 CRUISE CONTROL MAIN SWITCH REMOVAL/INSTALLATION.)
2. Inspect for continuity between the cruise control main switch terminals using an ohmmeter.
  - If not as specified, replace the cruise control main switch.

○—○ : Continuity ○—(⊗)—○ : Bulb

Switch position	Terminal							
	A	B	D	F	H	J	K	L
Off	○	○—(⊗)—○		○—(⊗)—○			○—(⊗)—○	
Front fog light on	○	○—(⊗)—○		○—(⊗)—○		○—○	○—(⊗)—○	
Cruise control main on	○	○—(⊗)—○	○—○	○—(⊗)—○			○—(⊗)—○	

Y5U120WAB



Y5U120WAC

## CRUISE CONTROL SWITCH REMOVAL/INSTALLATION

A5U012066341W01

### Note

- The cruise control switch is together with the wiper lever.

1. Disconnect the negative battery cable.
2. Remove the wiper lever from the combination switch. (See 09-18-7 COMBINATION SWITCH DISASSEMBLY/ASSEMBLY.)
3. Install in the reverse order of removal.

# CRUISE CONTROL SYSTEM

## CRUISE CONTROL SWITCH INSPECTION

A5U012066341W02

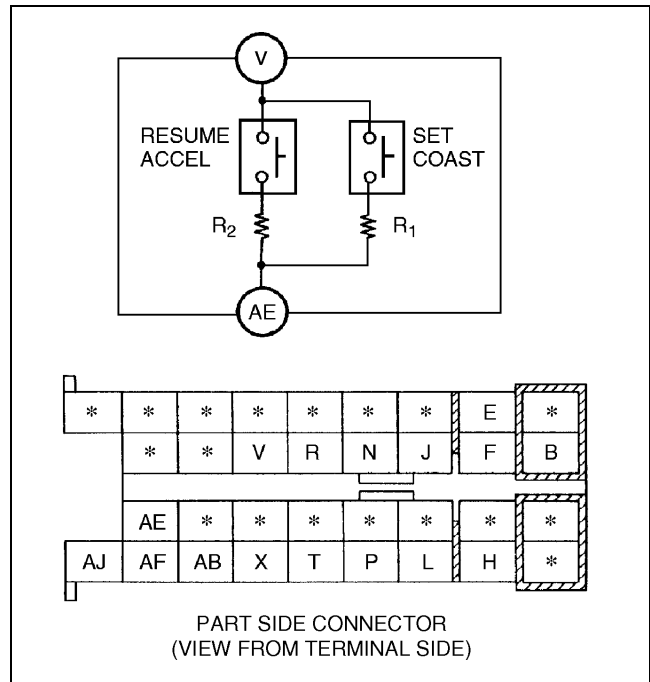
1. Remove the combination switch. (See 09-18-6 COMBINATION SWITCH REMOVAL/INSTALLATION.)
2. Measure the resistance between the cruise control switch terminals using an ohmmeter.
  - If not as specified, replace the wiper lever.

○—○ : Resistance

Switch position	Terminal	
	V	AE
SET/COAST	○—○	: R <sub>1</sub>
Off		
RESUME/ACCEL	○—○	: R <sub>2</sub>

R<sub>1</sub>: 240 Ω R<sub>2</sub>: 910 Ω

X5U120WA8



Y5U120WA7