

01-20 CRUISE CONTROL SYSTEM

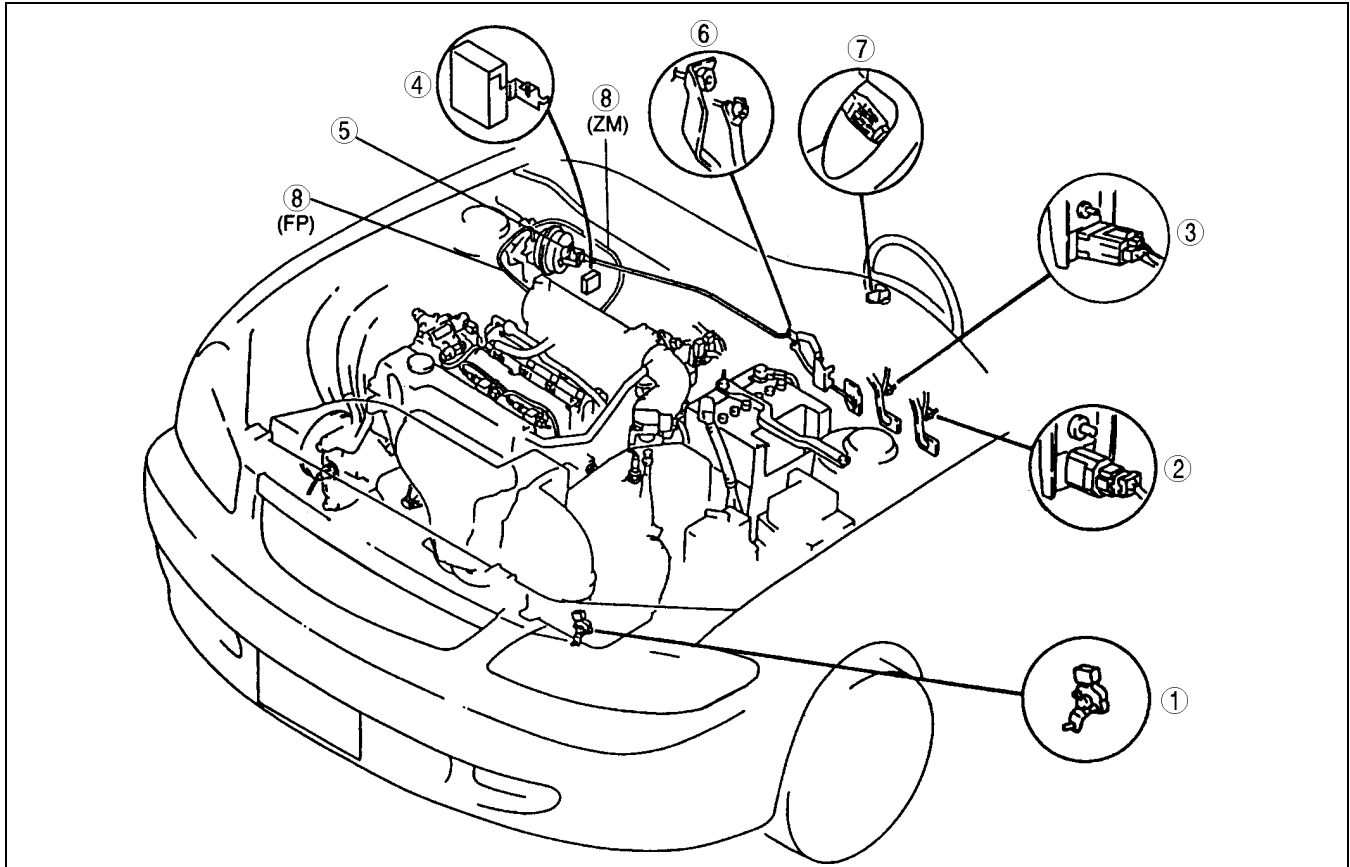
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A3U012001011W01



Z3U0120W001

1	Transmission range (TR) switch (ATX) (See 05-17-20 TRANSAXLE RANGE (TR) SWITCH INSPECTION) (See 05-17-20 TRANSAXLE RANGE (TR) SWITCH REMOVAL/INSTALLATION) (See 05-17-23 TRANSAXLE RANGE (TR) SWITCH ADJUSTMENT)
2	Clutch switch (MTX) (See 01-40B-42 CLUTCH SWITCH INSPECTION [FS]) (See 01-40A-41 CLUTCH SWITCH INSPECTION [ZM])
3	Brake switch (See 04-11-5 BRAKE SWITCH INSPECTION)
4	Cruise control module (See 01-20-2 CRUISE CONTROL MODULE REMOVAL/INSTALLATION) (See 01-20-2 CRUISE CONTROL MODULE INSPECTION)

5	Cruise actuator (See 01-20-4 CRUISE ACTUATOR REMOVAL/INSTALLATION) (See 01-20-4 CRUISE ACTUATOR INSPECTION)
6	Actuator cable (See 01-20-5 ACTUATOR CABLE REMOVAL) (See 01-20-5 ACTUATOR CABLE INSTALLATION)
7	Cruise control switch (See 01-20-7 CRUISE CONTROL SWITCH REMOVAL/INSTALLATION) (See 01-20-8 CRUISE CONTROL SWITCH INSPECTION)
8	Vacuum hose

CRUISE CONTROL SYSTEM

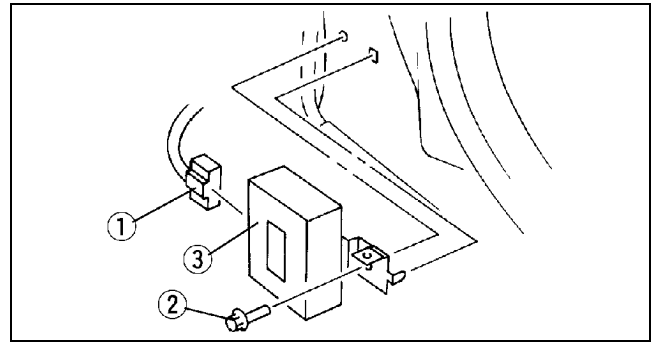
CRUISE CONTROL MODULE REMOVAL/INSTALLATION

A3U012066320W01

1. Disconnect the negative battery cable.
2. Remove the passenger-side front side trim. (See 09-17-13 FRONT SIDE TRIM REMOVAL/INSTALLATION.)
3. Remove in the order indicated in the table.

1	Connector
2	Bolt
3	Cruise control module

4. Install in the reverse order of removal.



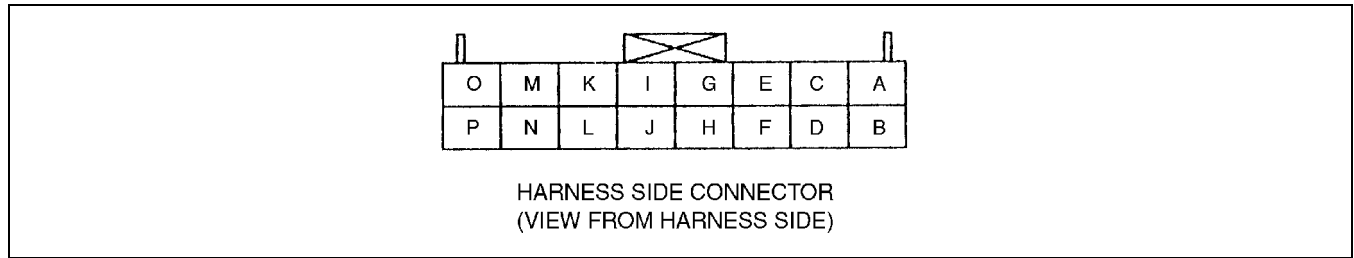
X3U120WA0

CRUISE CONTROL MODULE INSPECTION

A3U012066320W02

1. Remove the passenger-side front side trim. (See 09-17-13 FRONT SIDE TRIM REMOVAL/INSTALLATION.)
2. Remove the cruise control module without disconnecting the connector.
3. Measure the voltage at the cruise control module terminals as indicated below.
4. Disconnect the cruise control module connector before inspecting for continuity at terminal P.
 - 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 List (Reference)



Y3U120WA0

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 at ON position	B+	<ul style="list-style-type: none"> • Inspect brake switch (See 04-11-5 BRAKE SWITCH INSPECTION) • Inspect cruise actuator (See 01-20-4 CRUISE ACTUATOR INSPECTION) • Inspect related harness
				Other	Below 1.0	
B	Cruise actuator control	Cruise actuator (Vacuum)	Ignition switch at ON position	Cruise control main switch at ON position	B+	<ul style="list-style-type: none"> • Inspect brake switch (See 04-11-5 BRAKE SWITCH INSPECTION) • Inspect cruise actuator (See 01-20-4 CRUISE ACTUATOR INSPECTION) • Inspect related harness
				Other	Below 1.0	
C	Cruise actuator control	Cruise actuator (Vent 2)	Ignition switch at ON position	Cruise control main switch at ON position	B+	<ul style="list-style-type: none"> • Inspect brake switch (See 04-11-5 BRAKE SWITCH INSPECTION) • Inspect cruise actuator (See 01-20-4 CRUISE ACTUATOR INSPECTION) • Inspect related harness
				Other	Below 1.0	
D	Cruise set indicator light output	Cruise set indicator light	Ignition switch at ON position	B+	<ul style="list-style-type: none"> • Inspect METER 10 A fuse • Inspect instrument cluster (See 09-22-4 INSTRUMENT CLUSTER INSPECTION) • Inspect related harness 	
			Ignition switch at LOCK or ACC position	Below 1.0		

CRUISE CONTROL SYSTEM

Terminal	Signal	Connected to	Test condition		Voltage (V) /Continuity	Action	
E	IG1	METER 10 A fuse	Ignition switch at ON position		B+	<ul style="list-style-type: none"> Inspect METER 10 A fuse Inspect related harness 	
			Ignition switch at LOCK or ACC position		Below 1.0		
F	—	—	—		—	—	
G	O/D off	PCM	Ignition switch at ON position		B+	<ul style="list-style-type: none"> Inspect PCM (See 01-40A-7 PCM INSPECTION [ZM]) (See 01-40B-7 PCM INSPECTION [FS]) Inspect related harness 	
			Ignition switch at LOCK or ACC position		Below 1.0		
H	Cruise actuator power supply	Brake switch	Ignition switch at ON position	Cruise control main switch at ON position	B+	—	
				Cruise control main switch at OFF position	Below 1.0		
I	Test	Data link connector	—		—	—	
J	ATX	Selector lever position	Transaxle range switch	Ignition switch at ON position and cruise control main switch at ON position	Selector lever at N or P range	Below 1.0	<ul style="list-style-type: none"> Inspect transaxle range switch (See 05-17-20 TRANSAXLE RANGE (TR) SWITCH INSPECTION) Inspect related harness
					Other	B+	
	MTX	Clutch switch on/off	Clutch switch	Ignition switch at ON position and cruise control main switch at ON position	Depress clutch pedal	Below 1.0	
					Other	B+	
K	Brake switch on/off	Brake switch	Depress brake pedal		B+	<ul style="list-style-type: none"> Inspect brake switch (See 04-11-5 BRAKE SWITCH INSPECTION) Inspect related harness 	
			Other		Below 1.0		
L	Cruise control switch position	Cruise control switch	Ignition switch at ON position and cruise control main switch at ON position	SET/COAST switch hold at on	Approx. 1.5	<ul style="list-style-type: none"> Inspect cruise control switch (See 01-20-8 CRUISE CONTROL SWITCH INSPECTION) Inspect related harness 	
				RESUME/ACCEL switch hold at on	Approx. 0.5		
				CANCEL switch hold at on	Approx. 3		
				Other	Approx. 5		
M	Brake switch on/off	Brake switch	Ignition switch at ON position and cruise control main switch at ON position	Depress brake pedal	Below 1.0	<ul style="list-style-type: none"> Inspect brake switch (See 04-11-5 BRAKE SWITCH INSPECTION) Inspect related harness 	
				Other	B+		
N	Vehicle speed	Vehicle speed sensor	Ignition switch at ON position and cruise control main switch at ON position	Rear tires rotating	Alternates below 1.0 and 5	<ul style="list-style-type: none"> Inspect METER 10 A fuse Inspect instrument cluster (See 09-22-4 INSTRUMENT CLUSTER INSPECTION) Inspect related harness 	
				Other	Below 1.0 or 5		
O	Cruise control main switch input	Cruise control switch	Ignition switch at ON position	Cruise control main switch at ON position	Below 1.0	<ul style="list-style-type: none"> Inspect cruise control switch (See 01-20-8 CRUISE CONTROL SWITCH INSPECTION) Inspect related harness 	
				Other	B+		
P	Cruise control module ground	GND	Constant: inspect for continuity to ground		Yes	<ul style="list-style-type: none"> Inspect related harness 	

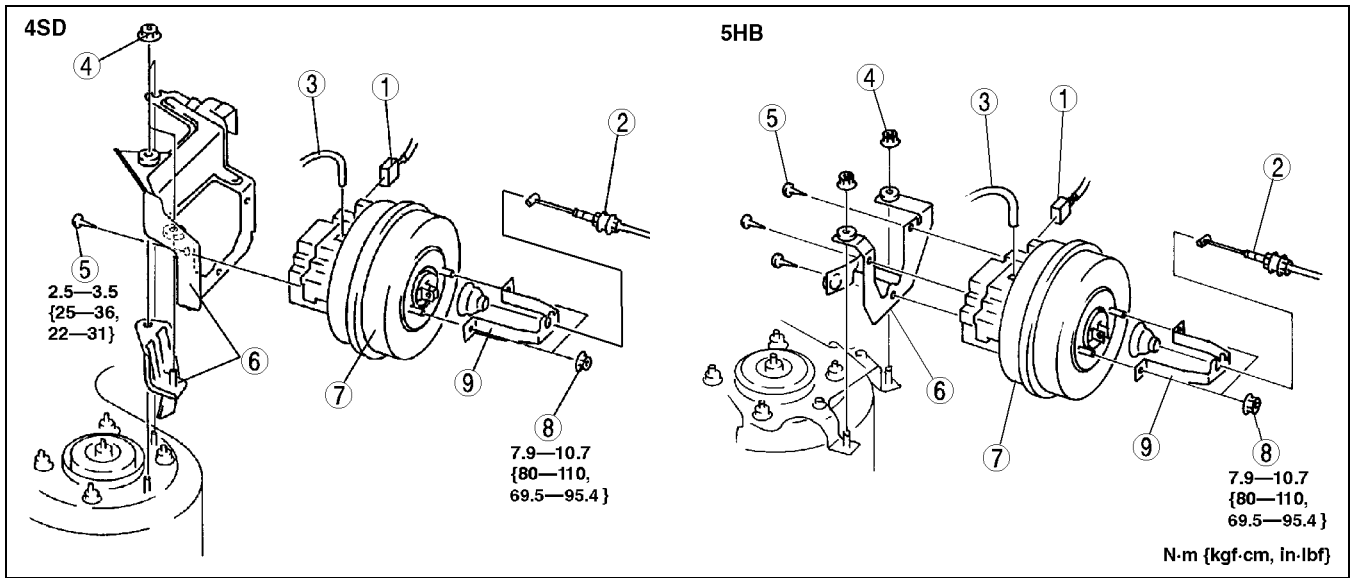
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CRUISE CONTROL SYSTEM

CRUISE ACTUATOR REMOVAL/INSTALLATION

A3U012066310W01

1. Disconnect the negative battery cable.
2. Remove in the order indicated in the table.
3. Install in the reverse order of removal.



A3U0120W101

1	Cruise actuator connector
2	Actuator cable (See 01-20-5 ACTUATOR CABLE REMOVAL) (See 01-20-5 ACTUATOR CABLE INSTALLATION)
3	Vacuum hose

4	Nut
5	Screw
6	Bracket
7	Cruise actuator
8	Nut
9	Bracket

CRUISE ACTUATOR INSPECTION

A3U012066310W02

1. Disconnect the negative battery cable.
2. Disconnect the cruise actuator connector.
3. Measure the resistance between the cruise actuator terminals using an ohmmeter.

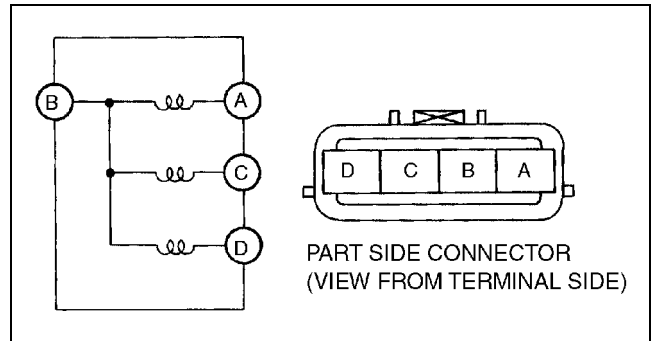
○—○ : Resistance

Step	Terminal				
	A	B	C	D	
1	○—○				R ₁
2		○—○			R ₂
3			○—○		R ₃

R₁: Approx. 55 ohms R₂: Approx. 21 ohms

R₃: Approx. 55 ohms

Z3U0120W003



Y3U120WA2

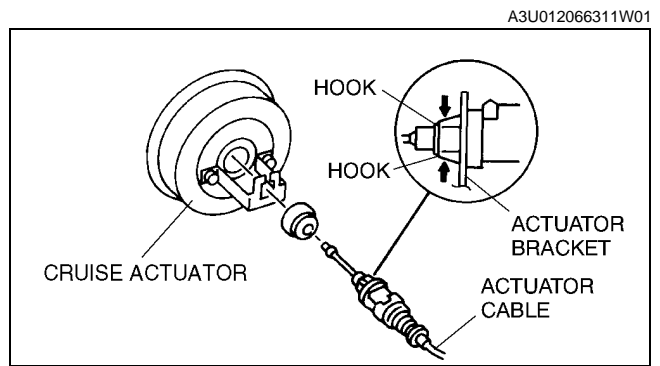
4. Disconnect the actuator cable from the accelerator pedal.
5. Allow the engine to idle.
6. Connect B+ and a ground to the terminals as shown and confirm the operation of the actuator cable.
 - If not as specified, replace the cruise actuator.

Step	Terminal connection				Operation of actuator cable
	A	B	C	D	
1	Ground	B+	Ground	Ground	Pull
2	Ground	B+	—	Ground	Hold
3	—	B+	—	Ground	Extend
4	—	—	—	—	Released

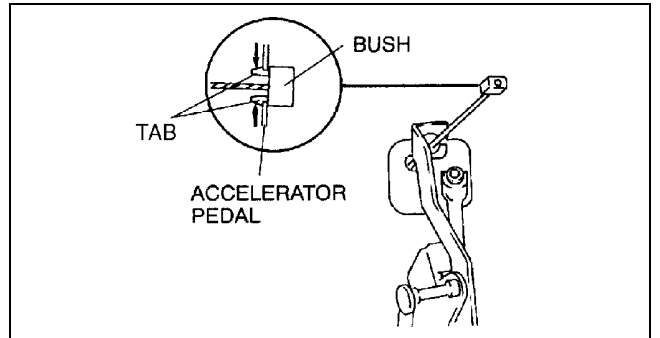
CRUISE CONTROL SYSTEM

ACTUATOR CABLE REMOVAL

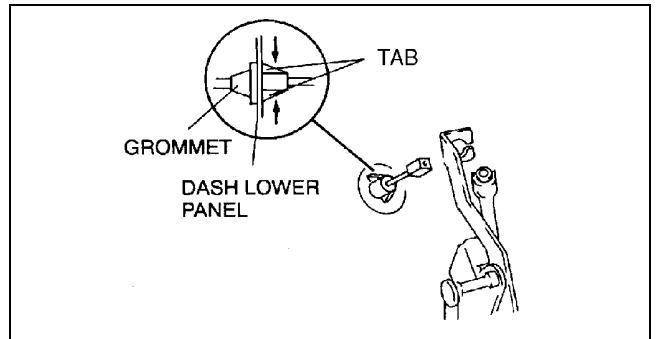
1. Loosen the nut, and remove the actuator cable.



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

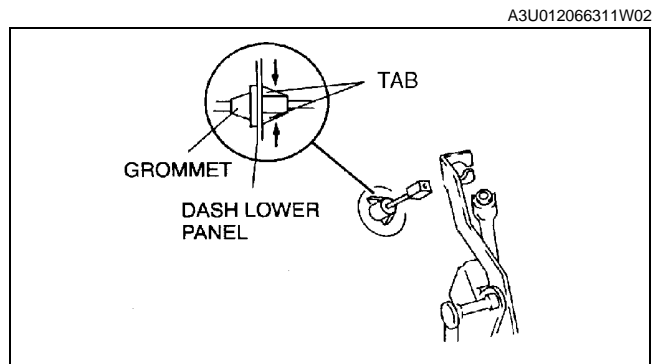


3. Press the tabs of the grommet, and remove it from the dash lower panel.
4. Push the actuator cable through the dash lower panel to remove it.



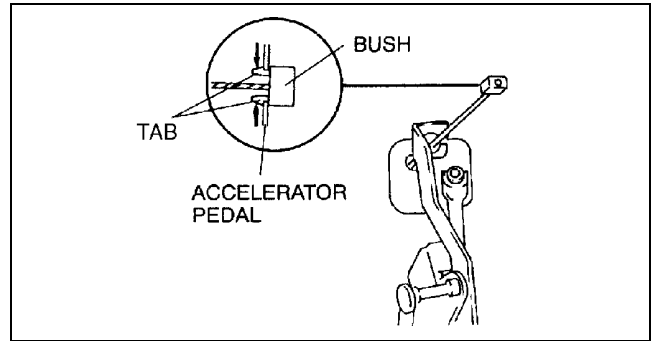
ACTUATOR CABLE INSTALLATION

1. Install the grommet to the dash lower panel.



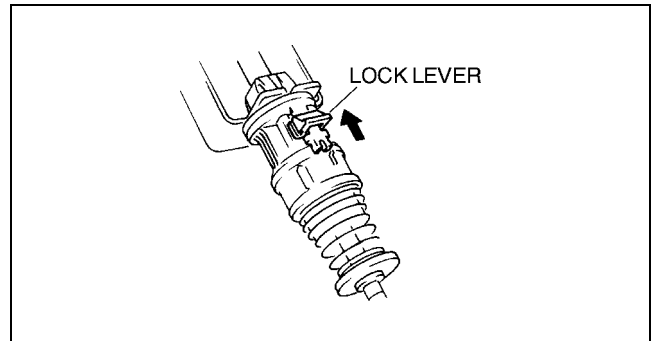
CRUISE CONTROL SYSTEM

2. Install the actuator cable to the accelerator pedal.



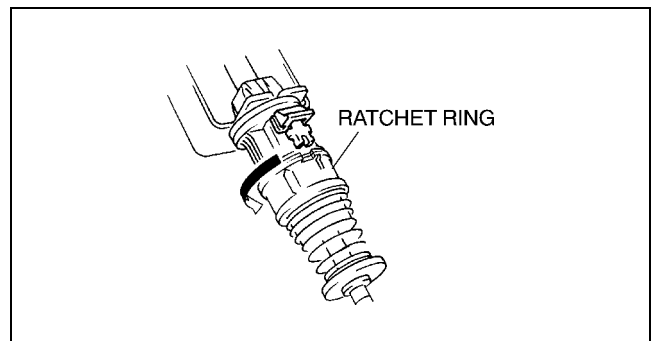
Y3U120WA5

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



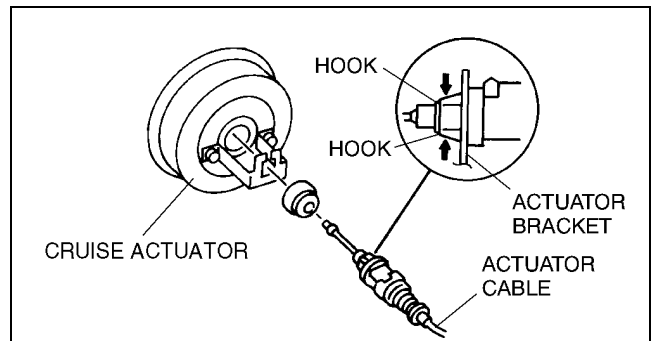
YMU120WAA

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



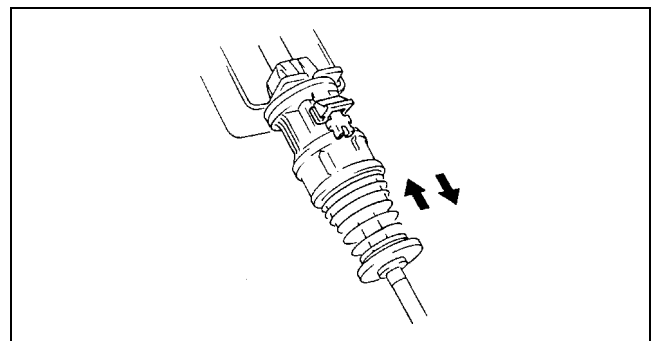
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5. Insert the grommet into the actuator bracket.



Z3U0120W004

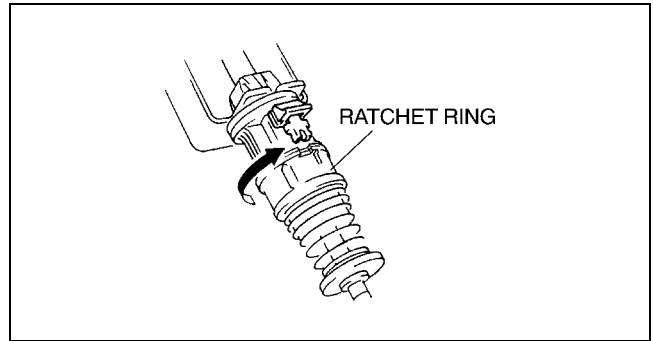
6. To adjust the free play, push or pull the actuator cable directly behind the spring **two times**.



YMU120WAJ

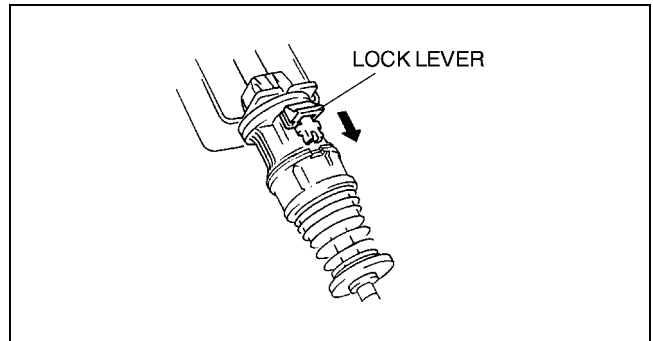
CRUISE CONTROL SYSTEM

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



YMU120WAC

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



YMU120WAD

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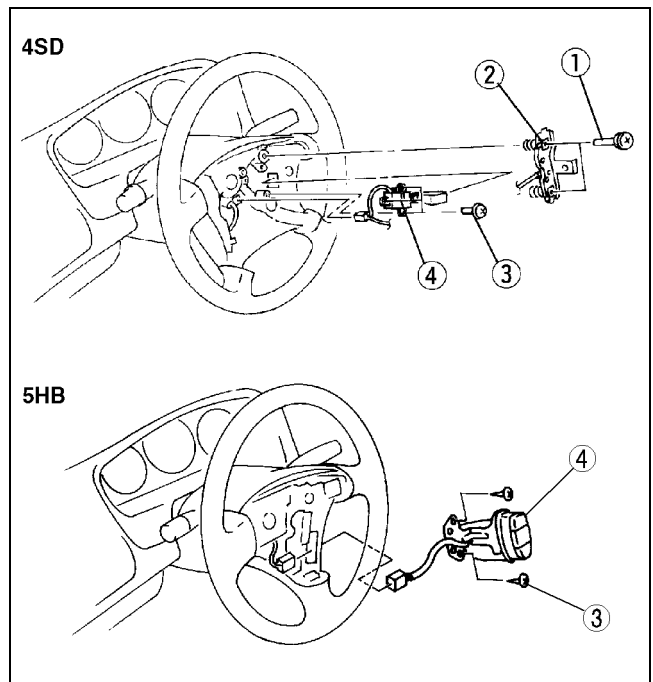
CRUISE CONTROL SWITCH REMOVAL/INSTALLATION

A3U012066341W01

- Disconnect the negative battery cable.
- Remove the driver-side air bag module. (See 08-10-5 DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.)
- Disconnect the cruise control switch connector.
- Remove in the order indicated in the table.

1	Screw (4SD)
2	Horn button contact (4SD)
3	Screw
4	Cruise control switch

- Install in the reverse order of removal.



A3U0120W102




CRUISE CONTROL SYSTEM

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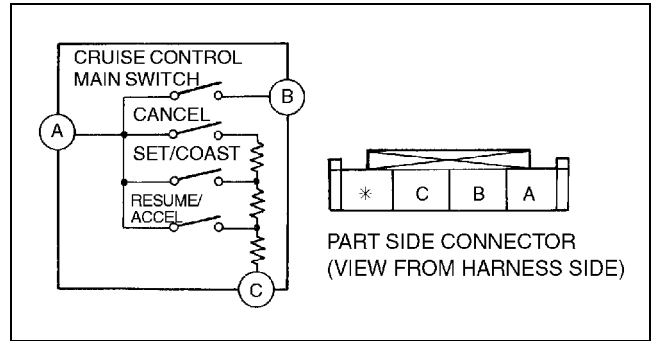
CRUISE CONTROL SWITCH INSPECTION

1. Disconnect the negative battery cable.
2. Remove the driver-side air bag module. (See 08-10-5 DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.)
3. Disconnect the cruise control switch connector.
4. Measure the resistance and inspect for continuity between the cruise control switch terminals using an ohmmeter.

○—○ : Continuity ○○ : Resistance

Switch position	Terminal		
	A	B	C
Cruise control main switch at ON position	○—○		
RESUME/ACCEL switch hold at on	○—  —○		○ R ₁
SET/COAST switch hold at on	○—  —○		○ R ₂
CANCEL switch hold at on	○—  —○		○ R ₃
Other			

R₁ : Approx. 68 ohms R₂: Approx. 198 ohms
R₃: Approx. 418 ohms



Y3U120WA4