

TROOPER

CONTROL SYSTEM

CRUISE CONTROL SYSTEM

CONTENTS

Service Precaution	10A-1	Removal	10A-5
General Description	10A-1	Installation	10A-5
Diagnosis	10A-2	Cruise Control Switch (Combination Switch)	10A-5
Brake Switch	10A-2	Removal and Installation	10A-5
Removal	10A-2	Cruise Control Unit	10A-6
Installation	10A-2	Removal	10A-6
Adjustment	10A-3	Installation	10A-6
Clutch Switch	10A-3	Cruise Actuator	10A-6
Removal and Installation	10A-3	Actuator Cable Diagram	10A-6
Adjustment	10A-3	Removal	10A-7
Starter Switch	10A-4	Installation	10A-7
Removal	10A-4	Adjustment	10A-7
Installation	10A-4	Mode Switch	10A-8
Cruise Control Main Switch	10A-5	Removal and Installation	10A-8

Service Precaution

WARNING: THIS VEHICLE HAS A SUPPLEMENTAL RESTRAINT SYSTEM (SRS). REFER TO THE SRS COMPONENT AND WIRING LOCATION VIEW IN ORDER TO DETERMINE WHETHER YOU ARE PERFORMING SERVICE ON OR NEAR THE SRS COMPONENTS OR THE SRS WIRING. WHEN YOU ARE PERFORMING SERVICE ON OR NEAR THE SRS COMPONENTS OR THE SRS WIRING, REFER TO THE SRS SERVICE INFORMATION. FAILURE TO FOLLOW WARNINGS COULD RESULT IN POSSIBLE AIR BAG DEPLOYMENT, PERSONAL INJURY, OR OTHERWISE UNNEEDED SRS SYSTEM REPAIRS.

CAUTION: Always use the correct fastener in the proper location. When you replace a fastener, use ONLY the exact part number for that application. ISUZU will call out those fasteners that require a replacement after removal. ISUZU will also call out the fasteners that require thread lockers or thread sealant. UNLESS OTHERWISE SPECIFIED, do not use supplemental coatings (Paints, greases, or other corrosion inhibitors) on threaded fasteners or fastener joint interfaces. Generally, such coatings adversely affect the fastener torque and the joint clamping force, and may damage the fastener. When you install fasteners, use the correct tightening sequence and specifications. Following these instructions can help you avoid damage to parts and systems.

General Description

The cruise control keeps the vehicle running at a fixed speed until a signal canceling this fixed speed is received. When the main switch "AUTO CRUISE" is turned on with the vehicle in the running mode, the battery voltage is applied to the control unit. When a signal from the control switch is input to the control unit while the vehicle is in this state, the cruise control actuator is activated to operate the system. Also, while the system is operating, the "AUTO CRUISE" indicator light in the meter assembly lights up.

1. SET/COAST Switch Function

- 1. Set Function:** When the SET/COAST switch is pressed and released with the main switch on, the speed at which the vehicle is running at that moment is stored in the memory, and the vehicle automatically runs at the stored speed.
- 2. Coast-down Function:** When the SET/COAST switch is kept on while the vehicle is running, the vehicle decelerates during that time. The speed at which vehicle is running when the control switch is turned off is stored in the memory, and the vehicle automatically returns to the stored speed.
- 3. Tap-down Function:** When the SET/COAST switch is turned on and off instantaneously while the vehicle is running, the vehicle decelerates a mile for each on/off operation. The vehicle speed at which the vehicle was running when the SET/COAST was turned off last is stored in the memory, and the vehicle automatically returns to this stored speed.

10A-2 CRUISE CONTROL SYSTEM

2. RESUME/ACCEL Switch Function

1. **Resume Function:** When the RESUME/ACCEL switch is turned on/off after the system is temporarily deactivated by pressing the brake or clutch pedal while the vehicle is running, the vehicle resumes the speed stored before the system was released, and the vehicle automatically runs at the stored speed .
2. **Accelerate Function:** When the RESUME/ACCEL switch is kept on after the system is released completely, the vehicle accelerates its speed during that time. The vehicle speed at which the vehicle was running when the switch was turned off is stored in the memory, and the vehicle automatically returns to this speed.
3. **Tap-up Function:** When the RESUME/ACCEL switch is turned on and off instantaneously while the vehicle is running, the vehicle decelerates a mile for each on/off operation. The vehicle speed at which the vehicle was running when the switch was turned off last is stored in the memory, and the vehicle automatically returns to this stored speed.

3. CANCEL Function

1. **Temporary Cancellation:**
 - When the brake pedal is pressed.
 - When the clutch pedal is pressed. (M/T)
 - When the select lever is shifted to any position other than "D", "3", "2" or "L". (A/T)
 - When the cancel switch is operated.
 - When the vehicle speed exceeds about 12.5mph over the vehicle speed stored in the memory.
 - Turning the RESUME/ACCEL switch will return the vehicle to the speed stored in the cruise control memory.
2. **Complete Cancellation:**
 - When the starter switch or the main switch is turned off.
 - When the fail-safe function is activated.
 - When the vehicle speed is about 24 mph.

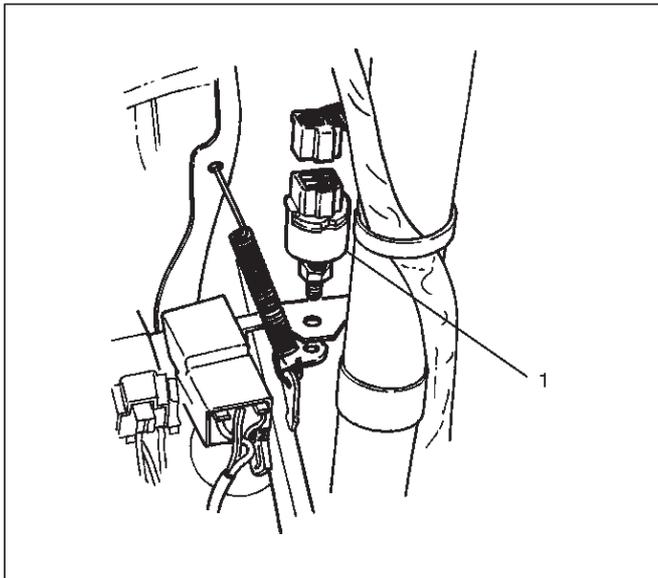
Diagnosis

Refer to the Cruise Control System Diagnosis in Wiring System section.

Brake Switch

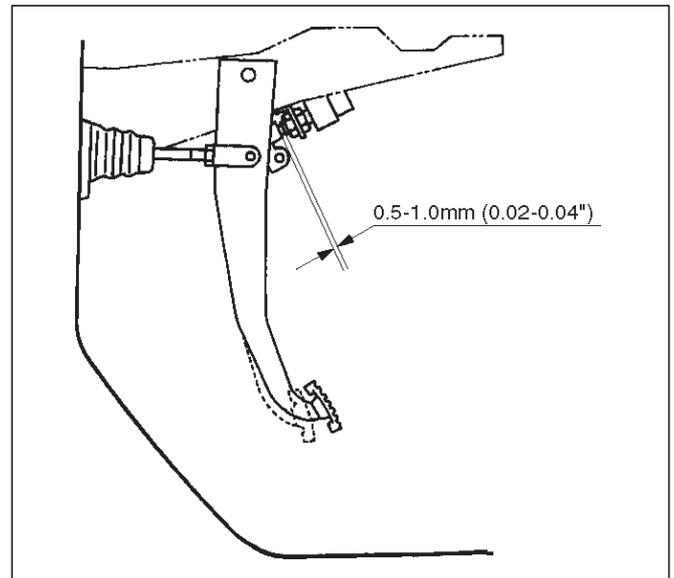
Removal

1. Disconnect the battery ground cable.
2. Remove the brake switch (1).
 - Disconnect the connector.
 - Loosen the lock nuts of the switch.
 - Remove the switch by turning it.



310RS004

2. Turn the switch clockwise until the tip of the threaded portion of the brake switch contacts the pedal arm.
3. Turn the switch counterclockwise until the space between the tip of the threaded portion and the pedal arm is 0.5 to 1.0 mm (0.02-0.04 in.) as shown in the figure.



310RS003

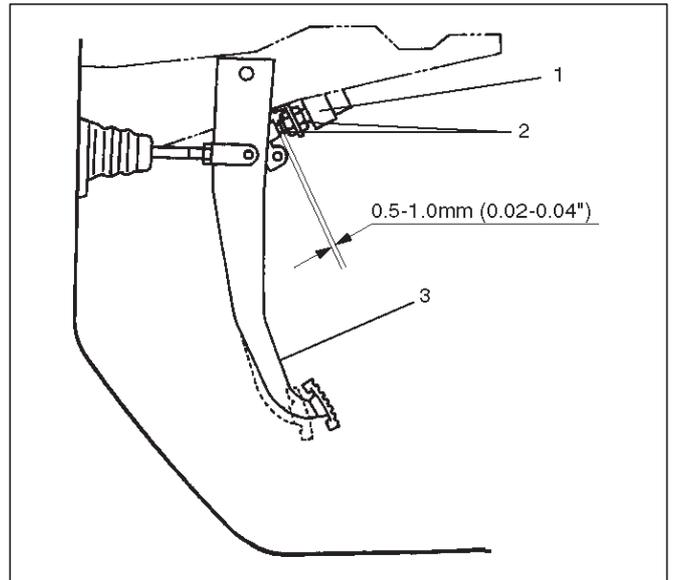
Installation

To install, follow the removal steps in the reverse order, noting the following points.

1. Check to see if the brake pedal has been returned by the return spring to the specified position.

Adjustment

1. Check to be sure that the brake pedal (3) has been completely returned by the return spring.
2. Disconnect the switch connector.
3. Loosen the lock nut (1) of the switch (2).
4. Turn the switch clockwise until the tip of screw portion of the brake pedal hits the pedal arm.
5. Turn the switch counterclockwise until the clearance between the tip of the screw portion and the pedal arm becomes 0.5 to 1.0 mm (0.02-0.04 in).
6. Tighten the lock nut.
7. Connect the switch connector.



310RW006

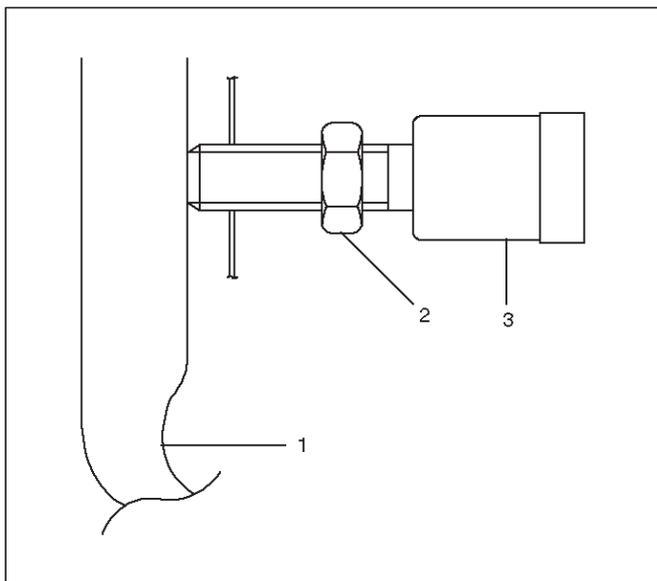
Clutch Switch

Removal and Installation

Refer to the Clutch Control removal and installation steps in Clutch section.

Adjustment

1. Check to be sure that the clutch pedal (1) has been completely returned by the return spring.
2. Disconnect the switch connector.
3. Loosen the lock nut (2) of the switch (3).
4. Push the switch by hand until the push rod cannot be seen from the tip portion of the switch.
5. Give the switch one reverse rotation.
6. Tighten the lock nut.
7. Connect the switch connector.

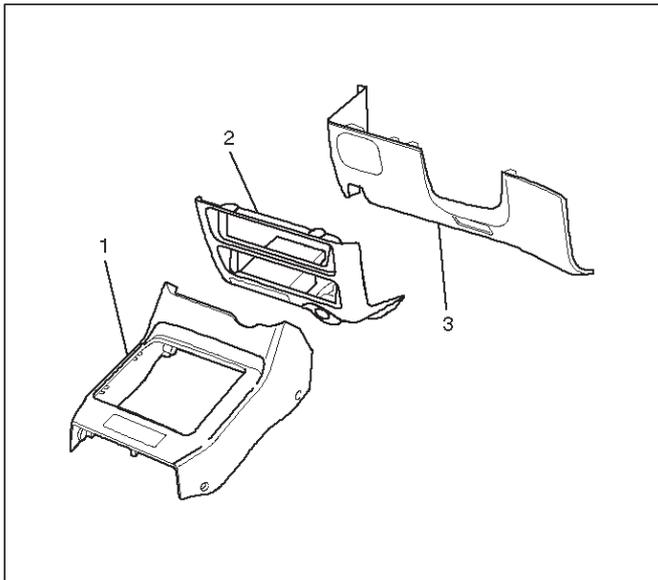


203RW002

Starter Switch

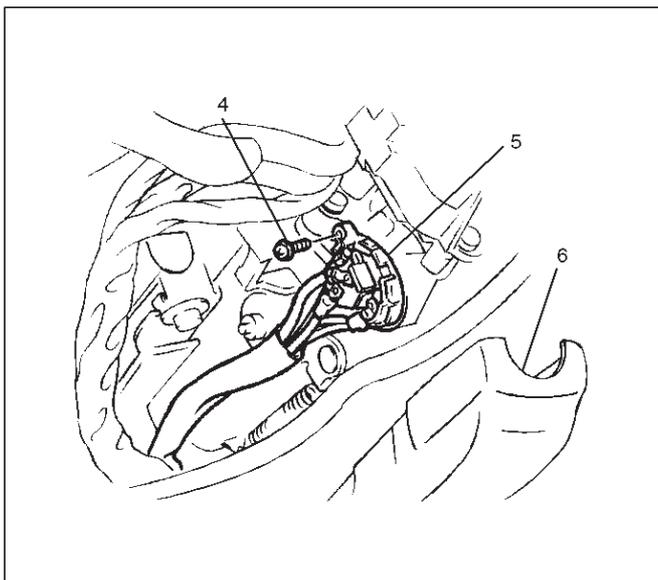
Removal

1. Disconnect the battery ground cable.
2. Remove the front console assembly (1). Refer to the Instrument Panel Assembly in Body Structure section.
3. Remove the lower cluster assembly (2). Refer to the Instrument Panel Assembly in Body Structure section.
4. Remove the instrument panel driver lower cover assembly (3). Refer to the Instrument Panel Assembly in Body Structure section.



821RW024

5. Remove seven screws to remove the steering cowl (6).
6. Disconnect the connector, remove the screw (4) and then remove the starter switch (5).

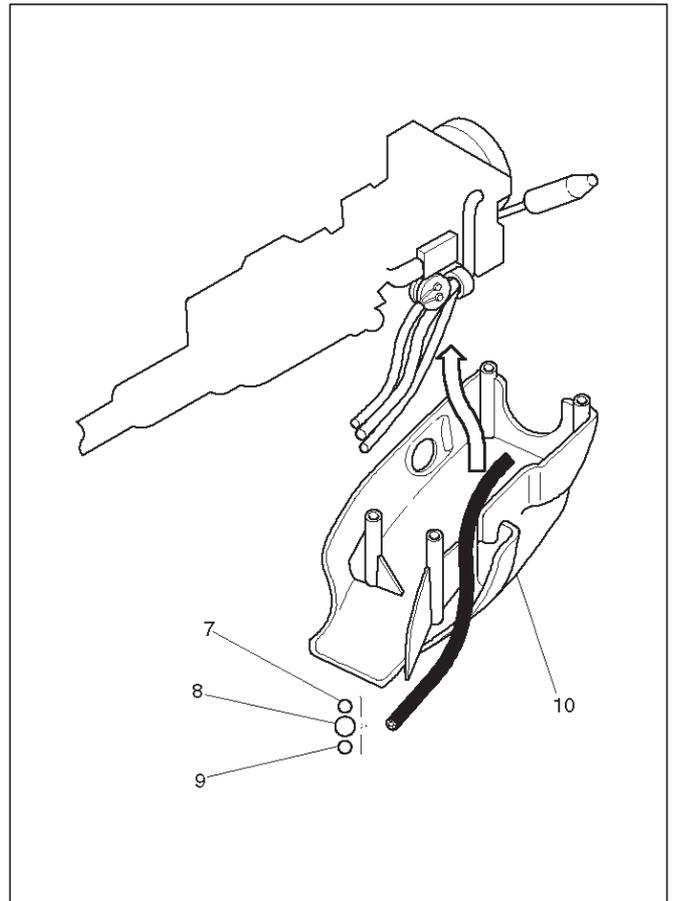


431RW005

Installation

To install, follow the removal steps in the reverse order, noting the following point.

1. When installing the steering cowl (10), be sure to pass the harnesses through the route as shown in the figure so that the starter switch harness (7), the combination switch harness (8) and the inflator module harness (9) will not catch.

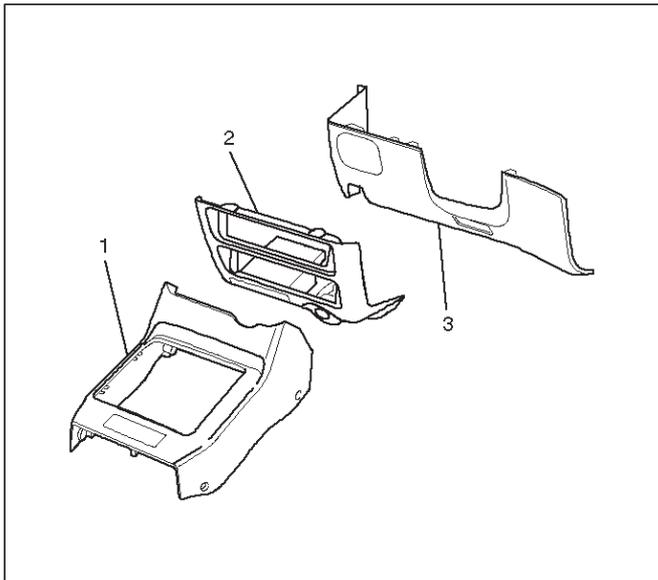


825RW058

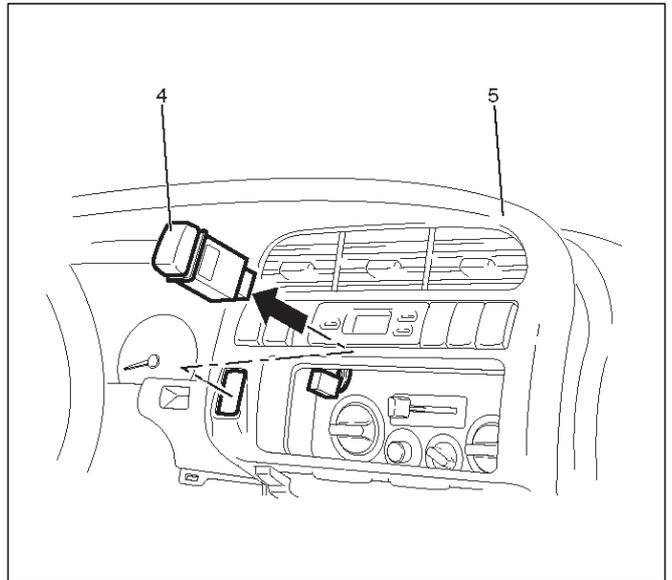
Cruise Control Main Switch

Removal

1. Disconnect the battery ground cable.
2. Remove the front console assembly (1). Refer to the Instrument Panel Assembly in Body Structure section.
3. Remove the lower cluster assembly (2). Refer to the Instrument Panel Assembly in Body Structure section.
4. Remove the instrument panel driver lower cover assembly (3). Refer to the Instrument Panel Assembly in Body Structure section.



5. Remove the instrument panel cluster assembly (5). Refer to the Instrument Panel Assembly in Body Structure section.
6. Disconnect the and push the lock from the side of the instrument panel cluster assembly to remove the cruise control main switch (4).



Installation

To install, follow the removal steps in the reverse order, noting the following point.

1. Push in the switch with your fingers until the switch is locked securely.

Cruise Control Switch (Combination Switch)

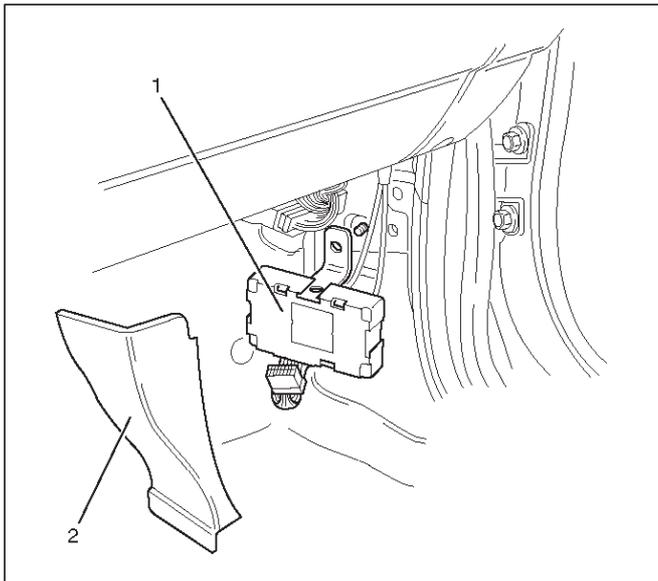
Removal and Installation

Refer to the Lighting Switch (Combination Switch) removal and installation steps of Lighting System in Body and Accessories section.

Cruise Control Unit

Removal

1. Disconnect the battery ground cable.
2. Remove the dash side trim panel (RH)(2).
3. Disconnect the connector.
4. Remove a fixing nut to remove the cruise control unit (1).



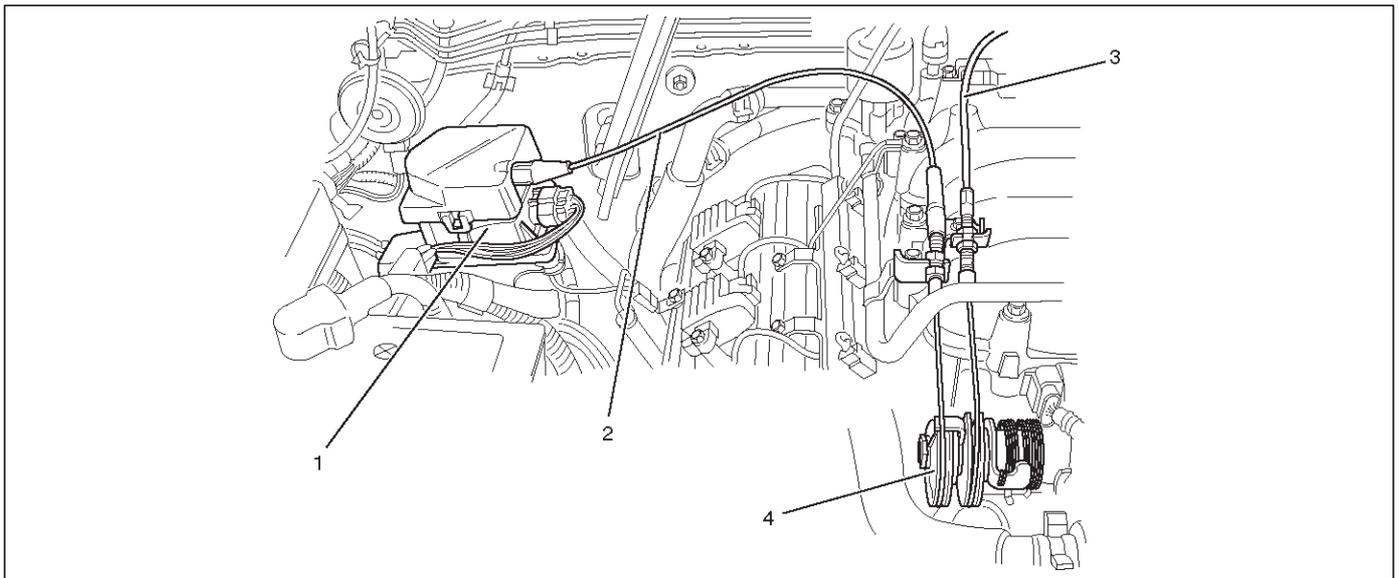
825RW050

Installation

To install, follow the removal steps in the reverse order.

Cruise Actuator

Actuator Cable Diagram



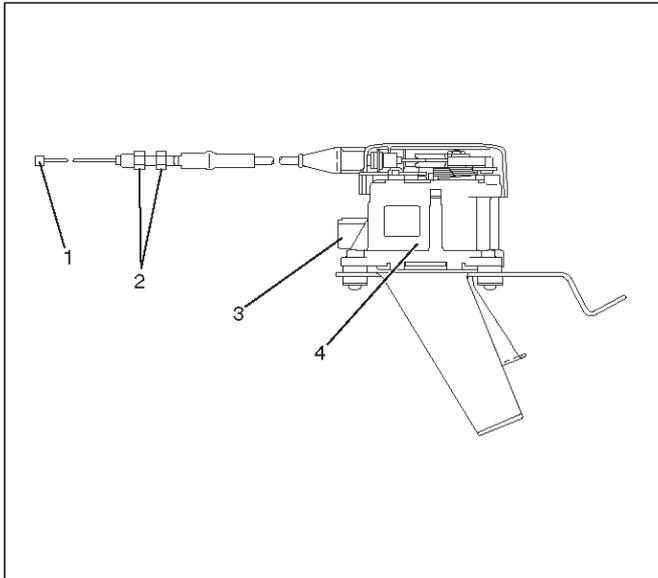
825RW051

Legend

- | | |
|------------------------------|---|
| (1) Cruise Actuator Assembly | (3) Accelerator Cable |
| (2) Cruise Control Cable | (4) Throttle Link (Cruise Control Side) |

Removal

1. Disconnect the battery ground cable.
2. Remove the cruise actuator Assembly (4).
 - Disconnect the connector (3).
 - Remove the cable end (1) from the throttle link (cruise control side).
 - Loosen two fixing nuts (2).
 - Remove three actuator fixing screws.



825RW049

Installation

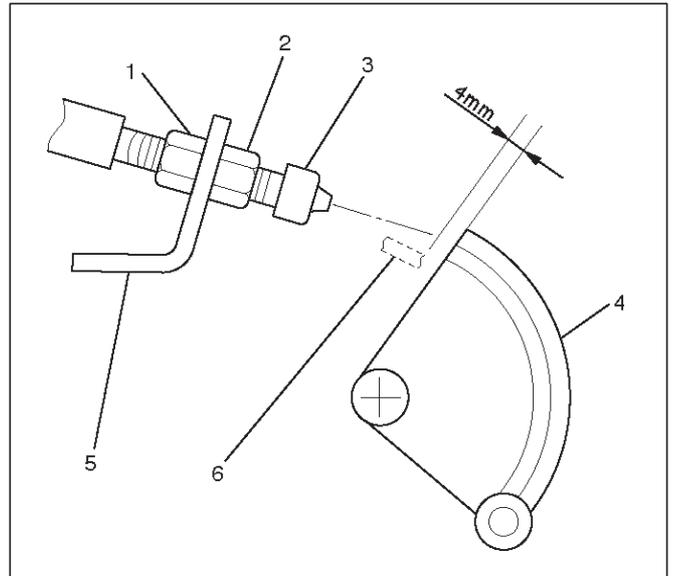
To install, follow the removal steps in the reverse order, noting the following point.

1. Take care not to bend the cable excessively.

Adjustment

After installing the cruise actuator, the following steps must be carried out for cruise control cable adjustment.

1. Install the cruise control cable end (3) to the throttle link (4).
2. Put the screw portion of the cable in the bracket (5).
3. Put the nut (1) to the bracket and then tighten the nut (2).
- If the distance between the throttle link (4) and the throttle link lever (6) is out of the specified range, loosen the nut (2) to adjust it.



035RW140

Mode Switch

Removal and Installation

Refer to the Mode Switch removal and installation steps in Automatic Transmission section.