

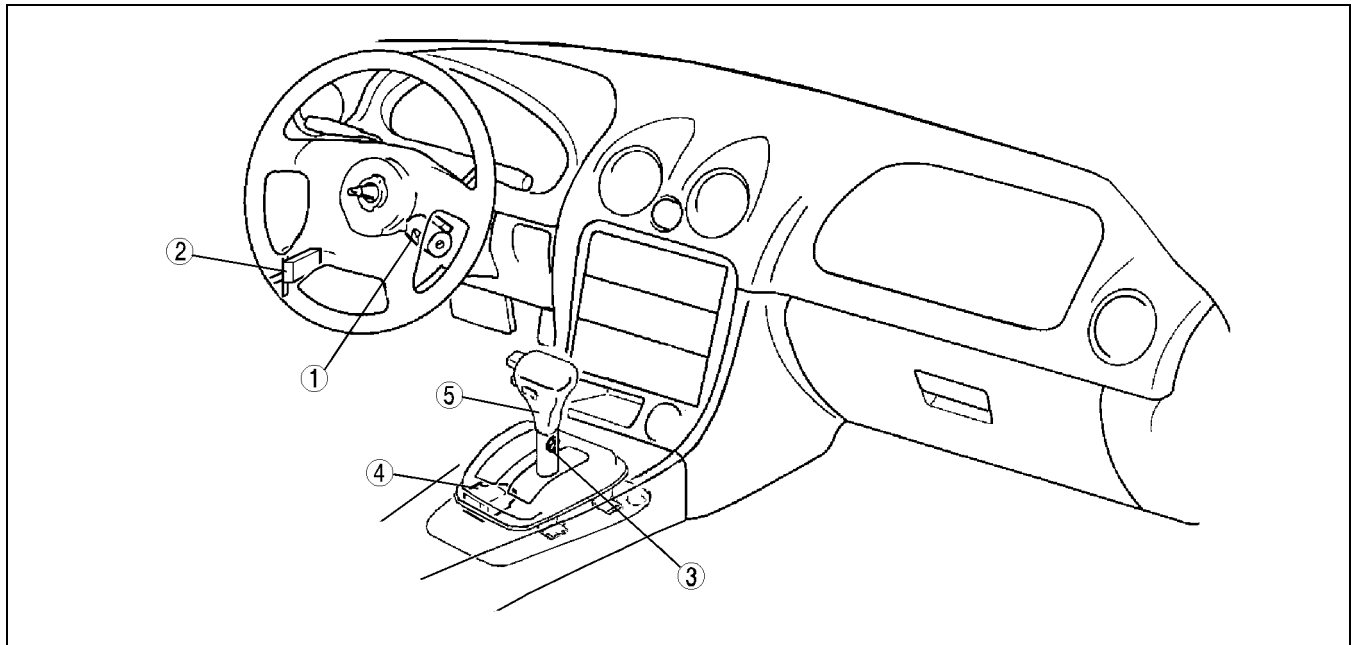
05-14 AUTOMATIC TRANSMISSION SHIFT MECHANISM

AUTOMATIC TRANSMISSION SHIFT MECHANISM	
LOCATION INDEX	05-14-1
EMERGENCY OVERRIDE BUTTON	
INSPECTION	05-14-2
KEY INTERLOCK SOLENOID	
INSPECTION	05-14-2
KEY INTERLOCK SOLENOID REMOVAL/	
INSTALLATION	05-14-2
KEY INTERLOCK UNIT INSPECTION ..	
05-14-2	
KEY INTERLOCK UNIT	
REMOVAL/INSTALLATION	05-14-3
P POSITION SWITCH INSPECTION ...	
05-14-3	
SHIFT-LOCK ACTUATOR	
INSPECTION	05-14-4

SHIFT-LOCK ACTUATOR REMOVAL/	
INSTALLATION	05-14-5
SELECTOR LEVER INSPECTION	
05-14-5	
SELECTOR LEVER ADJUSTMENT	
05-14-6	
Lever Position Adjustment	
05-14-6	
Indicator Panel Adjustment	
05-14-6	
SELECTOR LEVER	
REMOVAL/INSTALLATION	05-14-7
Spring Pin Installation Note	
05-14-7	
SELECTOR LEVER	
DISASSEMBLY/ASSEMBLY	05-14-8
Cam Assembly Note	
05-14-9	
Indicator Panel Assembly Note	
05-14-9	

AUTOMATIC TRANSMISSION SHIFT MECHANISM LOCATION INDEX

A5U051464350W01



Z5U514WA4

1	Key interlock solenoid (See 05-14-2 KEY INTERLOCK SOLENOID REMOVAL/INSTALLATION) (See 05-14-2 KEY INTERLOCK SOLENOID INSPECTION)
2	Key interlock unit (See 05-14-3 KEY INTERLOCK UNIT REMOVAL/ INSTALLATION) (See 05-14-2 KEY INTERLOCK UNIT INSPECTION)
3	P Position switch (See 05-14-3 P POSITION SWITCH INSPECTION)

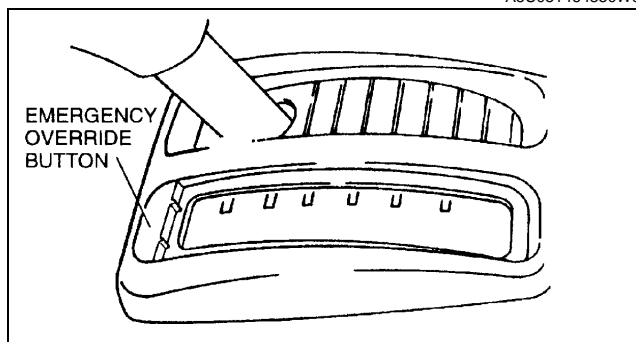
4	Shift-lock actuator (See 05-14-5 SHIFT-LOCK ACTUATOR REMOVAL/INSTALLATION) (See 05-14-4 SHIFT-LOCK ACTUATOR INSPECTION)
5	Selector lever (See 05-14-7 SELECTOR LEVER REMOVAL/ INSTALLATION) (See 05-14-5 SELECTOR LEVER INSPECTION) (See 05-14-6 SELECTOR LEVER ADJUSTMENT) (See 05-14-8 SELECTOR LEVER DISASSEMBLY/ ASSEMBLY)

AUTOMATIC TRANSMISSION SHIFT MECHANISM

EMERGENCY OVERRIDE BUTTON INSPECTION

A5U051464350W02

1. Verify that the selector lever is locked in the P position.
2. Remove the indicator panel cover using a screwdriver.
3. Insert the screwdriver into the emergency override hole, push down, and verify that the selector lever can be shifted from the P position.
 - If not as specified, inspect or replace the shift-lock actuator.



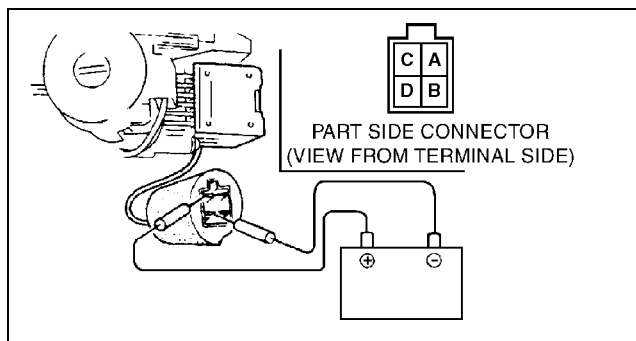
X5U514WA0

KEY INTERLOCK SOLENOID INSPECTION

A5U051409010W01

1. Disconnect the negative battery cable.
2. Remove the column cover.
3. Disconnect the key interlock solenoid connector.
4. Insert the ignition key in the key cylinder.
5. Inspect the key interlock operation when B+ is applied to the terminal as shown.
 - If not as specified, replace the key interlock solenoid.

Connection		Key interlock operation
B+	GND	
C	D	Lock



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6. Install reverse order of removal.
7. Connect the negative battery cable.

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KEY INTERLOCK SOLENOID REMOVAL/INSTALLATION

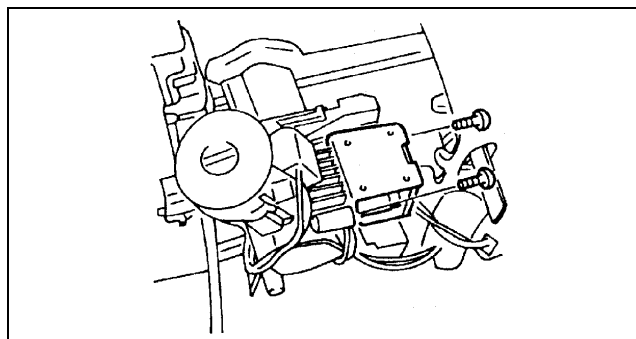
A5U051409010W02

1. Disconnect the negative battery cable.
2. Remove the column cover.
3. Disconnect the key interlock solenoid connector.
4. Remove the screws and the key interlock solenoid.
5. Install the key interlock solenoid and tighten the screws.

Tightening torque

6.9—12.7 N·m {70—130 kgf·cm, 61—112 in·lbf}

6. Verify that the key interlock solenoid operates.
7. Connect the key interlock solenoid connector.
8. Install the column cover.
9. Connect the negative battery cable.

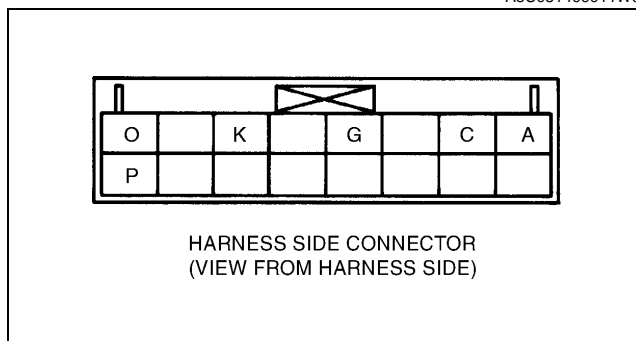


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KEY INTERLOCK UNIT INSPECTION

A5U051409011W01

1. Remove the front side trim.
2. Turn the ignition switch to ON, and inspect terminal voltages, referring to the chart below.
 - If not as specified, repair the wiring harness and/or key interlock unit.



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AUTOMATIC TRANSMISSION SHIFT MECHANISM

Terminal	(-) terminal connected to	Condition	Correct measurement value (V)
A	G	For less than 2 seconds after ignition switch is turned to ACC or on with P position switch on.	Approx. 0
		Except above conditions	B+
C	G	P position switch is on, and ignition switch is turned to ACC or ON.	Approx. 0
		Except above condition	B+
G	Ground	Constant	Approx. 0
K	G	P position switch is on.	Approx. 0
		P position switch is off.	B+
O	G	Ignition switch is at ON.	B+
		Ignition switch is off.	Approx. 0
P	G	Ignition switch is at ACC.	B+
		Ignition switch is at position other than ACC.	Approx. 0

05-14

3. Install the front side trim.

KEY INTERLOCK UNIT REMOVAL/INSTALLATION

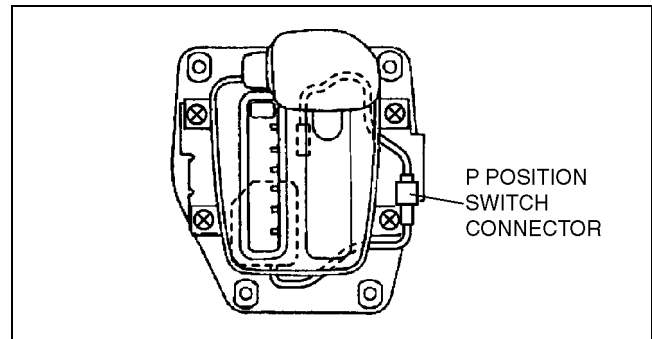
A5U051409011W02

1. Disconnect the negative battery cable.
2. Remove the front side trim.
3. Disconnect the key interlock unit connector.
4. Remove the key interlock unit.
5. Install in the reverse order of removal.

P POSITION SWITCH INSPECTION

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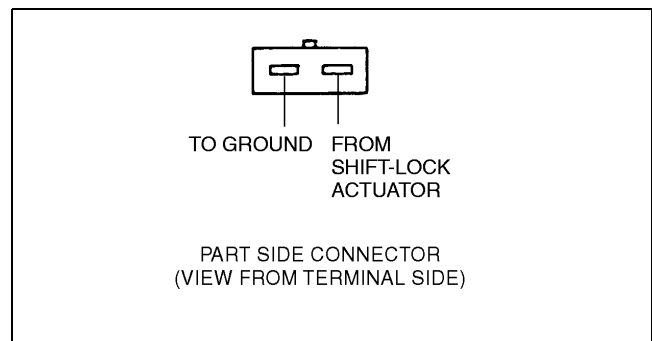
1. Disconnect the negative battery cable.
2. Remove the rear console.
3. Remove the screws and lift up the indicator panel.
4. Disconnect the P position switch connector.



Z5U514WA5

5. Inspect for continuity between the terminals A and B.
 - If not as specified, replace the P position switch.

Position/Range	Selector lever release button	Continuity
P	Released	Yes
	Depressed	No
R, N, D, 2, 1	—	No



Y5U514WA2

6. Connect the P position switch connector.

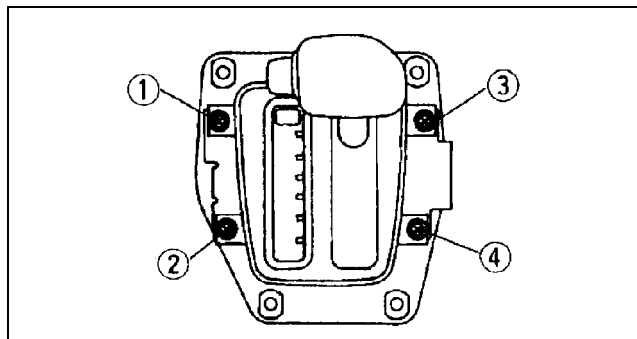
AUTOMATIC TRANSMISSION SHIFT MECHANISM

7. Adjust the indicator panel. Install the screws in the order shown in the figure.

Tightening torque

1.5—2.4 N·m {16—24 kgf·cm, 14—21 in·lbf}

8. Install the rear console.
9. Connect the negative battery cable.

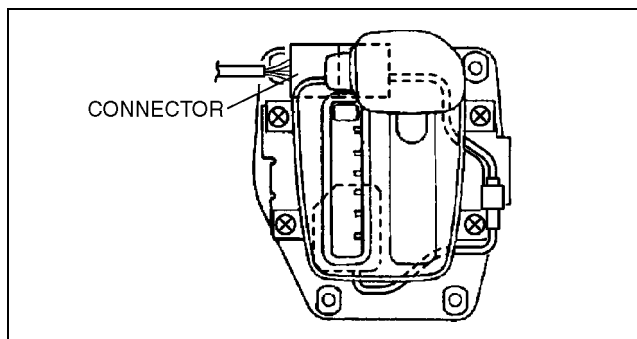


Z5U514WA7

SHIFT-LOCK ACTUATOR INSPECTION

A5U051446101W01

1. Remove the rear console.
2. Remove the selector lever knob and indicator panel screws.
3. Lift up slightly the selector lever, selector sleeve, and indicator panel, and disconnect the O/D OFF switch connector.
4. Shift the selector lever to the P position.



Z5U514WA6

5. Turn the ignition switch to the ON position, and inspect for terminal voltages and continuity, referring to the chart below. Disconnect the shift-lock actuator connector to inspect for continuity between terminal I (harness side) and ground.
 - If not as specified, repair the wiring harness and/or shift-lock actuator.

k	i				
l	j	h			

HARNESS SIDE CONNECTOR
(VIEW FROM TERMINAL SIDE)

Y5U514WA3

Terminal	(-) terminal connected to	Condition	Correct measurement value
h	l	Ignition switch is off	B+
i	l	Ignition switch is at ON	B+
j	l	Brake pedal is released → depressed	0 V → B+
k	l	P position, selector lever release button is depressed	0 V
l (harness side)	Body	Constant	0 ohm

6. Grasp the O/D OFF switch wiring harness and pull it while pushing the selector lever knob down fully onto the selector lever.
7. Connect the O/D OFF switch connector.

AUTOMATIC TRANSMISSION SHIFT MECHANISM

- Adjust the indicator panel. Install the screws in the order shown in the figure.

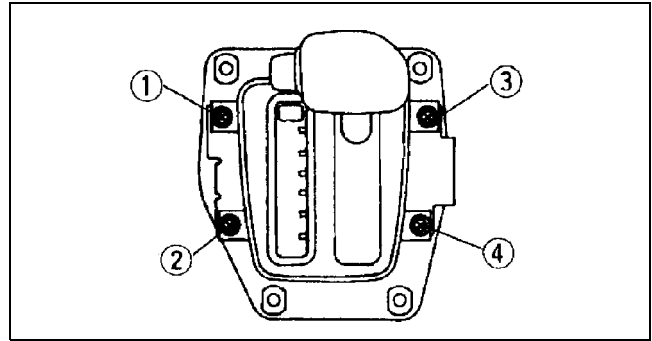
Tightening torque

1.5—2.4 N·m {16—24 kgf·cm, 14—21 in·lbf}

- Apply locking compound to the selector lever knob screw threads after the threads have been cleaned. Tighten the screws.

Tightening torque

2.0—2.9 N·m {21—29 kgf·cm, 18—25 in·lbf}



Z5U514WA7

- Install the rear console.
- Verify correct operation of the shift-lock system.

SHIFT-LOCK ACTUATOR REMOVAL/INSTALLATION

A5U051446101W02

05-14

- Disconnect the negative battery cable.
- Remove the rear console.
- Remove the indicator screws and lift up the indicator panel.
- Disconnect the shift-lock actuator connector.
- Disconnect the P position switch connector.
- Remove the shift-lock actuator.
- Install a shift-lock actuator.

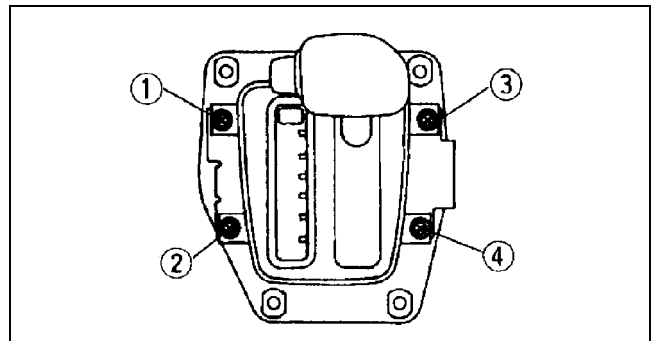
Tightening torque

0.7—1.2 N·m {8—12 kgf·cm, 6.2—10.6 in·lbf}

- Connect the P position switch connector.
- Connect the shift-lock actuator connector.
- Adjust the indicator panel. Install the screws in the order shown in the figure.

Tightening torque

1.5—2.4 N·m {16—24 kgf·cm, 14—21 in·lbf}



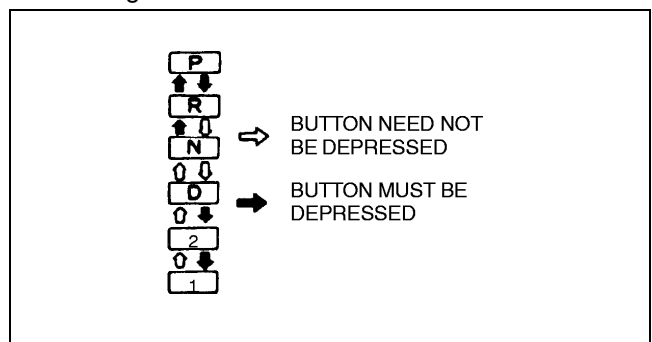
Z5U514WA7

- Install the rear console.
- Verify correct operation of the shift-lock system.
- Connect the negative battery cable.

SELECTOR LEVER INSPECTION

A5U051446102W01

- Verify that the selector lever can be shifted only as shown in the figure.
- Make sure there is a click at each range when shifted from the P position to 1 range, and vice versa.
- Verify that the positions of the selector lever and the indicator are aligned.
- Verify that the selector lever moves smoothly.
 - If not as specified, adjust or repair the selector lever.



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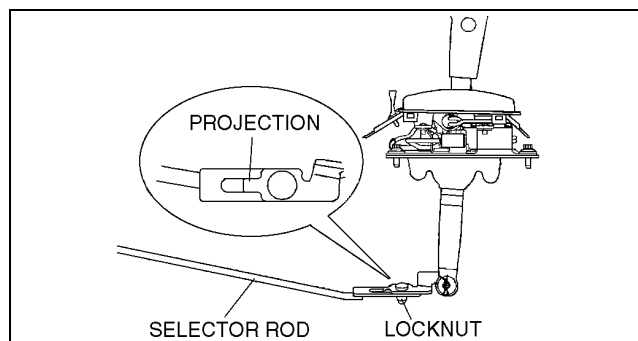
AUTOMATIC TRANSMISSION SHIFT MECHANISM

SELECTOR LEVER ADJUSTMENT

A5U051446102W02

Lever Position Adjustment

1. Remove the rear console, selector lever knob, selector sleeve, and indicator panel.
2. Loosen the locknut.

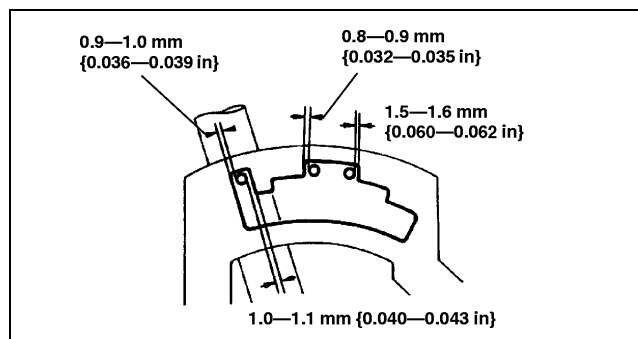


Z5U514WA9

3. Adjust the lever so that the clearance between the guide plate and the guide pin in the P position with the push rod lightly depressed is as shown.
4. Tighten the locknut.

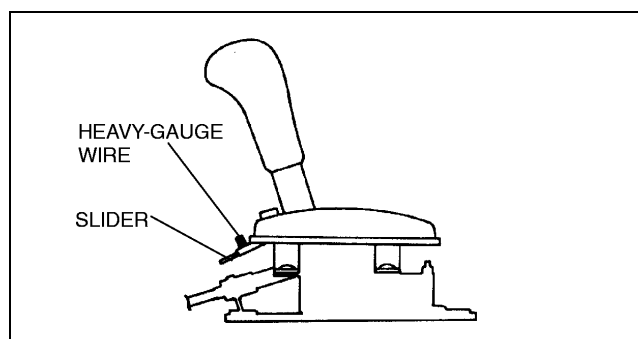
Tightening torque

19—25 N·m {1.9—2.6 kgf·m, 14—18 ft·lbf}



Y5U514WA4

5. Move the selector lever to the N position and D range and verify that there is the same clearance between the guide plate and guide pin.
 - If not as specified, readjust the lever.
6. Install the indicator panel, selector sleeve, selector lever knob, and rear console in the reverse order of removal.



U5U51415

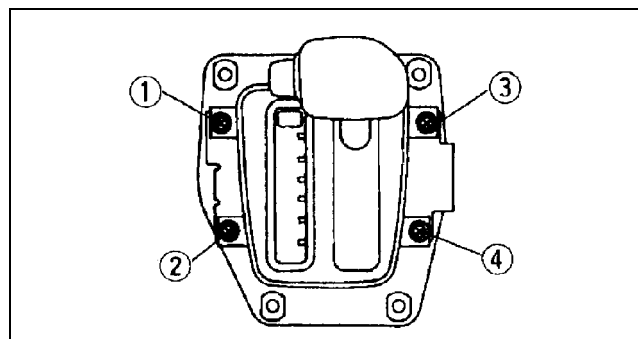
Indicator Panel Adjustment

1. Shift the selector lever to the P position.
2. Loosen the indicator screws.
3. Align the alignment hole in the slider with the hole in the indicator panel. Install suitable heavy-gauge wire to hold the slider.
4. Tighten the indicator mounting screws in the order shown in the figure.

Tightening torque

1.5—2.4 N·m {16—24 kgf·cm, 14—21 in·lbf}

5. Remove the wire from the slider.
6. Verify that the selector lever properly aligns with the indicator in each range.
7. Verify correct operation of the emergency override button.



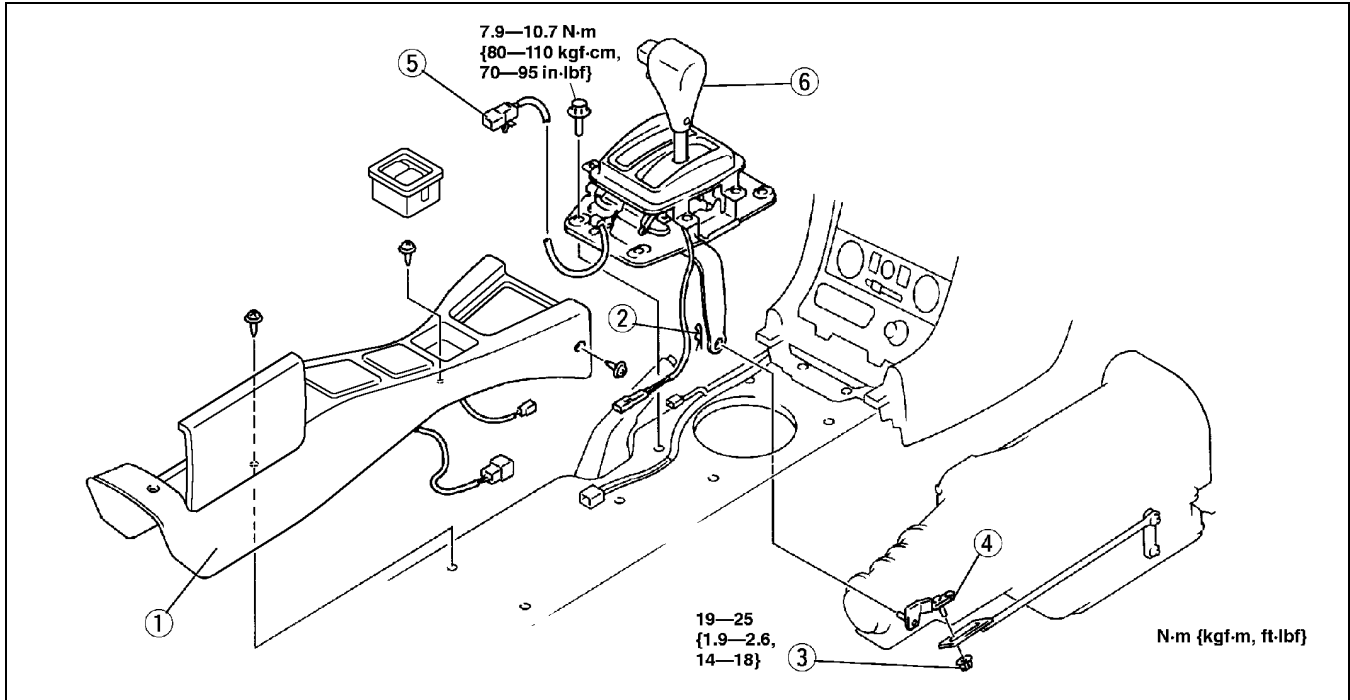
Z5U514WA7

AUTOMATIC TRANSMISSION SHIFT MECHANISM

SELECTOR LEVER REMOVAL/INSTALLATION

A5U051446102W03

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



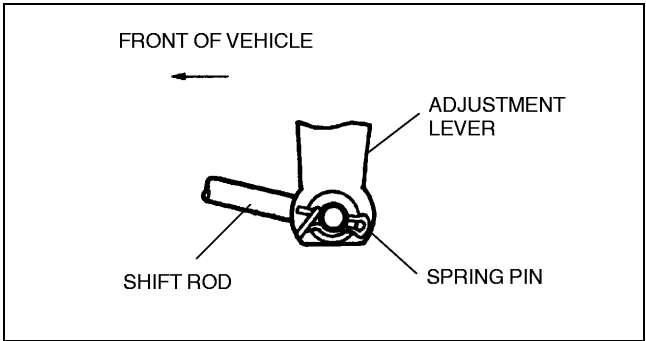
Z5U514WA3

1	Rear console
2	Spring pin (See 05-14-7 Spring Pin Installation Note)
3	Nut

4	Bracket
5	Shift-lock actuator connector
6	Selector lever

Spring Pin Installation Note

- 1. On level ground, jack up the vehicle and support it evenly on safety stands.
- 2. Install a new spring pin as shown in the figure.



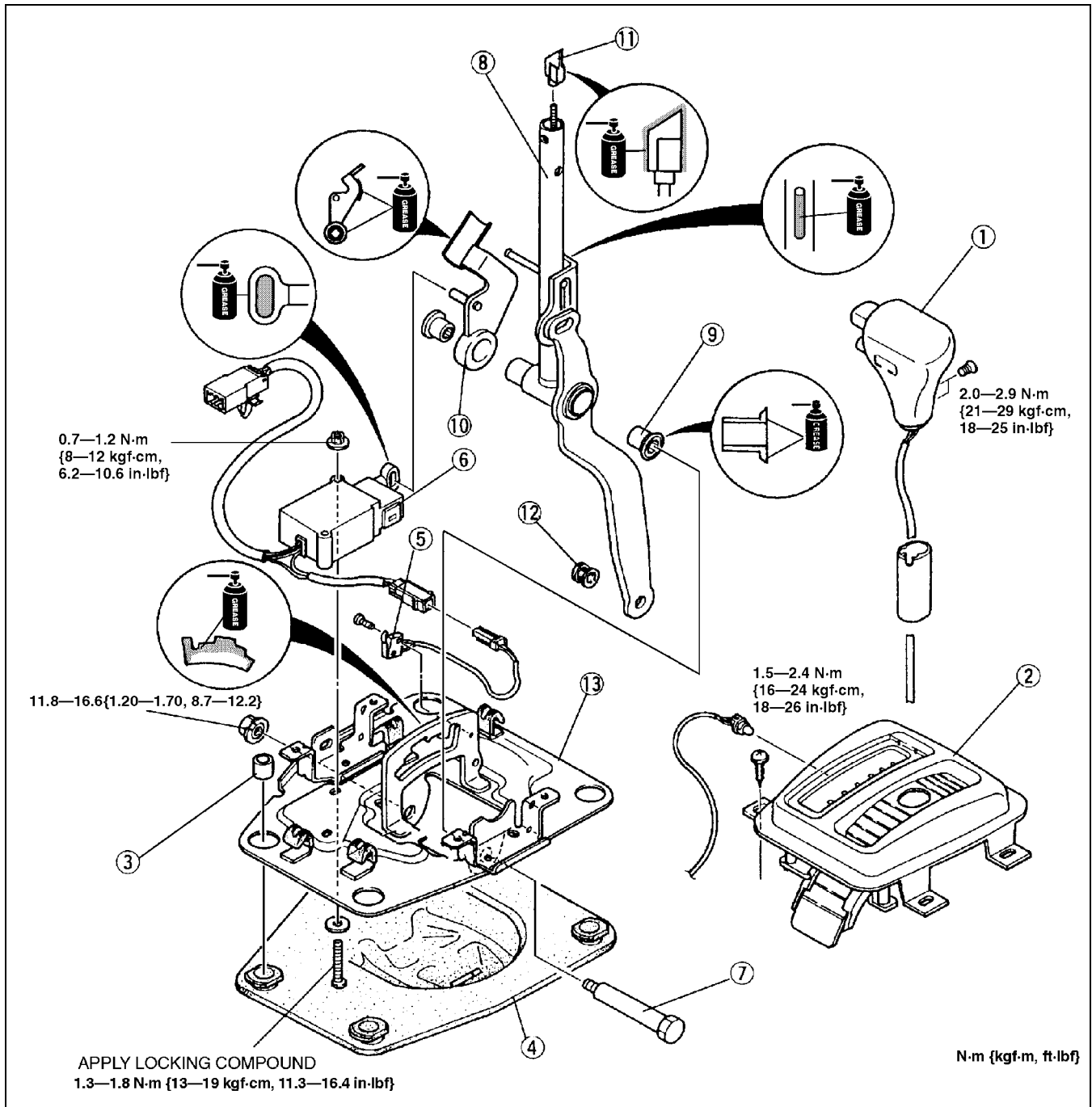
U5U51419

AUTOMATIC TRANSMISSION SHIFT MECHANISM

SELECTOR LEVER DISASSEMBLY/ASSEMBLY

A5U051446102W04

1. Disassemble in the order indicated in the table.
2. Assemble in the reverse order of disassembly.



Z5U514WA2

1	Selector lever knob
2	Indicator panel (See 05-14-9 Indicator Panel Assembly Note)
3	Spacer
4	Boot
5	P position switch
6	Shift-lock actuator
7	Spindle

8	Push rod component
9	Bushing
10	Lock lever
11	Cam (See 05-14-9 Cam Assembly Note)
12	Bushing
13	Selector lever bracket

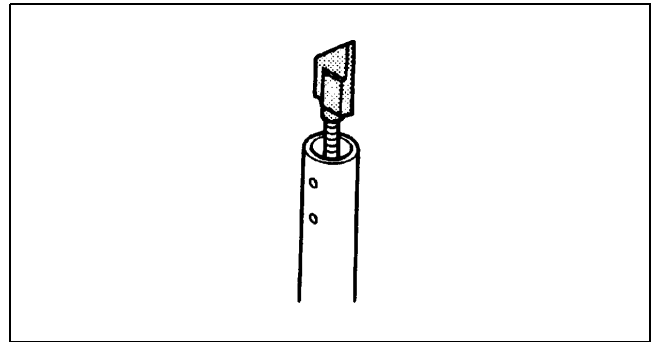
AUTOMATIC TRANSMISSION SHIFT MECHANISM

Cam Assembly Note

1. Temporarily install the cam to the push rod.

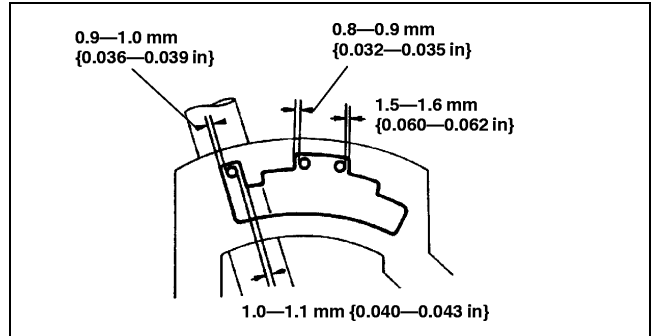
Note

- The clearance becomes smaller by turning the cam clockwise.



U5U51421

2. Adjust the clearance between the guide plate and the guide pin by turning the cam.
3. Install the selector lever knob and verify that the clearance is as specified.
 - Repeat from step 2 if necessary.

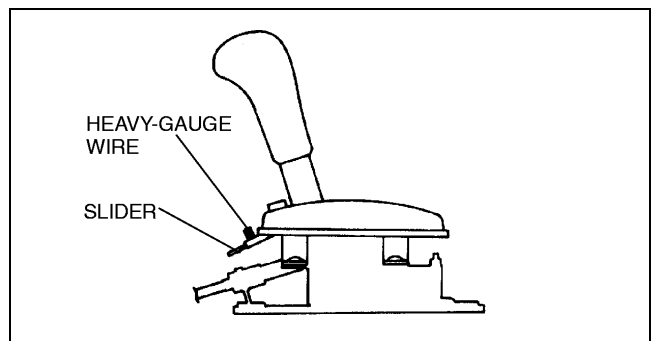


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05-14

Indicator Panel Assembly Note

1. Set the selector sleeve over the selector lever.
2. Grasp the O/D OFF switch wiring harness and pull it while pushing the selector lever knob down fully on the selector lever.
3. Connect the O/D OFF switch connector.
4. Shift the selector lever to the P position.
5. Align the alignment hole in the slider with the hole in the indicator panel. Install suitable heavy-gauge wire to hold the slider.



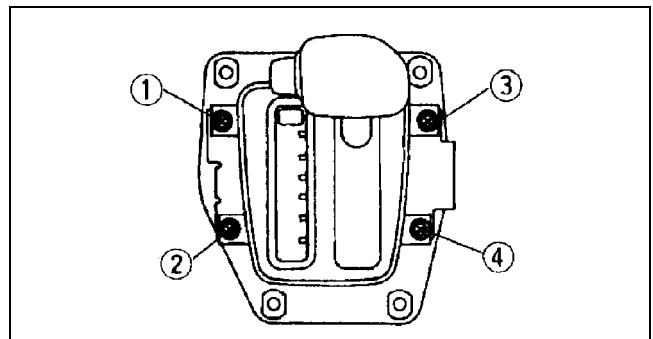
X5U514WAD

6. Tighten the indicator mounting screws in the order shown in the figure.

Tightening torque

1.5—2.4 N·m {16—24 kgf·cm, 14—21 in·lbf}

7. Remove the wire from the slider.
8. Verify that the selector lever properly aligns with the indicator in each range.
9. Verify correct operation of the emergency override button.



Z5U514WA7