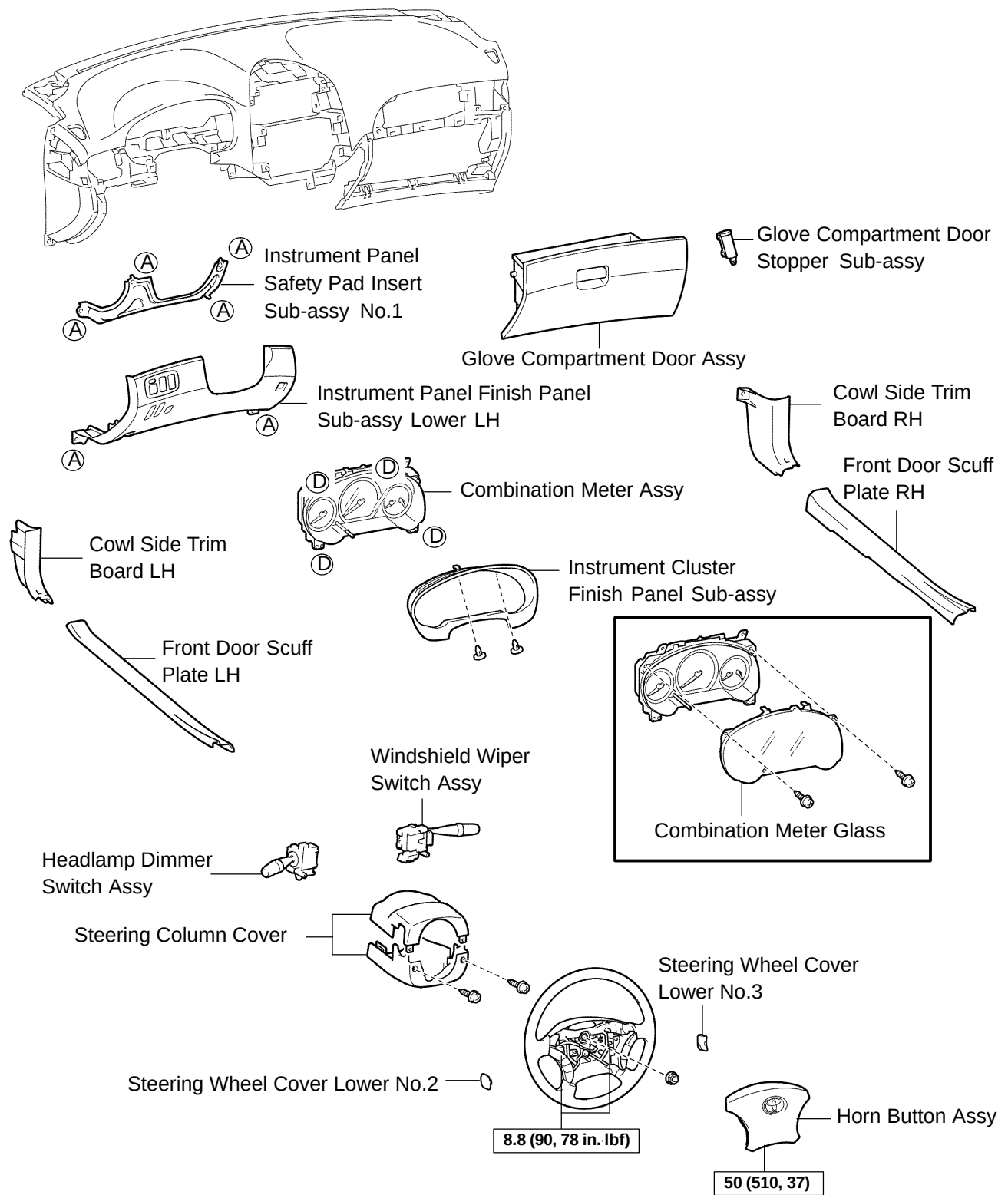


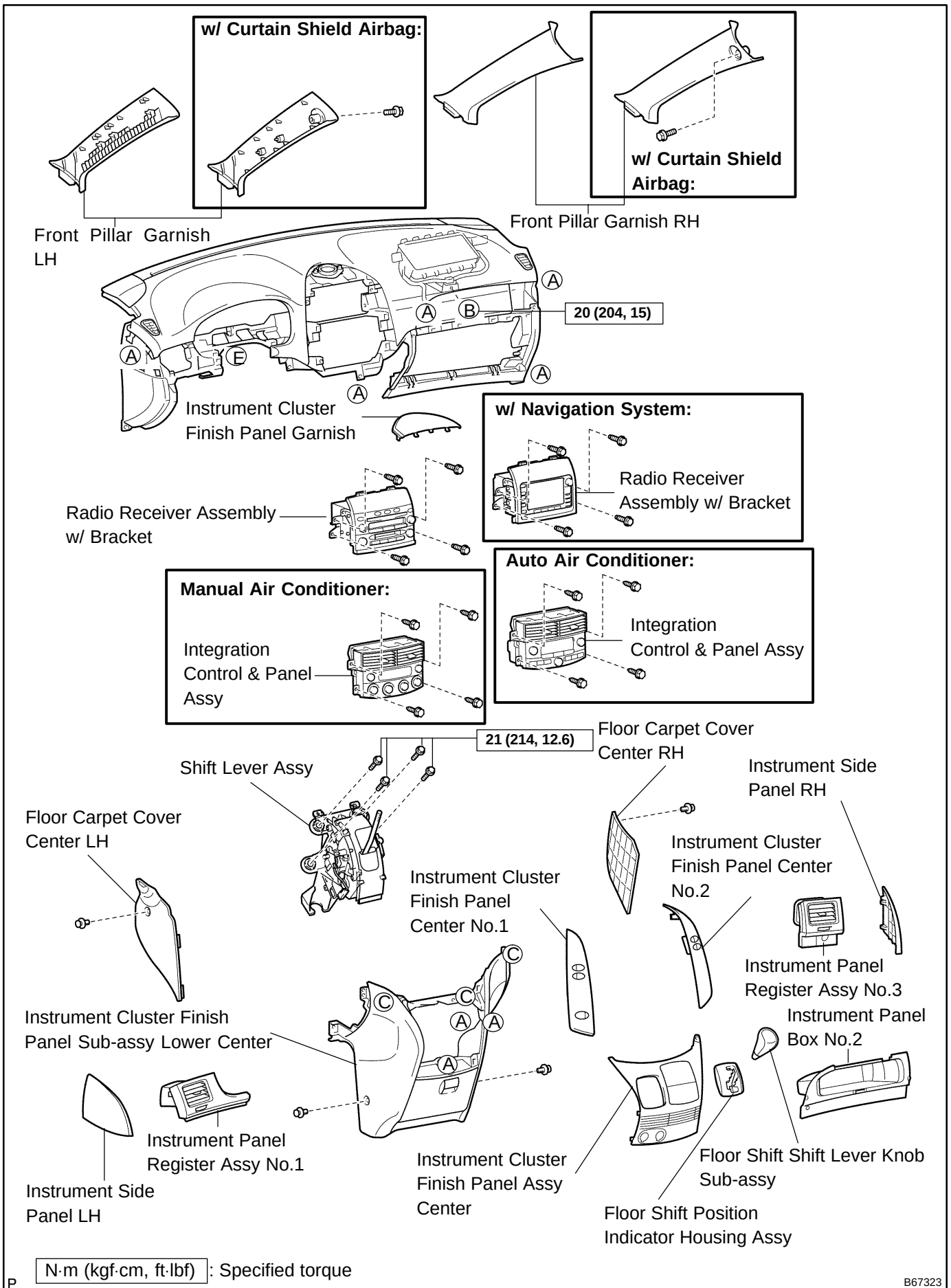
INSTRUMENT PANEL/METER COMPONENTS

710FN-02

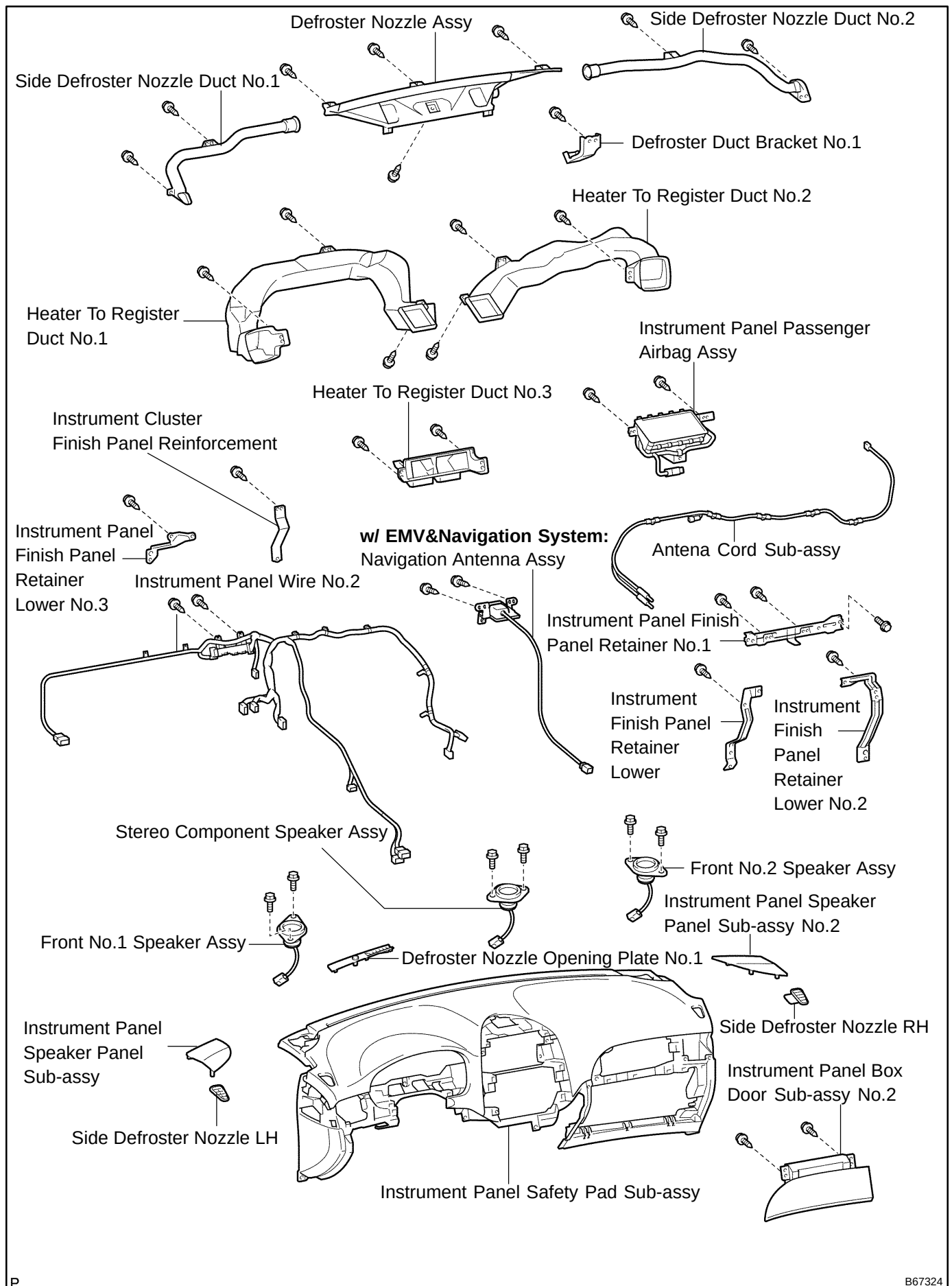


P N·m (kgf·cm, ft·lbf) : Specified torque

B67322



B67323



B67324

ON-VEHICLE INSPECTION

1. INSPECT SPEEDOMETER

- (a) Check the operation.
- (1) Using a speedometer tester, inspect the speedometer for acceptable indication error and check the operation of the odometer.

Reference: km/h (Canada)

Standard indication	Acceptable range
20 km/h	17.5 - 21.5 km/h
40 km/h	38.0 - 42.0 km/h
60 km/h	58.0 - 63.0 km/h
80 km/h	78.0 - 84.0 km/h
100 km/h	98.5 - 104.5 km/h
120 km/h	119.0 - 125.0 km/h
140 km/h	139.0 - 146.0 km/h
160 km/h	159.0 - 167.0 km/h

Reference: MPH (U.S.)

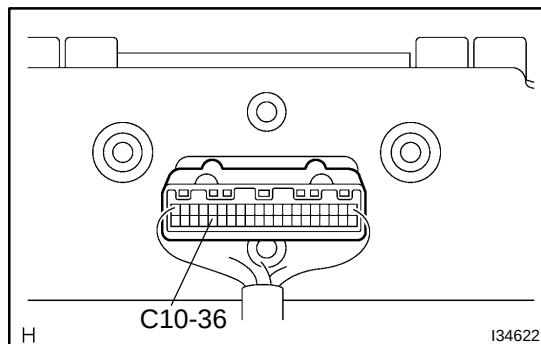
Standard indication	Acceptable range
20 mph	20.0 - 23.0 mph
40 mph	40.0 - 43.5 mph
60 mph	60.0 - 64.0 mph
80 mph	80.0 - 84.5 mph
100 mph	100.0 - 105.0 mph

NOTICE:

Tire wear and over or under inflation will affect the indication error.

- (2) Check the deflection width of the speed meter indicator.

Reference: Below 0.5 km/h (0.3 mph)



2. INSPECT OUTPUT SIGNAL OF VEHICLE SPEED

- (a) Check for the signal.
- (1) While driving the vehicle at the speed of 10 km/h, check the voltage between the terminal C10-36 of the combination meter assy and the body ground.

Standard: Fluctuation between 10 to 14 V or less is repeated 7 times within 1 sec.

NOTICE:

Check it with the ignition switch ON and the connector connected.

3. INSPECT TACHOMETER

- (a) Check the operation
- (1) Connect the tune-up test tachometer, and start the engine.

NOTICE:

- Reversing the connection of the tachometer will damage the transistors and the insides of the diodes.
- When removing or installing the tachometer, be careful not to drop or subject it to heavy shocks.

- (2) Compare the result of the test with standard indication.

DC 13.5 V, 25 °C at (77 °F)

INSTRUMENT PANEL/METER - COMBINATION METER

Standard indication (r/min)	Acceptable range (r/min) Data in () are for reference
700	630 - 770
1,000	(900 - 1100)
2,000	(1850 - 2150)
3,000	2800 - 3200
4,000	(3800 - 4200)
5,000	4800 - 5200
6,000	(5750 - 6250)
7,000	6700 - 7300

INSTRUMENT PANEL SAFETY PAD SUB-ASSY

710FO-01

PRECAUTION

1. PRECAUTION FOR VEHICLE WITH SRS AIRBAG AND SEAT BELT PRETENSIONER

- (a) Some operations in this section may affect SRS airbag system. Before performing the corresponding operations, please read the NOTICE of the SRS airbag for the proper operations.

COMBINATION METER

PROBLEM SYMPTOMS TABLE

710E0-04

Warning Lights:

Symptom	Suspect Area	See page
Check Engine warning light does not come on.	4. Refer to troubleshooting 5. Wire Harness or Connector 6. ECM 7. Combination Meter Assy	05-5 - - -
Discharge warning light does not come on.	1. Perform ACTIVE TEST with hand-held tester 2. Wire Harness or Connector 3. ECM 4. Combination Meter Assy	05-1527 - - -
Brake warning light does not come on.	1. Wire Harness or Connector 2. Skid control ECU 3. Combination Meter Assy	- - -
ABS warning light does not come on.	1. Refer to troubleshooting 2. Wire Harness or Connector 3. Combination Meter Assy	05-383 - -
SRS warning light does not come on.	1. Perform ACTIVE TEST with hand-held tester 2. Refer to troubleshooting 3. Wire Harness or Connector 4. Combination Meter Assy	05-1527 05-431 - -
Open Door warning light does not come on.	1. Perform ACTIVE TEST with hand-held tester 2. Wire Harness or Connector 3. Door Courtesy Switch 4. Body ECU 5. Combination Meter Assy	05-1527 - 05-1131 - -
Fuel Level warning light does not come on.	1. Perform ACTIVE TEST with hand-held tester 2. Wire Harness or Connector 3. Fuel Sender Gauge 4. Combination Meter Assy	05-1527 - - -
Low Oil Pressure warning light does not come on.	1. Perform ACTIVE TEST with hand-held tester 2. Wire Harness or Connector 3. Low Oil Pressure Warning Switch 4. Combination Meter Assy	05-1527 - - -
Driver's seat belt warning light does not come on.	1. Perform ACTIVE TEST with hand-held tester 2. Wire Harness or Connector 3. Body ECU 4. Front Inner Belt Assy 5. Combination Meter Assy	05-1527 - - - -
VSC warning light does not come on.	1. Refer to troubleshooting 2. Wire Harness or Connector 3. Combination Meter Assy	05-431 - -

Indicator Lights:

Symptom	Suspect Area	See page
Shift indicator light does not come on.	1. Perform ACTIVE TEST with hand-held tester 2. Wire Harness or Connector 3. Neutral Start Switch Circuit 4. Combination Meter Assy	05-1527 - - -
Turn indicator light does not come on.	1. Wire Harness or Connector 2. Turn Signal and Hazard Warning System 3. Combination Meter Assy	- 05-1131 -

TRC off indicator light does not come on.	1. Perform ACTIVE TEST with hand-held tester 2. Refer to troubleshooting 3. Wire Harness or Connector 4. Combination Meter Assy	05-1527 05-431 - -
SLIP indicator light does not come on.	1. Perform ACTIVE TEST with hand-held tester 2. Wire Harness or Connector 3. Refer to troubleshooting 4. Combination Meter Assy	05-1527 - 05-431 -
CRUISE indicator light does not come on.	1. Perform ACTIVE TEST with hand-held tester 2. Wire Harness or Connector 3. ECM 4. Combination Meter Assy	05-1527 - - -
"NORM" "READY" indicator light does not come on.	1. Perform ACTIVE TEST with hand-held tester 2. Refer to troubleshooting 3. Wire Harness or Connector 4. ECM 5. Combination Meter Assy	05-1527 05-1985 - - -
High Beam indicator light does not come on.	1. Wire Harness or Connector 2. Headlight Dimmer Switch 3. Combination Meter Assy	- 05-1131 -
Tire pressure indicator light does not come on.	1. Refer to troubleshooting 2. Wire Harness or Connector 3. Skid Control ECU 4. Combination Meter Assy	05-344 - - -
Washer level indicator light does not come on.	1. Wire Harness or Connector 2. Combination Meter Assy 3. Washer Level Sensor	- - -
Key reminder buzzer does not operate.	1. Perform ACTIVE TEST with hand-held tester 2. Wire Harness or Connector 3. Door Courtesy Switch 4. Key Unlock Warning Switch 5. Combination Meter Assy	05-1527 - - 05-1817 -
Seat belt Warning buzzer does not operate (Driver side).	1. Perform ACTIVE TEST with hand-held tester 2. Wire Harness or Connector 3. Front Seat Inner Belt Assy 4. Combination Meter Assy	05-1527 - 71-4 -

Meter Gauges:

Symptom	Suspect Area	See page
Speedometer does not operate.	1. Refer to troubleshooting	05-1539
Water temperature does not operate.	1. Refer to troubleshooting	05-1543
Tachometer does not operate.	1. Refer to troubleshooting	05-1541
Fuel Gauge does not operate or operates abnormally.	1. Refer to troubleshooting	05-1545

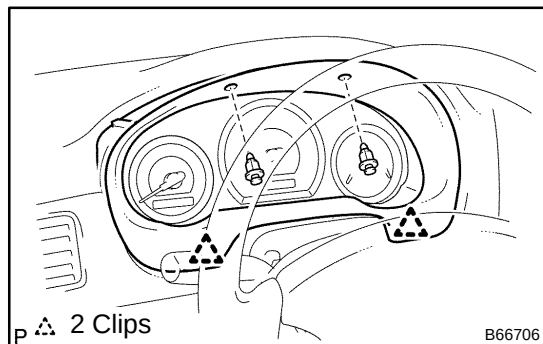
Accessory Meter:

Symptom	Suspect Area	See page
Indicated "Distance to empty" is in excessive error (Other meters operate normally).	1. Wire Harness or Connector 2. Accessory Meter 3. Combination Meter Assy	- - -
Indicated average fuel consumption and instantaneous fuel consumption are in excessive error (Other meters operate normally).	1. Accessory Meter	-
Incomplete display (Does not indicate numbers, some digital segments are missing).	1. Accessory Meter	-

INSTRUMENT PANEL/METER - COMBINATION METER

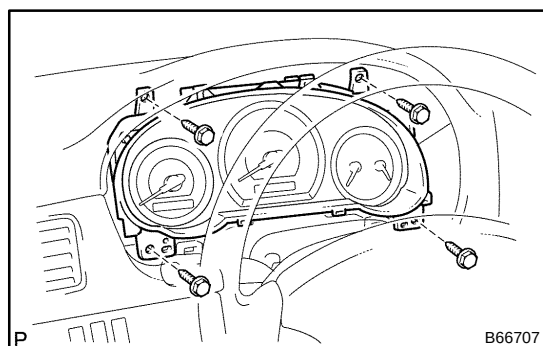
Outside temperature indicator shows "--".	1. Ambient Temperature Sensor	-
	2. Accessory Meter	-
	3. A/C ECU	-
	4. Combination Meter Assy	-
Indicated direction is in excessive error.	1. Accessory Meter	-

COMBINATION METER ASSY OVERHAUL



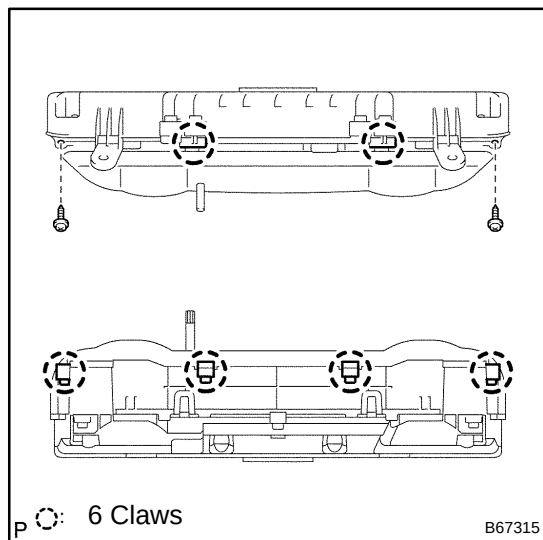
1. REMOVE INSTRUMENT CLUSTER FINISH PANEL SUB-ASSY

- (a) Remove the 2 clips.
- (b) Pull the instrument cluster finish panel sub-assy rearward to remove it.



2. REMOVE COMBINATION METER ASSY

- (a) Remove the 4 screws.
- (b) Pull out the combination meter assy, then disconnect the connectors.



3. REMOVE COMBINATION METER GLASS

- (a) Remove the 2 screws.
- (b) Disengage the 6 claws and remove the combination meter glass.

REPLACEMENT

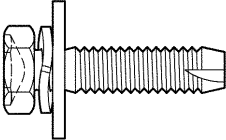
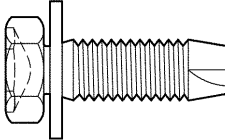
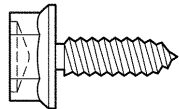
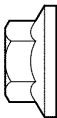
HINT:

COMPONENTS: See page 71-6

1. TABLE OF BOLT, SCREW AND NUT

HINT:

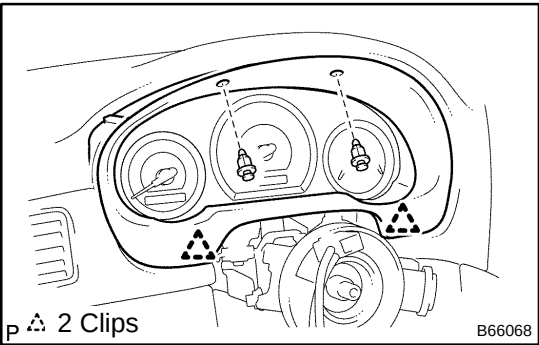
The bolts, the screws and the nuts, which are necessary for installation and removal of the instrument panel, are shown in the illustration below with alphabets.

Code	Shape	Code	Shape	Code	Shape
<A>	 $\phi = 6$ (0.24) L = 25 (0.98) 90080-11372		 $\phi = 8$ (0.31) L = 25 (0.98) 90080-11449	<C>	 $\phi = 5$ (0.20) L = 16 (0.63) 90159-50384
<D>	 $\phi = 6$ (0.24) 90179-06009				

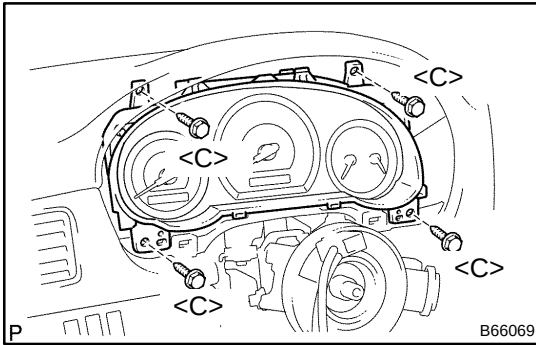
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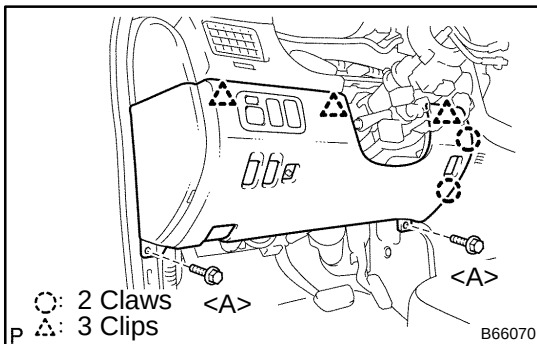
- 2. DISCONNECT BATTERY NEGATIVE TERMINAL (See page 60-1)
- 3. REMOVE STEERING WHEEL COVER LOWER NO.2
- 4. REMOVE STEERING WHEEL COVER LOWER NO.3
- 5. REMOVE HORN BUTTON ASSY (See page 60-19)
- 6. REMOVE STEERING WHEEL ASSY (See page 50-8)
SST 09950-50013 (09951-05010, 09952-05010, 09953-05020, 09954-05021)
- 7. REMOVE STEERING COLUMN COVER (See page 65-24)
- 8. REMOVE HEADLAMP DIMMER SWITCH ASSY (See page 65-24)
- 9. REMOVE WINDSHIELD WIPER SWITCH ASSY (See page 66-15)



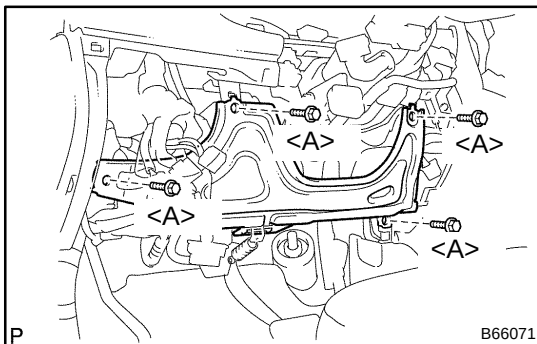
- 10. REMOVE INSTRUMENT CLUSTER FINISH PANEL SUB-ASSY
 - (a) Remove the 2 clips.
 - (b) Pull the instrument cluster finish panel sub-assy rearward to remove it.

**11. REMOVE COMBINATION METER ASSY**

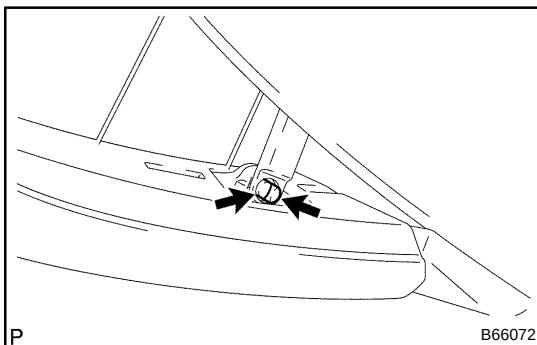
- (a) Remove the 4 screws <C>.
- (b) Pull out the combination meter assy, then disconnect the connectors.

12. REMOVE FRONT DOOR SCUFF PLATE LH (See page 76-27)**13. REMOVE FRONT DOOR SCUFF PLATE RH (See page 76-27)****14. REMOVE COWL SIDE TRIM BOARD LH (See page 76-27)****15. REMOVE COWL SIDE TRIM BOARD RH (See page 76-27)****16. REMOVE INSTRUMENT PANEL FINISH PANEL SUB-ASSY LOWER LH**

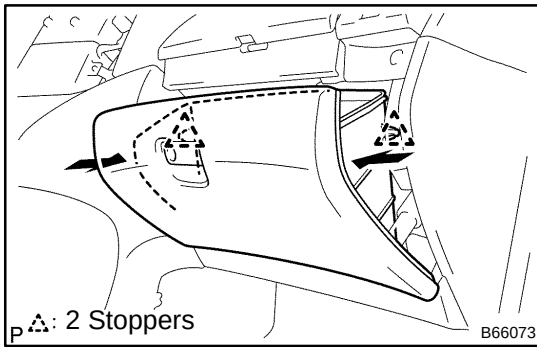
- (a) Remove the 2 bolts <A>.
- (b) Disconnect the hood lock control cable assy.
- (c) Disengage the 2 claws and 3 clips, and then remove the instrument panel finish panel sub-assy lower LH.
- (d) Disconnect the connectors.

**17. REMOVE INSTRUMENT PANEL SAFETY PAD INSERT SUB-ASSY NO.1**

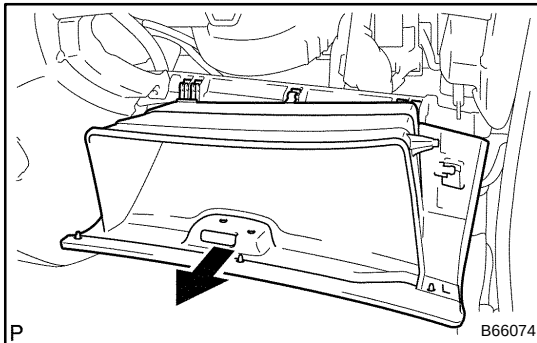
- (a) Remove the 4 bolts <A> and instrument panel safety pad insert sub-assy No.1.
- (b) Disconnect the connector.

**18. REMOVE GLOVE COMPARTMENT DOOR STOPPER SUB-ASSY**

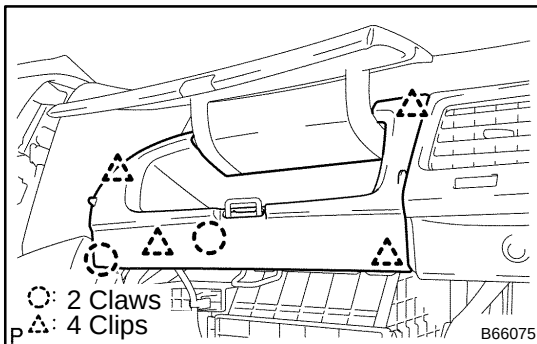
- (a) Disengage the claw, and remove the glove compartment door stopper sub-assy.

**19. REMOVE GLOVE COMPARTMENT DOOR ASSY**

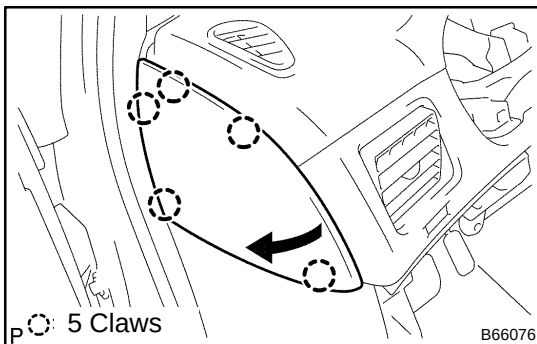
- (a) Push the right side wall and then push the left wall to release the stoppers.



- (b) Pull the glove compartment door sub-assy rearward to remove it.

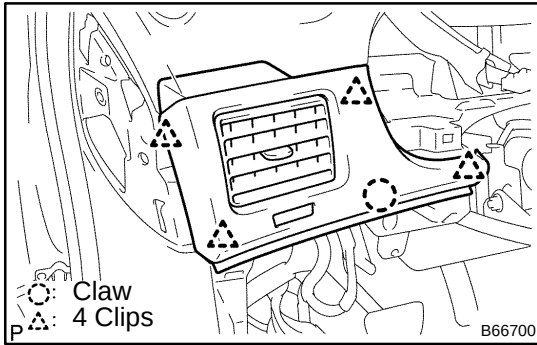
**20. REMOVE INSTRUMENT PANEL BOX NO.2**

- (a) Disengage the 2 claws and the 4 clips, and remove the instrument panel box No.2.

**21. REMOVE INSTRUMENT SIDE PANEL LH**

- (a) Disengage the 5 claws by pulling up the edge of the instrument side panel LH from the rear of the vehicle.
- (b) Remove the instrument side panel LH.

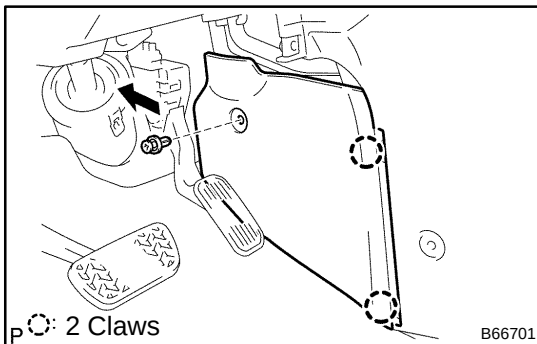
22. REMOVE INSTRUMENT SIDE PANEL RH



23. REMOVE INSTRUMENT PANEL REGISTER ASSY NO.1

- (a) Disengage the claw and 4 clips, and then remove the instrument panel register assy No.1.

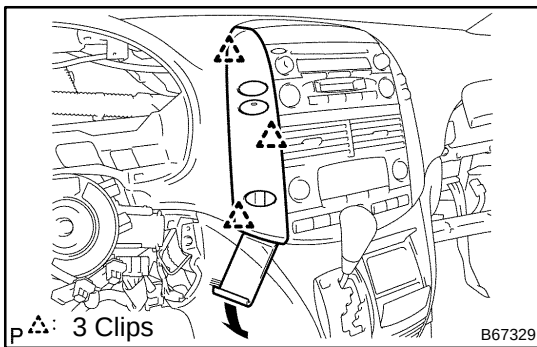
24. REMOVE INSTRUMENT PANEL REGISTER ASSY NO.3



25. REMOVE FLOOR CARPET COVER CENTER LH

- (a) Remove the clip on the floor carpet cover center LH.
- (b) Depress the edge of the floor carpet cover center LH around the claws to disengage the two claws under beneath of the floor carpet cover center LH.
- (c) Slightly sliding the floor carpet cover center LH to the front of the vehicle, detach the two claws from the instrument cluster finish panel sub-assy lower center at the floor carpet cover center LH.
- (d) Remove the floor carpet cover center LH.

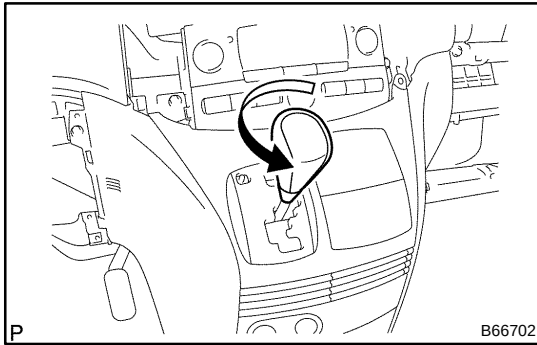
26. REMOVE FLOOR CARPET COVER CENTER RH



27. REMOVE INSTRUMENT CLUSTER FINISH PANEL CENTER NO.1

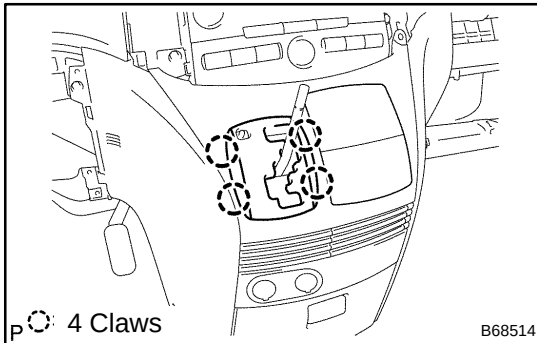
- (a) Using a moulding remover, disengage the 3 clips as shown in the illustration.
- (b) Disconnect the connector and remove the instrument cluster finish panel center No.1.

28. REMOVE INSTRUMENT CLUSTER FINISH PANEL CENTER NO.2



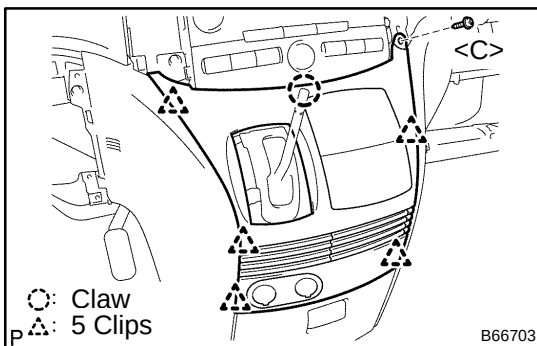
29. REMOVE SHIFT LEVER KNOB SUB-ASSY

- (a) Remove the floor shift lever knob sub-assy.



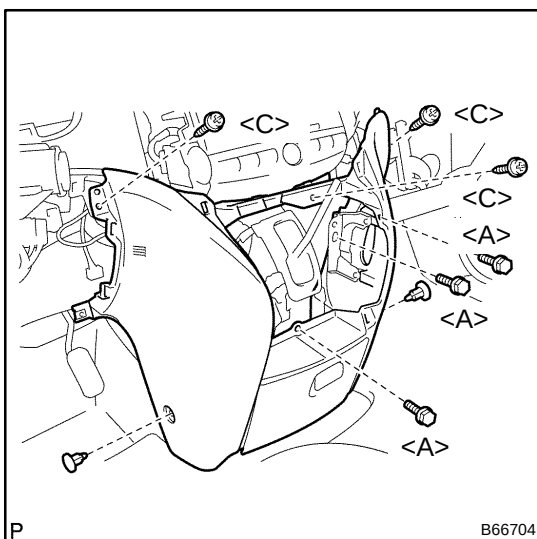
30. REMOVE FLOOR SHIFT POSITION INDICATOR HOUSING ASSY

- (a) Disengage the 4 claws, and remove the floor shift position indicator housing assy.



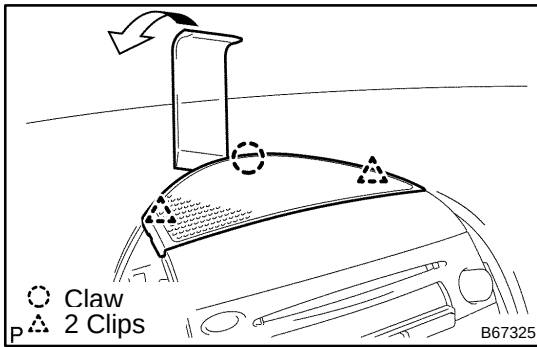
31. REMOVE INSTRUMENT CLUSTER FINISH PANEL ASSY CENTER

- (a) Remove the screw <C>.
(b) Disengage the 5 clips and the claw from the lowest part on the instrument cluster finish panel assy center in order.
(c) Disconnect the connectors at the instrument cluster finish panel sub-assy lower center, and then remove the instrument cluster finish panel assy center.



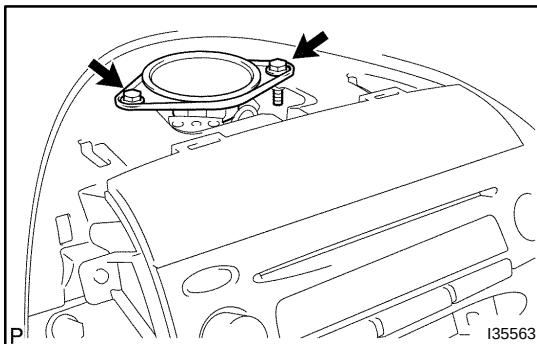
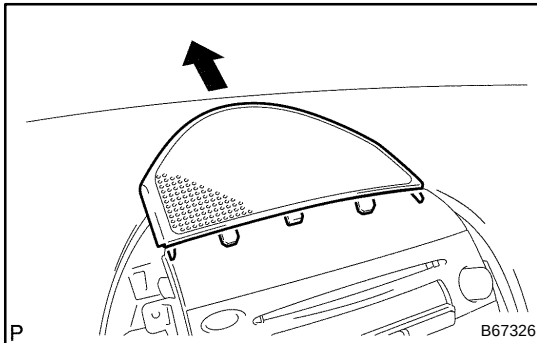
32. REMOVE INSTRUMENT CLUSTER FINISH PANEL SUB-ASSY LOWER CENTER

- (a) Remove the 2 clips on both sides.
(b) Remove the 3 screws <C> and 3 bolts <A>.
(c) Pull the instrument cluster finish panel sub-assy lower center rearward to remove it.
(d) Disconnect the connector.



33. REMOVE INSTRUMENT CLUSTER FINISH PANEL GARNISH

- Insert the edge of a moulding remover between the instrument cluster finish panel garnish and the radio receiver from the top center, and then lean the moulding remover toward the front of the vehicle to raise the instrument cluster finish panel garnish.
- Disengage the claw on the top of the instrument cluster finish panel garnish and the two clips from the radio receiver.
- Pull up the instrument cluster finish panel garnish to the front of the vehicle to disengage the 5 claws at the bottom of the instrument cluster finish panel garnish.
- Remove the instrument cluster finish panel garnish.



34. REMOVE STEREO COMPONENT SPEAKER ASSY

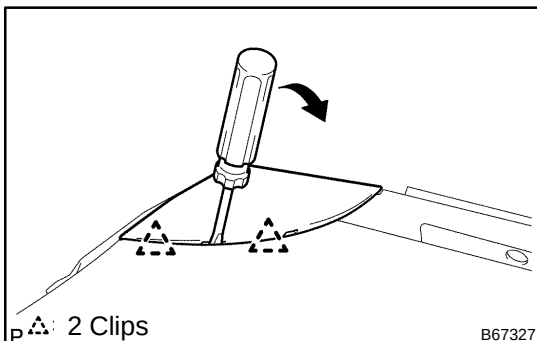
- Remove the 2 screws and stereo component speaker assy.
- Disconnect the connector.

35. REMOVE RADIO RECEIVER ASSEMBLY W/BRACKET (See page 67-8)

36. REMOVE INTEGRATION CONTROL & PANEL ASSY (See page 55-25)

37. REMOVE FRONT PILLAR GARNISH LH (See page 76-27)

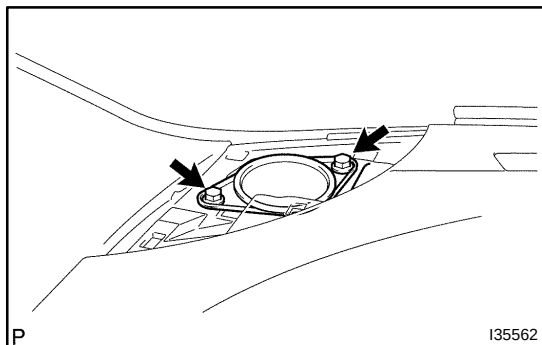
38. REMOVE FRONT PILLAR GARNISH RH (See page 76-27)



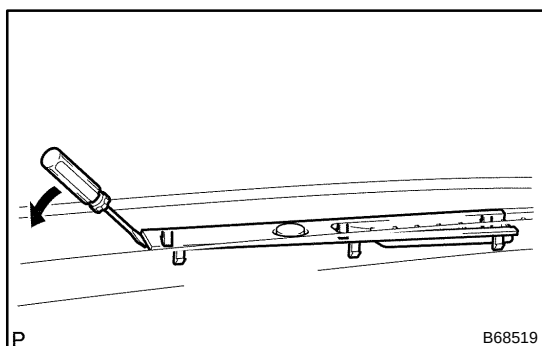
39. REMOVE INSTRUMENT PANEL SPEAKER PANEL SUB-ASSY

- Using a screwdriver, disengage the 2 clips and remove the instrument panel speaker panel sub-assy.

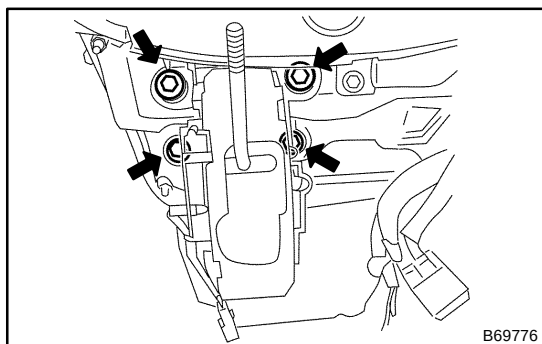
40. REMOVE INSTRUMENT PANEL SPEAKER PANEL SUB-ASSY NO.2

**41. REMOVE FRONT NO.1 SPEAKER ASSY**

- (a) Remove the 2 screws and front No.1 speaker assy.
- (b) Disconnect the connector.

42. REMOVE FRONT NO.2 SPEAKER ASSY**43. REMOVE DEFROSTER NOZZLE OPENING PLATE NO.1**

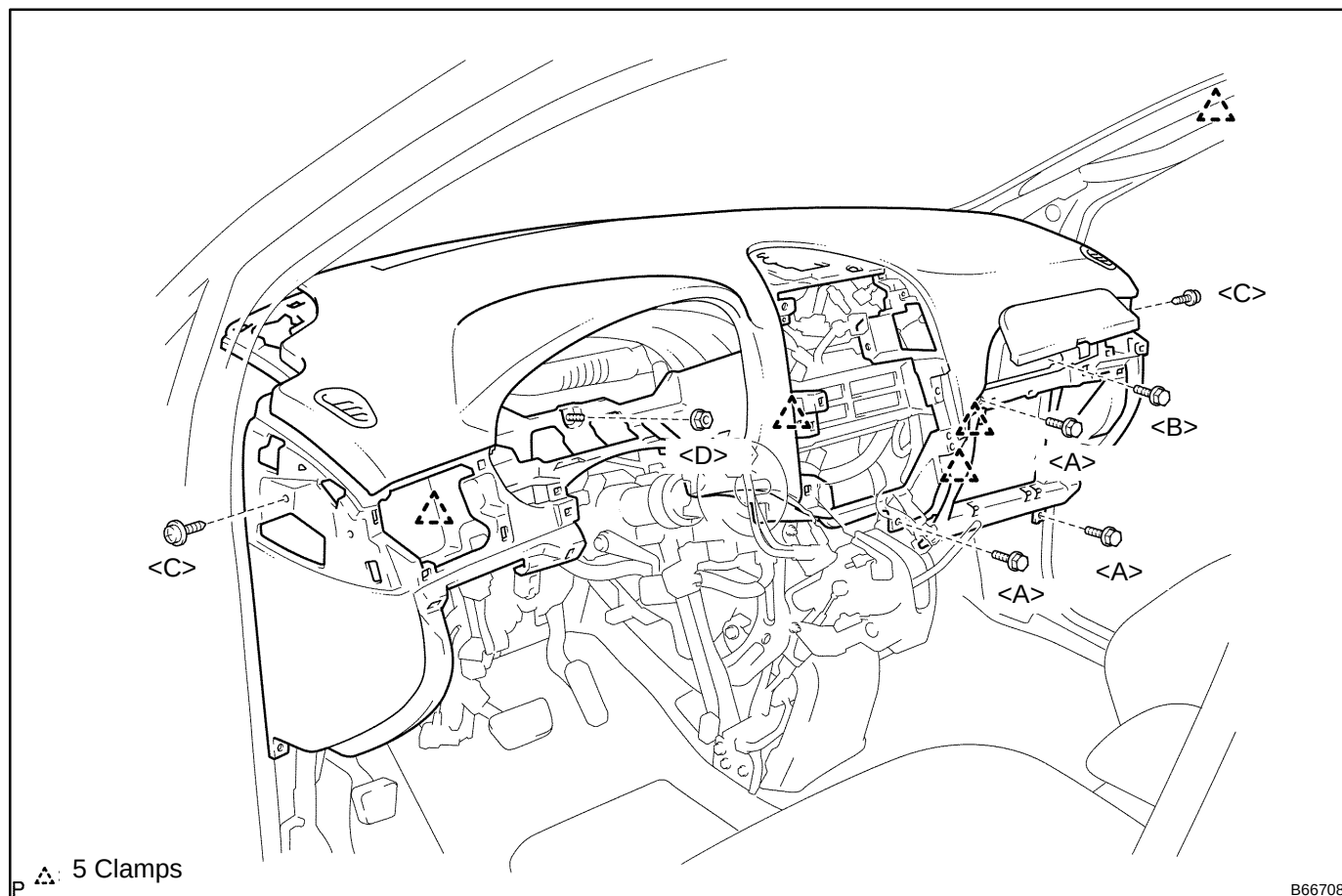
- (a) Using a screwdriver, disengage the 6 claws and remove the defroster nozzle opening plate No.1.
- (b) Disconnect the connector.

**44. SEPARATE SHIFT LEVER ASSY**

- (a) Remove the 4 bolts and separate the shift lever assy.

45. REMOVE INSTRUMENT PANEL SUB-ASSY W/PASSENGER AIRBAG ASSY

- (a) Remove the 4 bolts <A> and 2 screws <C> and a nut <E>.
- (b) Disconnect the connectors.
- (c) Remove the instrument panel sub-assy w/ passenger airbag assy.



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46. REMOVE SIDE DEFROSTER NOZZLE DUCT NO.1

- (a) Remove the 2 screws <C> and defroster nozzle duct No.1.

47. REMOVE SIDE DEFROSTER NOZZLE DUCT NO.2

- (a) Remove the 2 screws <C> and defroster nozzle duct No.2.

48. REMOVE DEFROSTER NOZZLE ASSY

- (a) Remove the 4 screws <C> and defroster nozzle assy.

49. REMOVE HEATER TO REGISTER DUCT NO.1

- (a) Remove the 3 screws <C> and heater to register duct No.1.

50. REMOVE HEATER TO REGISTER DUCT NO.2

- (a) Remove the 3 screws <C> and heater to register duct No.2.

51. REMOVE HEATER TO REGISTER DUCT NO.3

- (a) Remove the 2 screws <C> and heater to register duct No.3.

52. REMOVE SIDE DEFROSTER NOZZLE LH**53. REMOVE SIDE DEFROSTER NOZZLE RH****54. REMOVE INSTRUMENT PANEL FINISH PANEL RETAINER LOWER NO.3**

- (a) Remove the 2 screws <C> and instrument panel finish panel retainer lower No.3.

55. REMOVE INSTRUMENT CLUSTER FINISH PANEL REINFORCEMENT

- (a) Remove the screw <C> and instrument cluster finish panel reinforcement.

56. REMOVE DEFROSTER DUCT BRACKET NO.1

- (a) Remove the screw <C> and defroster duct bracket No.1.

57. REMOVE INSTRUMENT FINISH PANEL RETAINER LOWER

- (a) Remove the screw <C> and instrument finish panel retainer lower.

58. REMOVE INSTRUMENT FINISH PANEL RETAINER LOWER NO.2

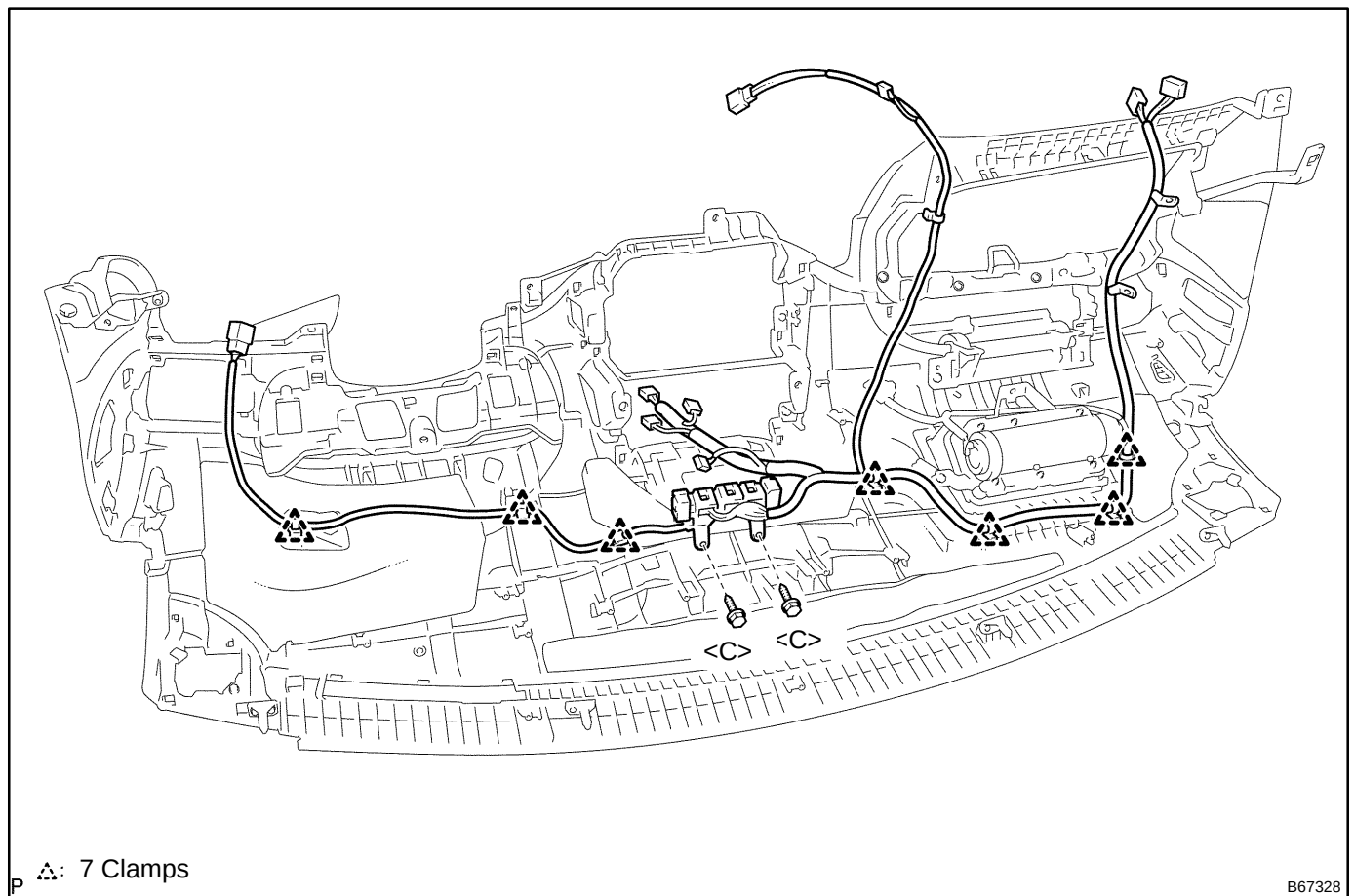
- (a) Remove the screw <C> and instrument finish panel retainer lower No.2.

59. REMOVE INSTRUMENT PANEL FINISH PANEL RETAINER NO.1

- (a) Remove the 2 screws <C> and instrument panel finish panel retainer No.1.

60. REMOVE INSTRUMENT PANEL BOX DOOR SUB-ASSY NO.2**61. REMOVE ANTENNA CORD SUB-ASSY (See page 67-17)****62. REMOVE NAVIGATION ANTENNA ASSY (W/ EMV & NAVIGATION SYSTEM) (See page 67-22)****63. REMOVE INSTRUMENT PANEL WIRE NO.2**

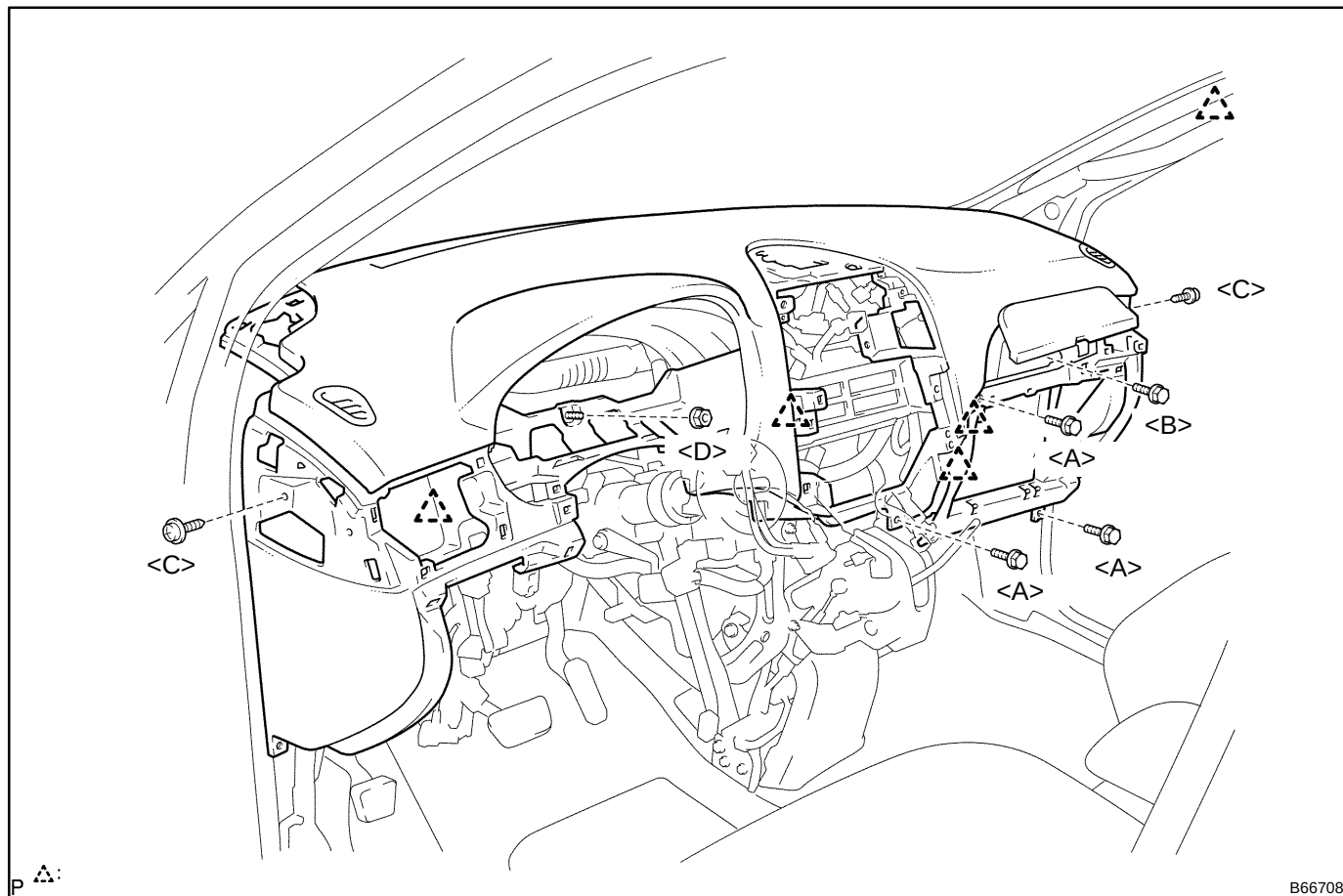
- (a) Remove the 2 screws <C>.
- (b) Disengage the 7 clamps and remove the instrument panel wire No.2.

**64. REMOVE INSTR PNL PASS L/DOOR AIR BAG ASSY (See page 60-31)****65. REMOVE INSTRUMENT PANEL SAFETY PAD SUB-ASSY**

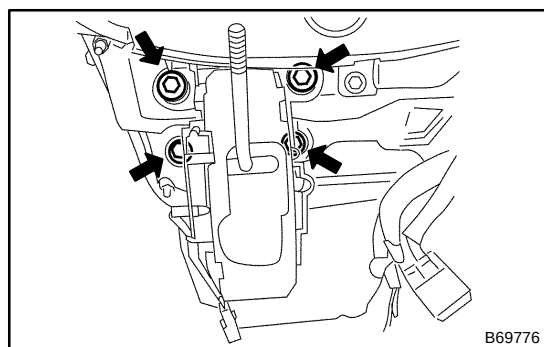
66. INSTALL INSTRUMENT PANEL SUB-ASSY W/PASSENGER AIRBAG ASSY

- (a) Using a torque wrench, install the bolt .

Torque: 20 N·m (204 kgf·cm, 14 ft·lbf)



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**67. INSTALL SHIFT LEVER ASSY**

- (a) Using a torque wrench, install the 4 bolts.

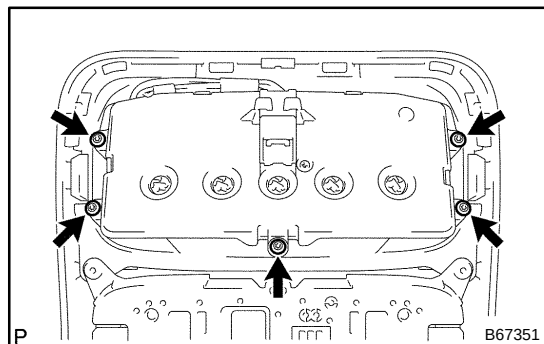
Torque: 21 N·m (214 kgf·cm, 12.6 ft·lbf)

68. ADJUST SPIRAL CABLE SUB-ASSY (See page 60-28)**69. INSTALL STEERING WHEEL ASSY (See page 50-8)****70. INSTALL HORN BUTTON ASSY (See page 60-19)****71. INSPECT HORN BUTTON ASSY (See page 60-12)****72. INSPECT SRS WARNING LIGHT (See page 05-770)**

ACCESSORY METER ASSY REPLACEMENT

710FR-02

1. REMOVE ROOF CONSOLE BOX ASSY (See page 76-27)



2. REMOVE ACCESSORY METER ASSY

- (a) Using a torx[®] socket wrench (T10), remove the 5 screws and accessory meter assy.