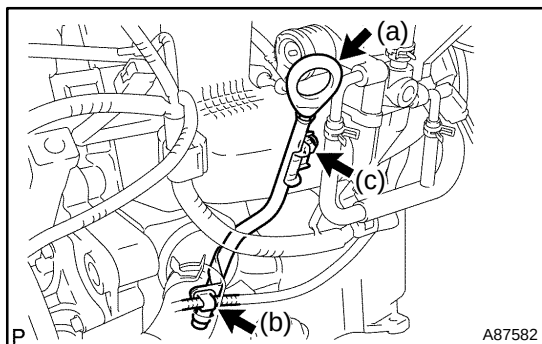


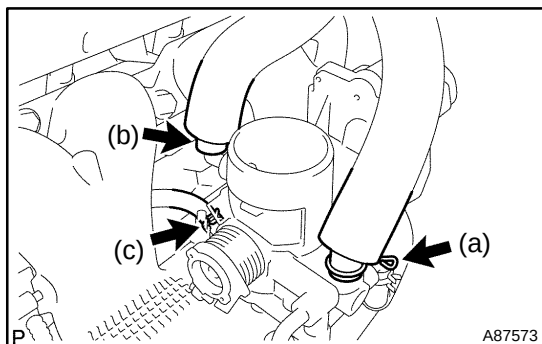
REPLACEMENT

1. REMOVE RADIATOR SUPPORT OPENING COVER (See page 10-15)
2. REMOVE ENGINE UNDER COVER LH
3. DRAIN ENGINE COOLANT (See page 16-11)
4. REMOVE REAR FLOOR BOARD NO.2 (See page 19-2)
5. REMOVE DECK FLOOR BOX REAR (See page 19-2)
6. REMOVE REAR FLOOR BOARD NO.3 (See page 19-2)
7. DISCONNECT ENGINE WIRE NO.3 (BATTERY NEGATIVE TERMINAL) (See page 19-2)
8. REMOVE AIR CLEANER ASSY (See page 10-15)



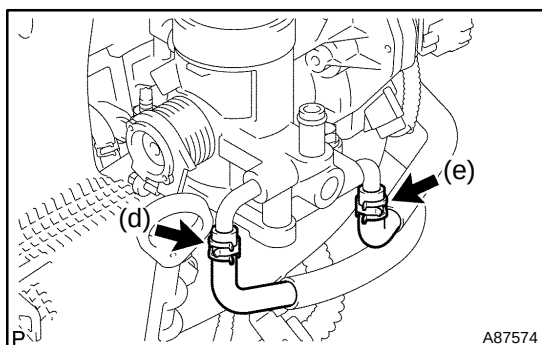
9. REMOVE OIL LEVEL GAUGE GUIDE

- (a) Remove the oil level gauge from the oil level gauge guide.
- (b) Remove the wire harness clamp.
- (c) Remove the bolt, then pull out the oil level gauge guide.

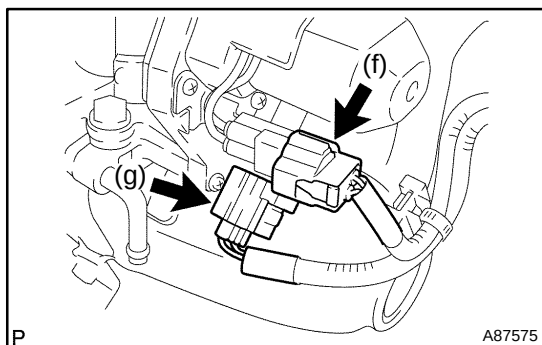


10. REMOVE INTAKE MANIFOLD

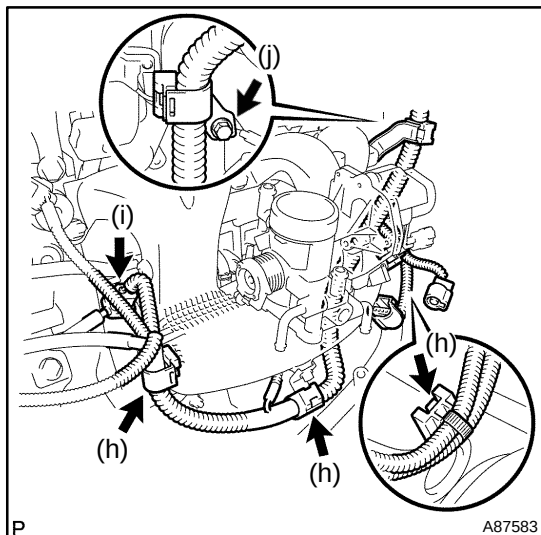
- (a) Disconnect the ventilation hose from the throttle with motor body.
- (b) Disconnect the ventilation hose No. 2 from the throttle with motor body.
- (c) Disconnect the fuel vapor feed hose No. 1 from the throttle with motor body.



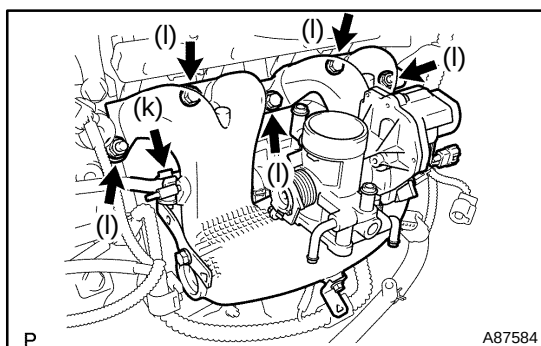
- (d) Disconnect the water by-pass hose from the throttle with motor body.
- (e) Disconnect the water by-pass hose No. 2 from the throttle with motor body.



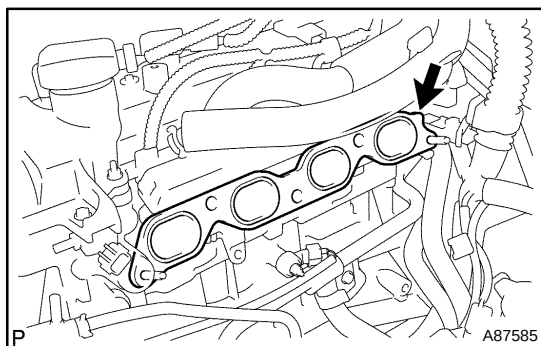
- (f) Disconnect the throttle control motor connector.
- (g) Disconnect the throttle position sensor connector.



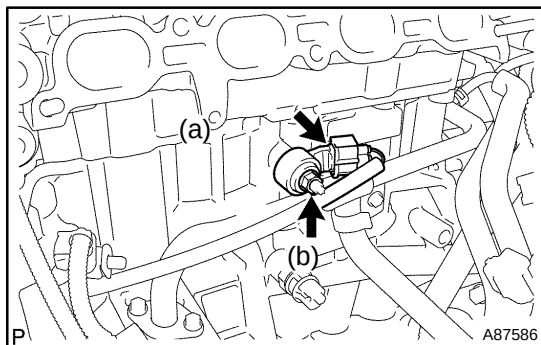
- (h) Remove the 3 wire harness clamps.
- (i) Remove the connector clamp.
- (j) Remove the bolt, then remove the harness clamp bracket.



- (k) Remove the fuel vapor feed hose No. 1 from the hose clamp.
- (l) Remove the 3 bolts and 2 nuts, then remove the intake manifold.

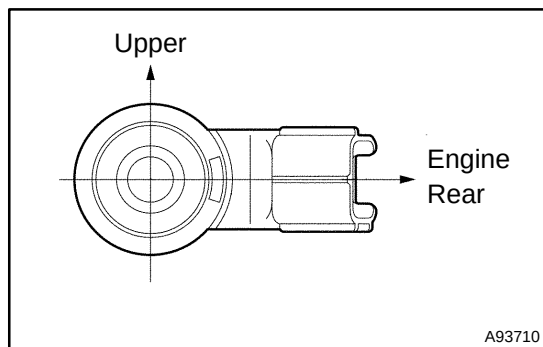


- (m) Remove the gasket from the cylinder head.



11. REMOVE KNOCK SENSOR

- (a) Disconnect the knock sensor connector.
- (b) Remove the nut, then remove the knock sensor.

**12. INSTALL KNOCK SENSOR**

- (a) Install the knock sensor with the nut.

Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)

NOTICE:

Be careful to install the knock sensor in the correct direction.

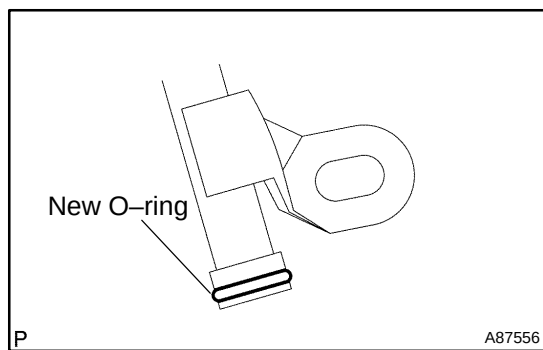
- (b) Connect the knock sensor connector.

13. INSTALL INTAKE MANIFOLD

- (a) Install a new gasket to the cylinder head.
 (b) Install the intake manifold with the 3 bolts and 2 nuts.
Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)
 (c) Install the fuel vapor feed hose No. 1 to the hose clamp.
 (d) Install the harness clamp bracket with the bolt.

Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)

- (e) Install the connector clamp.
 (f) Install the 3 wire harness clamps.
 (g) Connect the throttle position sensor connector.
 (h) Connect the throttle control motor connector.
 (i) Connect the water by-pass hose No. 2 to the throttle with motor body.
 (j) Connect the water by-pass hose to the throttle with motor body.
 (k) Connect the fuel vapor feed hose No. 1 to the throttle with motor body.
 (l) Connect the ventilation hose No. 2 to the throttle with motor body.
 (m) Connect the ventilation hose to the throttle with motor body.

**14. INSTALL OIL LEVEL GAUGE GUIDE**

- (a) Apply a light coat of engine oil to a new O-ring, then install it to the oil level gauge guide.
 (b) Apply a light coat of engine oil to the O-ring again, then install the oil level gauge guide with the bolt.

Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)

NOTICE:

Be careful that the O-ring is not cracked or jammed when installing.

- (c) Install the wire harness clamp.
 (d) Install the oil level gauge to the oil level gauge guide.

15. INSTALL AIR CLEANER ASSY (See page 10-15)**16. CONNECT ENGINE WIRE NO.3 (BATTERY NEGATIVE TERMINAL) (See page 19-2)****17. ADD ENGINE COOLANT (See page 16-11)****18. CHECK FOR ENGINE COOLANT LEAKS (See page 16-11)****19. CHECK FOR ENGINE OIL LEAKS****20. INSTALL REAR FLOOR BOARD NO.3****21. INSTALL DECK FLOOR BOX REAR****22. INSTALL REAR FLOOR BOARD NO.2****23. INSTALL ENGINE UNDER COVER LH**

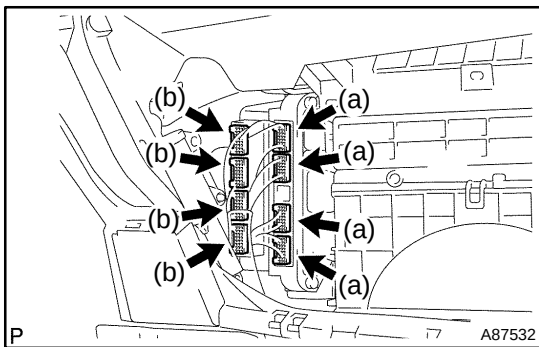
- 24. INSTALL RADIATOR SUPPORT OPENING COVER
- 25. POWER WINDOW CONTROL SYSTEM INITIALIZE (See page [01-28](#))

ECM (1NZ-FXE)

100MV-01

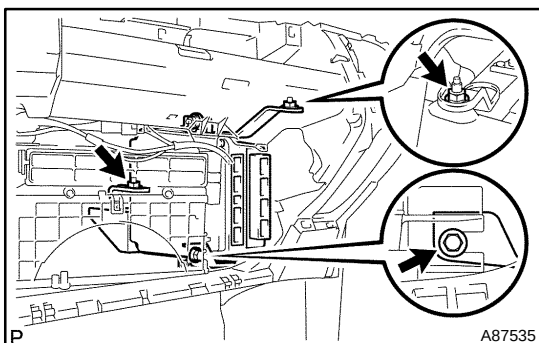
REPLACEMENT

1. REMOVE REAR FLOOR BOARD NO.2 (See page 19-2)
2. REMOVE DECK FLOOR BOX REAR (See page 19-2)
3. REMOVE REAR FLOOR BOARD NO.3 (See page 19-2)
4. DISCONNECT ENGINE WIRE NO.3 (BATTERY NEGATIVE TERMINAL) (See page 19-2)
5. REMOVE INSTRUMENT PANEL REGISTER ASSY NO.1 (See page 71-7)
6. REMOVE INSTRUMENT PANEL FINISH PANEL SUB-ASSY LOWER (See page 71-7)
7. REMOVE INSTRUMENT PANEL FINISH PANEL SUB-ASSY UPPER (See page 71-7)
8. REMOVE INSTRUMENT PANEL REGISTER ASSY NO.3 (See page 71-7)
9. REMOVE INSTRUMENT PANEL REGISTER ASSY NO.4 (See page 71-7)
10. REMOVE INSTRUMENT PANEL REGISTER ASSY NO.2 (See page 71-7)
11. REMOVE MULTI-DISPLAY ASSY (See page 67-7)
12. REMOVE GLOVE COMPARTMENT DOOR STOPPER SUB-ASSY (See page 71-7)
13. REMOVE GLOVE COMPARTMENT DOOR ASSY (See page 71-7)
14. REMOVE INSTRUMENT PANEL CUSHION
15. REMOVE INSTRUMENT CLUSTER FINISH PANEL END
16. REMOVE INSTRUMENT PANEL HOLE COVER (See page 71-7)
17. REMOVE GLOVE COMPARTMENT DOOR (See page 71-7)
18. REMOVE INSTR PANEL SPEAKER PANEL SUB-ASSY NO.1 W/CTR SPEAKER (W/ JBL SOUND SYSTEM) (See page 67-11)
19. REMOVE FRONT PILLAR GARNISH CORNER PIECE LH (See page 76-28)
20. REMOVE FRONT PILLAR GARNISH CORNER PIECE RH (See page 76-28)
21. REMOVE FRONT PILLAR GARNISH LH (See page 76-28)
22. REMOVE FRONT PILLAR GARNISH RH (See page 76-28)
23. DISCONNECT PASSENGER AIRBAG CONNECTOR (See page 60-32)
24. REMOVE INSTRUMENT PANEL SUB-ASSY W/PASSENGER AIRBAG ASSY (See page 71-7)
25. REMOVE HEATER TO REGISTER DUCT NO.3 (See page 55-17)

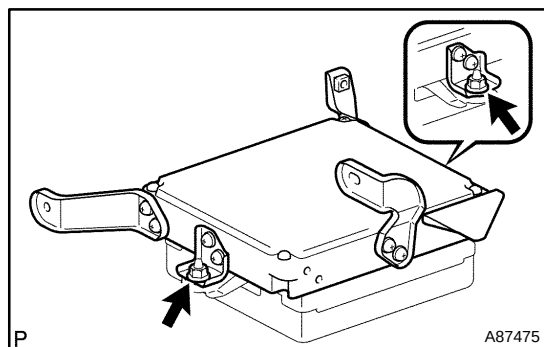


26. REMOVE ECM

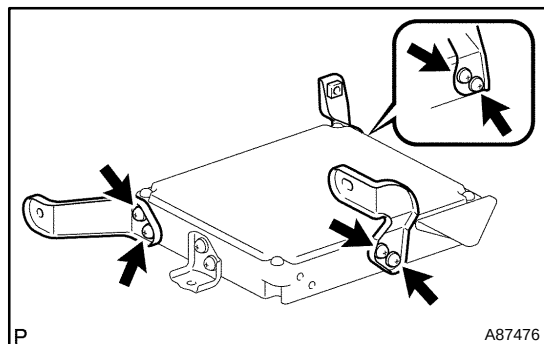
- (a) Disconnect the 4 ECM connectors.
- (b) Disconnect the 4 hybrid vehicle control ECU connectors.



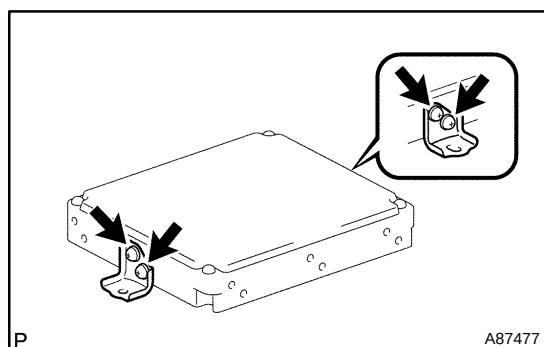
- (c) Remove the 2 bolts and nut, then remove the ECM.



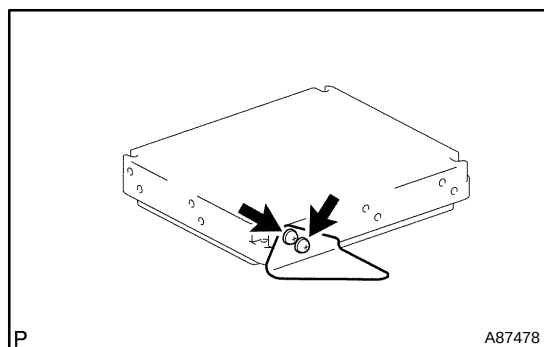
(d) Remove the 2 nuts, then remove the ECM.



(e) Remove the 6 screws, then remove the 3 ECM brackets No. 1.



(f) Remove the 4 screws, then remove the 2 ECM brackets No. 2.



(g) Remove the 2 screws, then remove the ECM bracket No. 3.

27. INSTALL ECM

Torque: 3.0 N·m (31 kgf·cm, 27 in.-lbf)

28. INSTALL HEATER TO REGISTER DUCT NO.3

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

30. CONNECT PASSENGER AIRBAG CONNECTOR

31. INSTALL FRONT PILLAR GARNISH RH

32. INSTALL FRONT PILLAR GARNISH LH

33. INSTALL FRONT PILLAR GARNISH CORNER PIECE RH

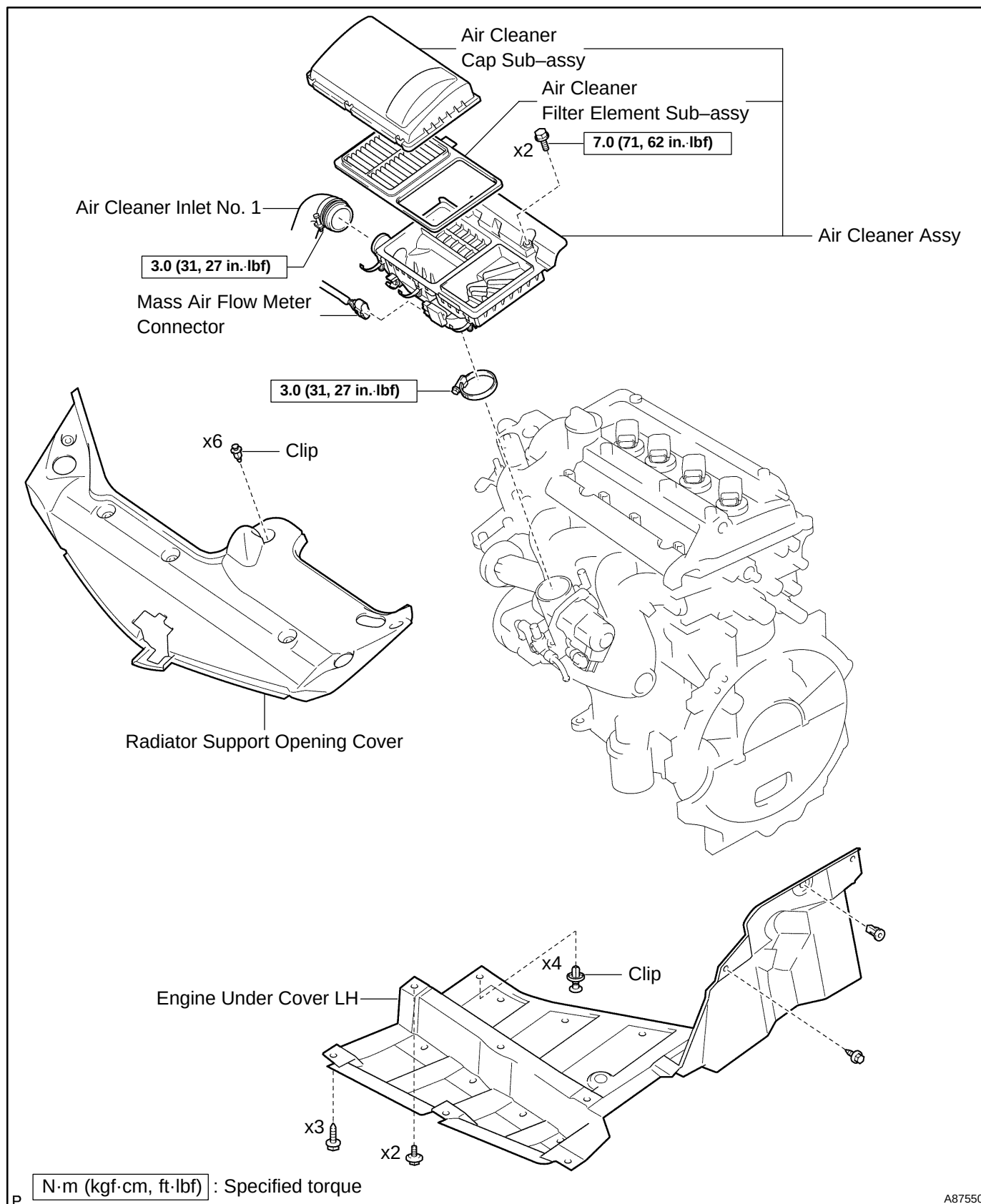
34. INSTALL FRONT PILLAR GARNISH CORNER PIECE LH

35. INSTALL INSTR PANEL SPEAKER PANEL SUB-ASSY NO.1 W/CTR SPEAKER (W/ JBL SOUND SYSTEM)
36. INSTALL GLOVE COMPARTMENT DOOR
37. INSTALL INSTRUMENT PANEL HOLE COVER
38. INSTALL INSTRUMENT CLUSTER FINISH PANEL END
39. INSTALL INSTRUMENT PANEL CUSHION
40. INSTALL GLOVE COMPARTMENT DOOR ASSY
41. INSTALL GLOVE COMPARTMENT DOOR STOPPER SUB-ASSY
42. INSTALL MULTI-DISPLAY ASSY
43. INSTALL INSTRUMENT PANEL REGISTER ASSY NO.2
44. INSTALL INSTRUMENT PANEL REGISTER ASSY NO.4
45. INSTALL INSTRUMENT PANEL REGISTER ASSY NO.3
46. INSTALL INSTRUMENT PANEL FINISH PANEL SUB-ASSY UPPER
47. INSTALL INSTRUMENT PANEL FINISH PANEL SUB-ASSY LOWER
48. INSTALL INSTRUMENT PANEL REGISTER ASSY NO.1
49. CONNECT ENGINE WIRE NO.3 (BATTERY NEGATIVE TERMINAL) (See page [19-2](#))
50. INSPECT SRS WARNING LIGHT (See page [05-1397](#))
51. INSTALL REAR FLOOR BOARD NO.3
52. INSTALL DECK FLOOR BOX REAR
53. INSTALL REAR FLOOR BOARD NO.2
54. POWER WINDOW CONTROL SYSTEM INITIALIZE (See page [01-28](#))

THROTTLE W/MOTOR BODY ASSY (1NZ-FXE)

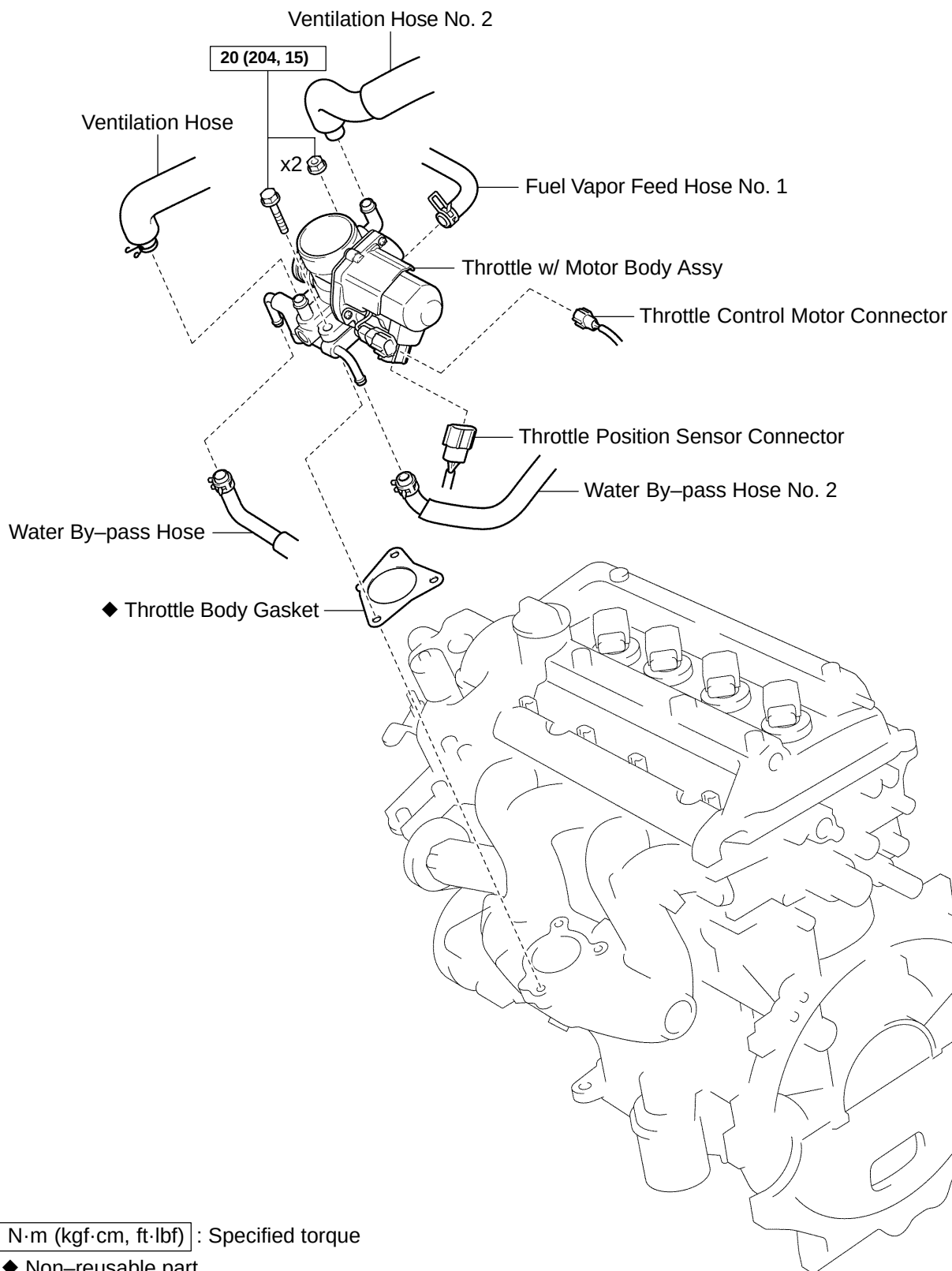
COMPONENTS

100MR-01



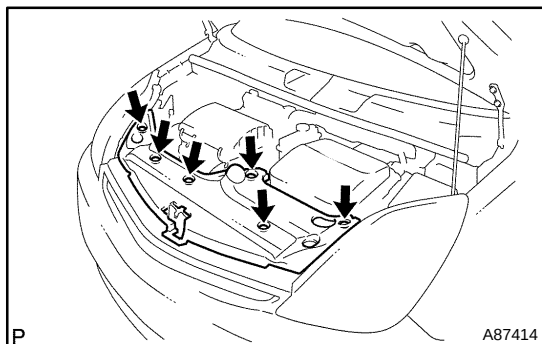
cardiagn.com

A87550



A87551

REPLACEMENT



1. REMOVE RADIATOR SUPPORT OPENING COVER

- (a) Remove the 6 clips, then remove the radiator support opening cover.

2. REMOVE ENGINE UNDER COVER LH

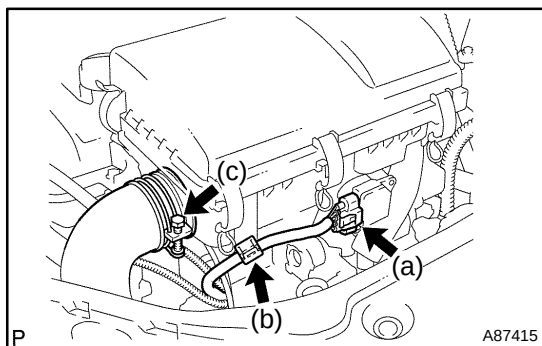
3. DRAIN ENGINE COOLANT (See page 16-11)

4. REMOVE REAR FLOOR BOARD NO.2 (See page 19-2)

5. REMOVE DECK FLOOR BOX REAR (See page 19-2)

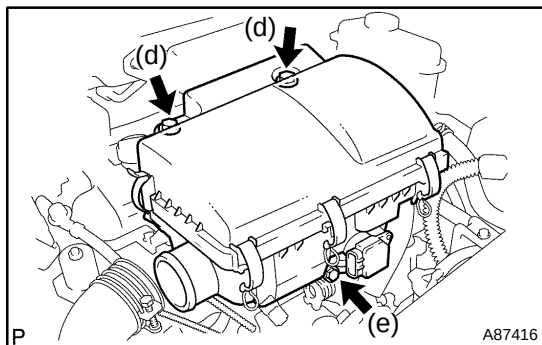
6. REMOVE REAR FLOOR BOARD NO.3 (See page 19-2)

7. DISCONNECT ENGINE WIRE NO.3 (BATTERY NEGATIVE TERMINAL) (See page 19-2)

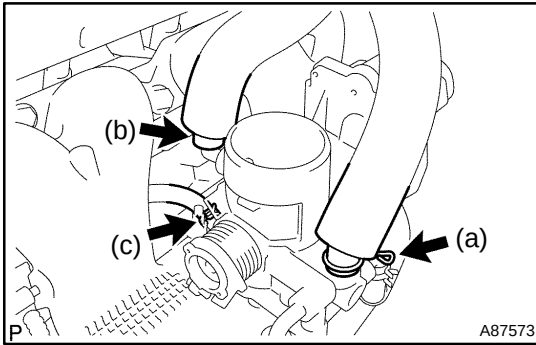


8. REMOVE AIR CLEANER ASSY

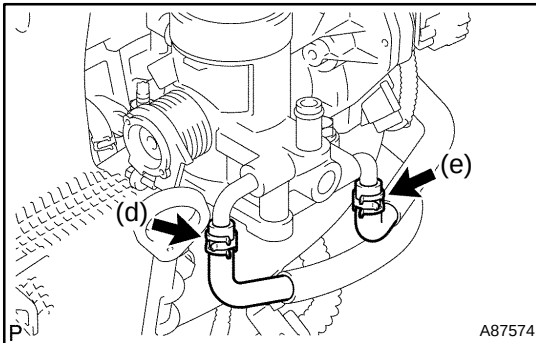
- (a) Disconnect the mass air flow meter connector.
 (b) Remove the wire harness from the wire harness clamp.
 (c) Loosen the hose clamp bolt, then disconnect the air cleaner inlet No. 1.



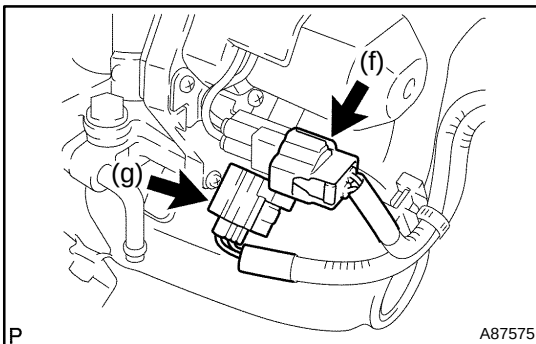
- (d) Remove the 2 bolts.
 (e) Loosen the hose clamp bolt, then remove the air cleaner.

**9. REMOVE THROTTLE W/MOTOR BODY ASSY**

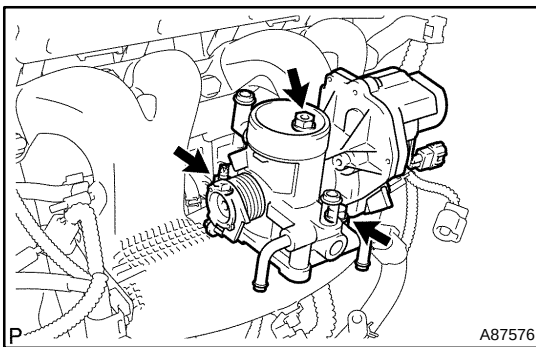
- (a) Disconnect the ventilation hose from the throttle with motor body.
- (b) Disconnect the ventilation hose No. 2 from the throttle with motor body.
- (c) Disconnect the fuel vapor feed hose No. 1 from the throttle with motor body.



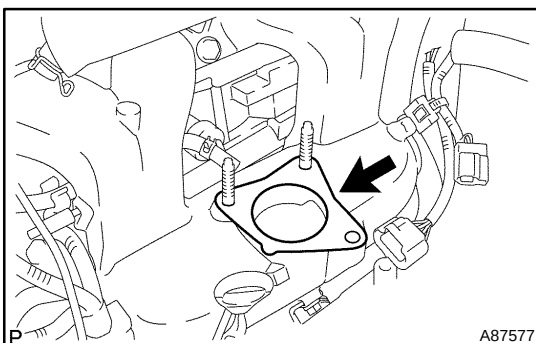
- (d) Disconnect the water by-pass hose from the throttle with motor body.
- (e) Disconnect the water by-pass hose No. 2 from the throttle with motor body.



- (f) Disconnect the throttle control motor connector.
- (g) Disconnect the throttle position sensor connector.



- (h) Remove the bolt and 2 nuts, then remove the throttle w/ motor body.



- (i) Remove the gasket from the intake manifold.

10. INSTALL THROTTLE W/MOTOR BODY ASSY

- (a) Install a new gasket to the intake manifold.
- (b) Install the throttle w/ motor body with the bolt and 2 nuts.
Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)
- (c) Connect the throttle position sensor connector.
- (d) Connect the throttle control motor connector.
- (e) Connect the water by-pass hose No. 2 to the throttle with motor body.
- (f) Connect the water by-pass hose to the throttle with motor body.
- (g) Connect the fuel vapor feed hose No. 1 to the throttle with motor body.
- (h) Connect the ventilation hose No. 2 to the throttle with motor body.
- (i) Connect the ventilation hose to the throttle with motor body.

11. INSTALL AIR CLEANER ASSY

- (a) Install the air cleaner with the 2 bolts.
Torque: 7.0 N·m (71 kgf·cm, 62 in·lbf)
- (b) Tighten the hose clamp bolt.
Torque: 3.0 N·m (31 kgf·cm, 27 in·lbf)
- (c) Connect the air cleaner inlet No. 1, then tighten the hose clamp bolt.
Torque: 3.0 N·m (31 kgf·cm, 27 in·lbf)
- (d) Connect the mass air flow meter connector.

12. CONNECT ENGINE WIRE NO.3 (BATTERY NEGATIVE TERMINAL) (See page 19-2)**13. ADD ENGINE COOLANT (See page 16-11)****14. CHECK FOR ENGINE COOLANT LEAKS (See page 16-2)****15. INSTALL REAR FLOOR BOARD NO.3****16. INSTALL DECK FLOOR BOX REAR****17. INSTALL REAR FLOOR BOARD NO.2****18. INSTALL ENGINE UNDER COVER LH****19. INSTALL RADIATOR SUPPORT OPENING COVER****20. POWER WINDOW CONTROL SYSTEM INITIALIZE (See page 01-28)**