

LUBRICATION SYSTEM (2AZ-FSE)

ON-VEHICLE INSPECTION

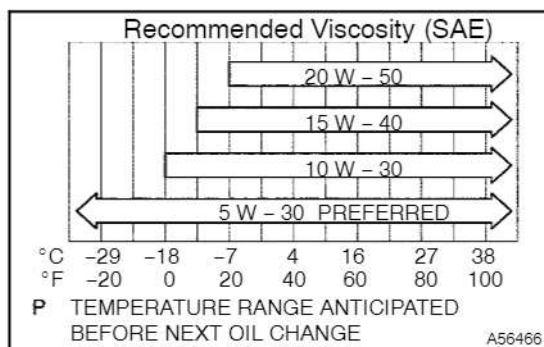
1700E-10

1. CHECK ENGINE OIL LEVEL

- After warm up the engine, then stop the engine and wait for 5 minutes,
- Check that the engine oil level is between the "L" and "F" marks on the oil level gage. If low, check for leakage and add oil up to the full level mark.

NOTICE:

Do not fill with engine oil above the full level mark.

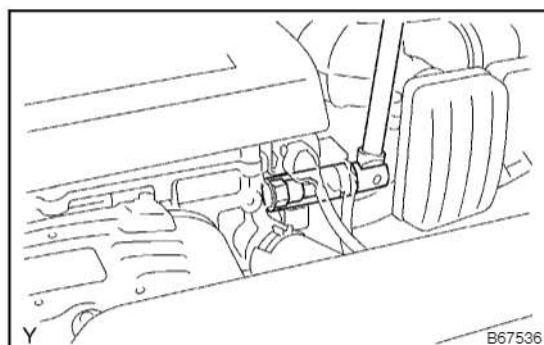


2. CHECK ENGINE OIL QUALITY

- Check the oil for deterioration, water intrusion. If the quality is visibly poor, replace the engine oil.

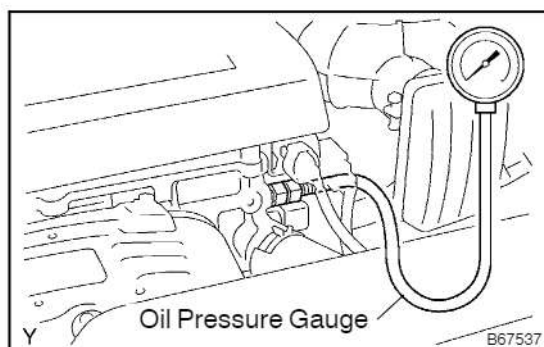
Oil grade:

API grade "SL" Energy-Conserving or ILSAC multi grade engine oil. Recommended viscosity is as shown in the illustration.



3. INSPECT OIL PRESSURE

- Disconnect the oil pressure switch connector.
- Using a deep socket wrench 24mm, remove the oil pressure switch.

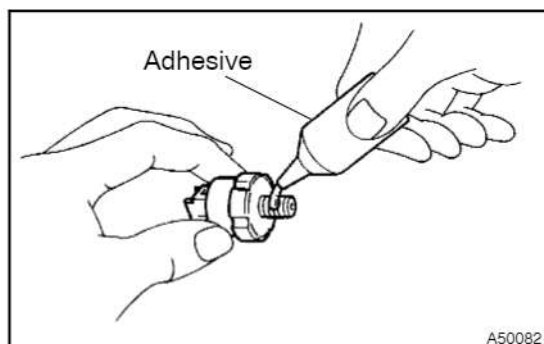


- Install the oil pressure gauge.
- Warm up the engine.
- Check the oil pressure.

Oil pressure:

Engine Condition	Oil Pressure
At idle	29 kPa (0.3 kgf/cm ² , 4.3 psi) or more
At 3,000 rpm	245 to 539 kPa (2.5 to 5.5 kgf/cm ² , 36 to 78 psi) or more

- Remove the oil pressure gauge.



- Apply adhesive to 2 or 3 threads of the oil pressure switch.

Adhesive:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

- Using a 24 mm deep socket wrench, install the oil pressure switch.

Torque: 15 N·m (153 kgf·cm, 11 ft·lbf)

NOTICE:

Do not start the engine within 1 hour of installation.

- (i) Connect the oil pressure switch connector.
- (j) Start the engine.
- (k) Check for the engine oil leaks.

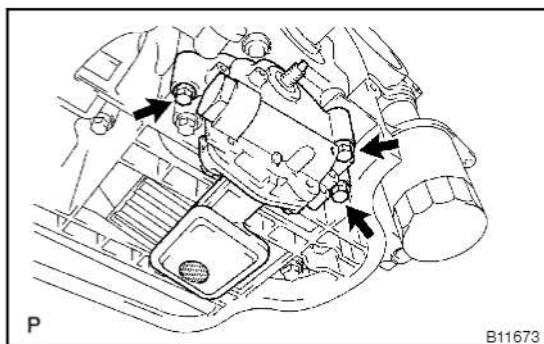
OIL PUMP ASSY (2AZ-FSE)

REPLACEMENT

170IV-01

1. DISCHARGE FUEL SYSTEM PRESSURE (See page 11-4)
2. REMOVE FRONT WHEEL RH
3. REMOVE RADIATOR SUPPORT OPENING COVER (See page 14-23)
4. REMOVE ENGINE ROOM COVER SIDE (See page 14-23)
5. REMOVE ENGINE UNDER COVER LH (See page 14-23)
6. REMOVE ENGINE UNDER COVER NO.4 RH (See page 14-23)
7. REMOVE ENGINE UNDER COVER RH (See page 14-23)
8. DRAIN ENGINE OIL (See page 17-6)
9. REMOVE ENGINE COVER SUB-ASSY NO.1 (See page 14-45)
10. REMOVE FUEL PRESSURE PULSATION DAMPER ASSY
11. DISCONNECT FUEL TUBE SUB-ASSY (See page 11-4)
12. SEPARATE FUEL PIPE SUB-ASSY NO.1 (See page 11-24)
SST 09023-12900
13. REMOVE FUEL PUMP ASSY (See page 11-24)
14. REMOVE FAN AND GENERATOR V BELT (See page 14-5)
SST 09249-63010
15. REMOVE GENERATOR ASSY (See page 19-8)
16. REMOVE EXHAUST PIPE ASSY FRONT (See page 15-2)
17. SEPARATE VANE PUMP ASSY (See page 14-45)
18. SEPARATE RETURN TUBE SUB-ASSY (See page 14-45)
19. SEPARATE COOLER REFRIGERANT SUCTION HOSE NO.1 (LHD STEERING POSITION TYPE) (See page 14-45)
20. REMOVE VANE PUMP OIL RESERVOIR ASSY (See page 14-45)
21. REMOVE OIL RESERVOIR BRACKET NO.1 (See page 14-45)
22. SEPARATE ENGINE WIRE (See page 14-45)
23. REMOVE COOLER BRACKET (LHD STEERING POSITION TYPE) (See page 14-45)
24. REMOVE ENGINE SERVICE COVER BRACKET RH (RHD STEERING POSITION TYPE) (See page 14-45)
25. REMOVE IGNITION COIL ASSY (See page 14-45)
26. REMOVE CYLINDER HEAD COVER SUB-ASSY (See page 14-45)
27. SET NO. 1 CYLINDER TO TDC/COMPRESSION (See page 14-45)
28. REMOVE ENGINE MOUNTING BRACKET NO.2 RH (See page 14-45)
29. REMOVE TRANSVERSE ENGINE ENGINE MOUNTING INSULATOR (See page 14-45)
30. REMOVE CRANKSHAFT PULLEY (See page 14-45)
SST 09213-54015 (91651-60855), 09330-00021, 09950-50013 (09951-05010, 09952-05010, 09953-05020, 09954-05021)
31. REMOVE CHAIN TENSIONER ASSY NO.1 (See page 14-45)
32. REMOVE CRANKSHAFT POSITION SENSOR (See page 18-6)
33. REMOVE OIL PAN SUB-ASSY (See page 14-45)
SST 09032-00100
34. REMOVE V-RIBBED BELT TENSIONER ASSY (See page 14-45)
35. REMOVE TIMING CHAIN OR BELT COVER SUB-ASSY (See page 14-45)
36. REMOVE CRANKSHAFT POSITION SENSOR PLATE NO.1
37. REMOVE CHAIN TENSIONER SLIPPER
38. REMOVE CHAIN VIBRATION DAMPER NO.1
39. REMOVE TIMING CHAIN GUIDE (See page 14-45)

40. REMOVE CHAIN SUB-ASSY
41. REMOVE CRANKSHAFT TIMING GEAR OR SPROCKET
42. REMOVE NO.2 CHAIN SUB-ASSY (See page 14-45)



43. REMOVE OIL PUMP ASSY
 - (a) Remove the 3 bolts, oil pump and gasket.

44. INSTALL OIL PUMP ASSY
 - (a) Install a new gasket and oil pump with 3 bolts.
Torque: 19 N·m (195 kgf·cm, 15 ft·lbf)
45. INSTALL NO.2 CHAIN SUB-ASSY (See page 14-45)
46. INSTALL CRANKSHAFT TIMING GEAR OR SPROCKET
47. SET NO. 1 CYLINDER TO TDC/COMPRESSION (See page 14-45)
48. INSTALL CHAIN VIBRATION DAMPER NO.1
Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)
49. INSTALL CHAIN SUB-ASSY (See page 14-45)
50. INSTALL TIMING CHAIN GUIDE
Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)
51. INSTALL CHAIN TENSIONER SLIPPER (See page 14-45)
52. INSTALL CRANKSHAFT POSITION SENSOR PLATE NO.1 (See page 14-45)
53. INSTALL TIMING CHAIN OR BELT COVER SUB-ASSY (See page 14-45)
54. INSTALL V-RIBBED BELT TENSIONER ASSY (See page 14-45)
55. INSTALL OIL PAN SUB-ASSY (See page 14-45)
56. INSTALL CRANKSHAFT POSITION SENSOR (See page 18-6)
57. INSTALL CRANKSHAFT PULLEY (See page 14-45)
SST 09213-54015 (91651-60855), 09330-00021
58. INSTALL CHAIN TENSIONER ASSY NO.1
59. INSTALL TRANSVERSE ENGINE ENGINE MOUNTING INSULATOR
Torque: 52 N·m (530 kgf·cm, 38 ft·lbf)
60. INSTALL ENGINE MOUNTING BRACKET NO.2 RH (See page 14-45)
61. INSTALL CYLINDER HEAD COVER SUB-ASSY (See page 14-45)
62. INSTALL COOLER BRACKET (LHD STEERING POSITION TYPE)
Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)
63. INSTALL ENGINE SERVICE COVER BRACKET RH (RHD STEERING POSITION TYPE)
Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)
64. INSTALL ENGINE WIRE
Torque: 7.0 N·m (71 kgf·cm, 62 in·lbf)
65. INSTALL OIL RESERVOIR BRACKET NO.1
Torque: 8.0 N·m (82 kgf·cm, 71 in·lbf)
66. INSTALL COOLER REFRIGERANT SUCTION HOSE NO.1 (LHD STEERING POSITION TYPE)
Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)

67. INSTALL RETURN TUBE SUB-ASSY
Torque: 8.0 N·m (82 kgf·cm, 71 in·lbf)
68. INSTALL IGNITION COIL ASSY
Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)
69. INSTALL VANE PUMP ASSY
Torque: 37 N·m (377 kgf·cm, 27 ft·lbf)
70. INSTALL EXHAUST PIPE ASSY FRONT (See page 15-2)
71. INSTALL GENERATOR ASSY (See page 19-8)
72. INSTALL FAN AND GENERATOR V BELT (See page 14-5)
SST 09249-63010
73. INSTALL FUEL PUMP ASSY (See page 11-24)
74. INSTALL FUEL PIPE SUB-ASSY NO.1 (See page 11-24)
SST 09023-12900
75. INSTALL FUEL TUBE SUB-ASSY (See page 11-4)
76. INSTALL FUEL PRESSURE PULSATION DAMPER ASSY (See page 11-24)
77. ADD ENGINE OIL (See page 17-6)
78. CHECK FOR ENGINE OIL LEAKS
79. CHECK FUEL LEAK
80. INSTALL ENGINE COVER SUB-ASSY NO.1
Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)
81. INSTALL FRONT WHEEL RH
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
82. ADD POWER STEERING FLUID (See Pub. No. RM1018E on page 51-4)
83. BLEED POWER STEERING FLUID (See Pub. No. RM1018E on page 51-4)
84. CHECK POWER STEERING FLUID LEVEL IN RESERVER
(See Pub. No. RM1018E on page 51-4)

OIL FILTER SUB-ASSY (2AZ-FSE)

REPLACEMENT

170IW-01

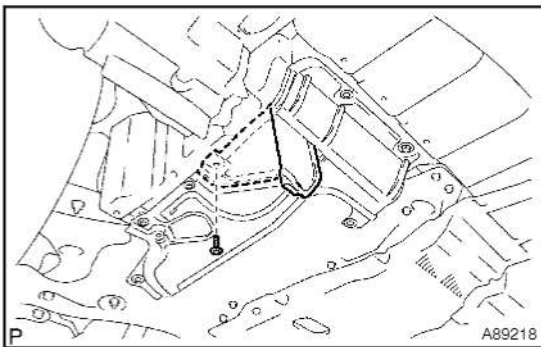
CAUTION:

- Prolonged and repeated contact with mineral oil will result in the removal of natural fats from the skin, leading to dryness, irritation and dermatitis. In addition, used engine oil contains potentially harmful contaminants which may cause skin cancer.
- Exercise caution in order to minimize the length and frequency of contact of your skin to used oil. Wear protective clothing and gloves. Wash your skin thoroughly with soap and water, or use water-less hand cleaner to remove any used engine oil. Do not use gasoline, thinners or solvents.
- In order to preserve the environment, used oil and used oil filter must be disposed of only at designated disposal sites.

1. DRAIN ENGINE OIL

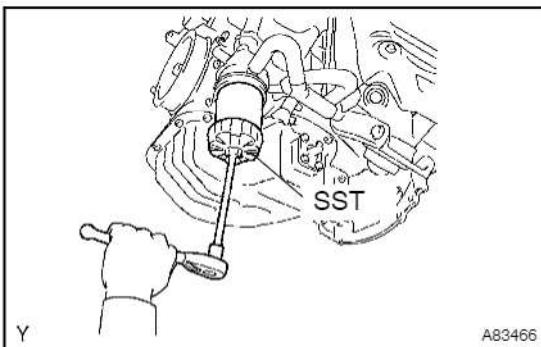
- Remove the oil filler cap
- Remove the drain plug from the oil pan.
- Install a new gasket and drain plug after draining engine oil.

Torque: 25 N·m (250 kgf·cm, 18 ft·lbf)



2. REMOVE OIL FILTER SUB-ASSY

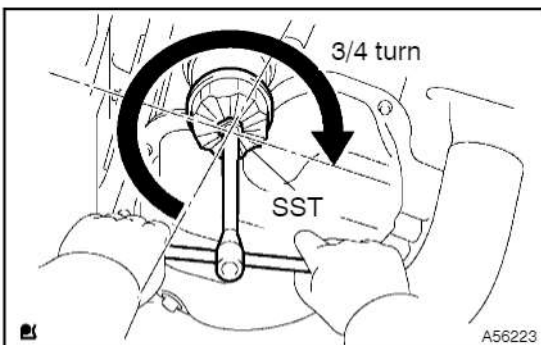
- Remove the bolt, then pull out the engine under cover No.4.



- Using SST, remove the oil filter.
SST 09228-06501

3. INSTALL OIL FILTER SUB-ASSY

- Check and clean the oil filter installation surface.
- Apply clean engine oil to the gasket of a new oil filter.



- Lightly screw the oil filter into place, then tighten it until the gasket contacts the seat.
- Using SST, tighten it by an additional 3/4 turn.

SST 09228-06501

Torque: 17.5 N·m (178 kgf·cm, 13 ft·lbf)

4. ADD ENGINE OIL

- (a) Fill with fresh engine oil.

Capacity:

Condition	Capacity	Quality
Drain and refill w/ oil filter change	3.8 liters (4.0 US qts, 3.3 Imp.qts)	See Page 17-1
Drain and refill w/o oil filter change	3.6 liters (3.8 US qts, 3.2 Imp.qts)	
Dry fill	4.5 liters (4.8 US qts, 4.0 Imp.qts)	

- (b) Install the oil filler cap.

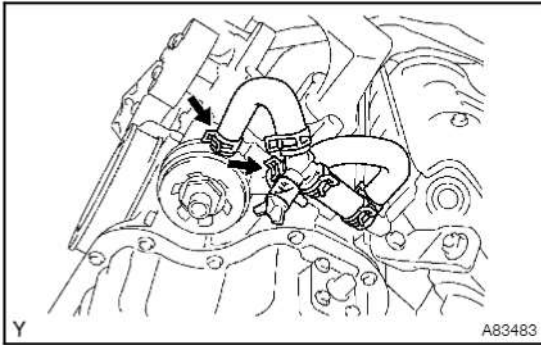
5. CHECK FOR ENGINE OIL LEAKS

OIL COOLER ASSY (2AZ-FSE)

1700X-01

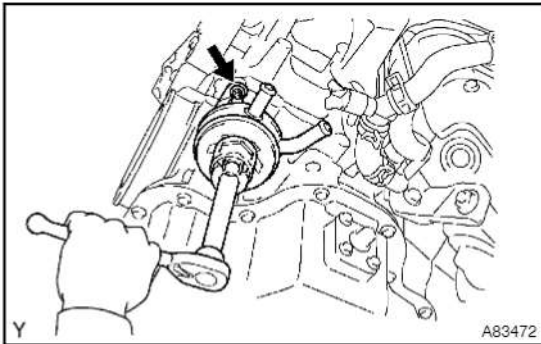
REPLACEMENT

1. REMOVE ENGINE UNDER COVER NO.4 RH (See page 14-23)
2. REMOVE ENGINE UNDER COVER RH (See page 14-23)
3. DRAIN ENGINE OIL (See page 17-6)
4. DRAIN COOLANT (See page 16-7)
5. REMOVE OIL FILTER SUB-ASSY (See page 17-6)
SST 09228-06501



6. REMOVE OIL COOLER ASSY

- (a) Disconnect the 2 oil cooler hoses from the oil cooler.



- (b) Using the 30 mm socket wrench, remove the oil cooler union bolt.
- (c) Remove the nut, then remove the oil cooler.
- (d) Remove the O-ring from the oil cooler.

7. INSTALL OIL COOLER ASSY

- (a) Install a new O-ring to the oil cooler.
 - (b) Install the oil cooler with a nut.
Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)
 - (c) Using the 30 mm socket wrench, install the oil cooler union bolt to the oil cooler.
Torque: 79 N·m (800 kgf·cm, 58 ft·lbf)
 - (d) Connect the 2 oil cooler hoses.
8. INSTALL OIL FILTER SUB-ASSY (See page 17-6)
SST 09228-06501
 9. ADD ENGINE OIL (See page 17-6)
 10. ADD COOLANT (See page 16-7)
 11. CHECK FOR ENGINE OIL LEAKS
 12. CHECK FOR ENGINE COOLANT LEAKS (See page 16-1)

LUBRICATION SYSTEM (1CD–FTV)(From September, 2003)

ON-VEHICLE INSPECTION

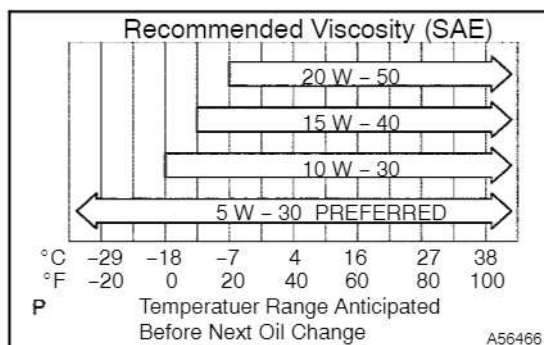
1701Y-01

1. CHECK ENGINE OIL LEVEL

- Warm up the engine. Stop the engine, then wait for 5 minutes.
 - Check that the engine oil level is between the 2 marks on the oil level gage.
- If low, check for leakage and add oil up to the upper mark.

NOTICE:

Do not fill with engine oil above the upper mark.



2. CHECK ENGINE OIL QUALITY

- Check the oil for deterioration, water intrusion, discoloring or thinning.

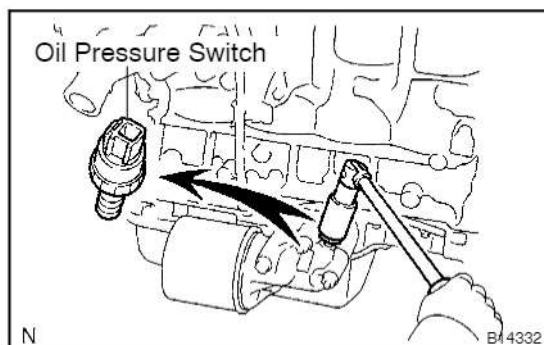
If the quality is visibly poor, replace the oil.

Oil grade:

Use ACEA B1, API grade CF - 4, CF or G-DLD-1.

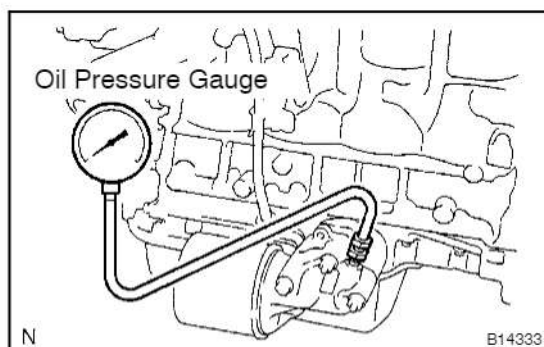
(You may also use API CE or CD.)

SAE 5W - 30 is the best choice for your vehicle in terms of good fuel economy and good starting in cold weather.



3. REMOVE OIL PRESSURE SWITCH ASSY

- Disconnect the oil pressure switch connector.
- Using a deep socket wrench 24mm, remove the oil pressure switch.



4. INSTALL OIL PRESSURE GAUGE

- Install the oil pressure gauge.

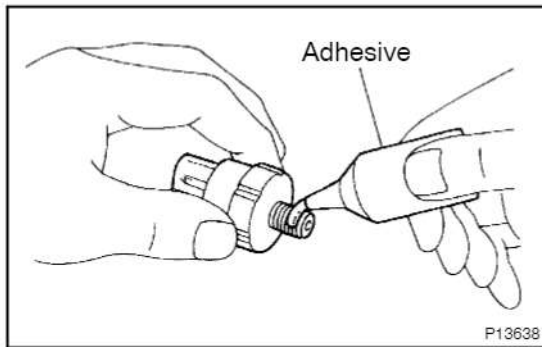
5. WARM UP ENGINE

6. CHECK OIL PRESSURE

Oil pressure:

At idle	29 kPa (0.3 kgf/cm ² , 4.3 psi) or more
At 4,500 rpm	245 to 588 kPa (2.5 to 6.0 kgf/cm ² , 36 to 85 psi) or more

7. REMOVE OIL PRESSURE GAUGE

**8. INSTALL OIL PRESSURE SWITCH ASSY**

- (a) Apply adhesive to the 2 or 3 threads of the oil pressure switch.

Adhesive:

Part No. 08833 - 00080, THREE BOND 1344, LOCTITE 242 or equivalent

- (b) Using a deep socket wrench 24mm, install the oil pressure switch.

Torque: 15 N·m (153 kgf·cm, 11 ft·lbf)

NOTICE:

Do not start the engine within 1 hour after the installation.

- (c) Connect the oil pressure switch connector.

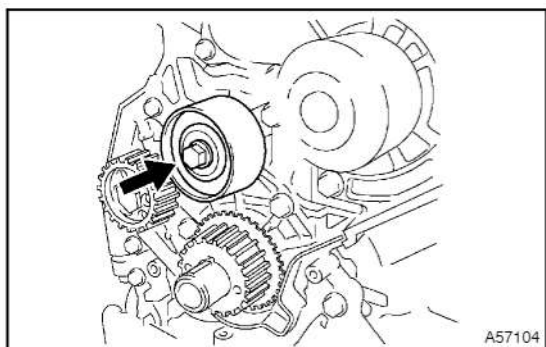
9. START ENGINE AND CHECK FOR LEAKS

OIL PUMP ASSY (1CD-FTV)(From September, 2003)

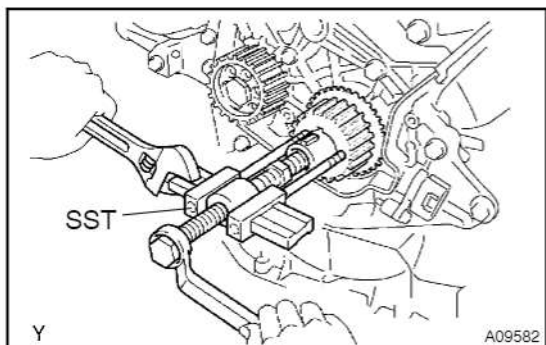
170/Z-01

REPLACEMENT

1. DRAIN ENGINE OIL (See Pub. No. RM1018E on page 17-30)
2. REMOVE RADIATOR SUPPORT OPENING COVER
3. REMOVE ENGINE ROOM COVER SIDE
4. REMOVE FRONT WHEEL RH
5. REMOVE ENGINE UNDER COVER SUB-ASSY NO.1
6. REMOVE ENGINE UNDER COVER RH
7. REMOVE ENGINE COVER SUB-ASSY NO.1 (See page 14-90)
8. REMOVE INJECTOR DRIVER (See page 14-108)
9. REMOVE V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1 (See Pub. No. RM1018E on page 14-269)
10. REMOVE GENERATOR V BELT (See Pub. No. RM1018E on page 14-269)
11. SEPARATE POWER STEERING IDLE PULLEY BRACKET (See page 14-138)
12. DISCONNECT ENGINE WIRE (See page 14-138)
13. DISCONNECT VACUUM HOSE (See page 14-108)
14. REMOVE ENGINE MOUNTING INSULATOR SUB-ASSY RH (See page 14-138)
15. REMOVE CRANKSHAFT PULLEY (See page 14-138)
SST 09213-54015 (09213-70020), 09330-00021, 09950-50013 (09951-05010, 09952-05010, 09953-05020, 09954-05031)
16. REMOVE IDLER PULLEY SUB-ASSY (See page 14-138)
17. REMOVE TIMING BELT NO.2 COVER (See page 14-138)
18. REMOVE TIMING BELT NO.1 COVER (See page 14-138)
19. REMOVE TIMING BELT GUIDE
20. REMOVE TRANSVERSE ENGINE ENGINE MOUNTING BRACKET (See page 14-138)
21. SET NO. 1 CYLINDER TO TDC/COMPRESSION (See page 14-138)
22. REMOVE TIMING CHAIN COVER PLATE (See page 14-138)
23. REMOVE TIMING BELT (See page 14-138)

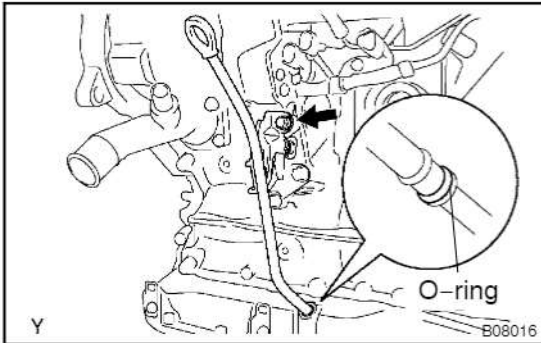


24. REMOVE TIMING BELT IDLER SUB-ASSY NO.2



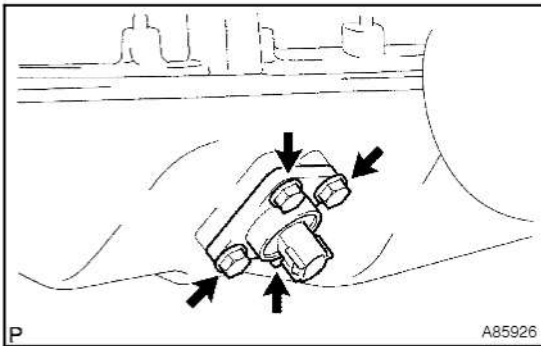
25. REMOVE CRANKSHAFT TIMING PULLEY
 - (a) If the timing pulley cannot be removed by hand, use SST to remove the pulley.
SST 09950-50013 (09951-05010, 09952-05010, 09953-05010, 09953-05020, 09954-05021)

26. REMOVE FLOOR PANEL BRACE FRONT (See page 15-6)
27. REMOVE EXHAUST PIPE ASSY FRONT (See page 15-6)
28. REMOVE GENERATOR ASSY (See Pub. No. RM1018E on page 19-29)
29. REMOVE TIMING BELT IDLER SUB-ASSY NO.1 (See page 16-21)
30. REMOVE V-RIBBED BELT TENSIONER ASSY (See page 14-108)



31. REMOVE OIL LEVEL GAGE GUIDE

- (a) Remove the bolt which secures the oil level gage guide to the cylinder block.
- (b) Pull out the oil level gage guide together with the oil level gage from the No. 1 oil pan.
- (c) Remove the O-ring from the oil level gage guide.

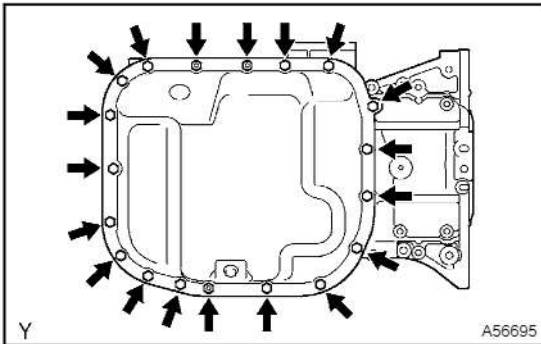


32. REMOVE ENGINE OIL LEVEL SENSOR

- (a) Remove the 4 bolts and level sensor.

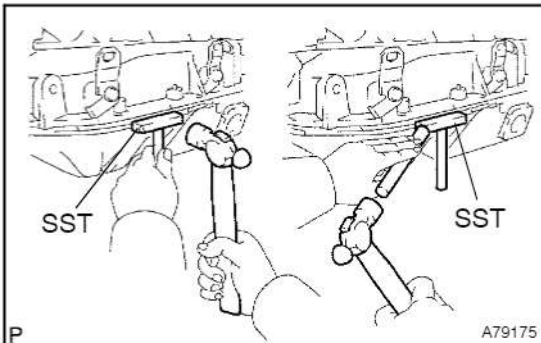
NOTICE:

Be careful not to drop the oil level sensor when removing.



33. REMOVE OIL PAN SUB-ASSY NO.2

- (a) Remove the 16 bolts and 3 nuts.

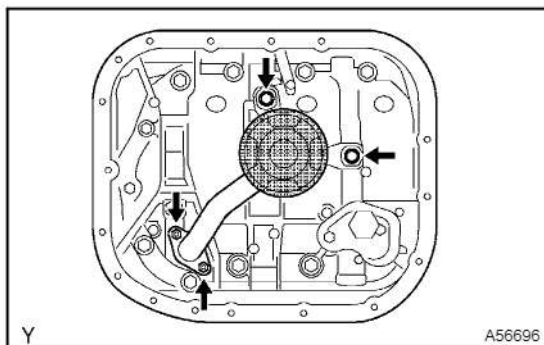


- (b) Insert the blade of SST between the No. 1 and No. 2 oil pans, then cut off the applied sealer and remove the No. 2 oil pan.

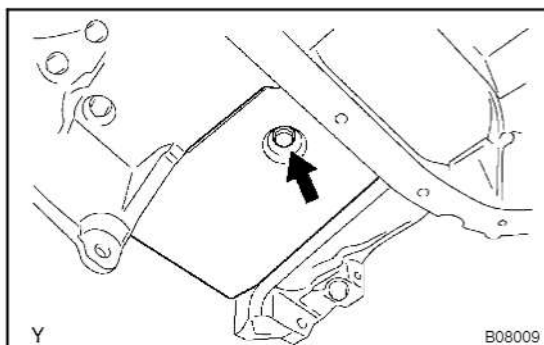
SST 09032-00100

NOTICE:

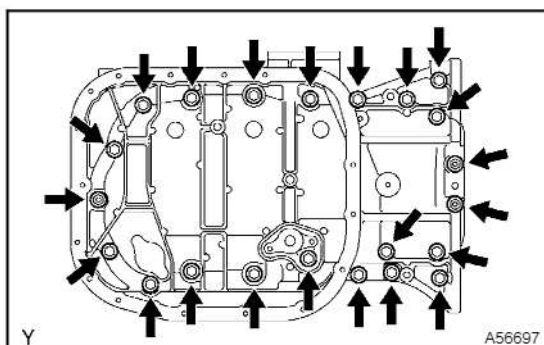
Be careful not to damage the No. 1 and No. 2 oil pans.

**34. REMOVE OIL STRAINER SUB-ASSY**

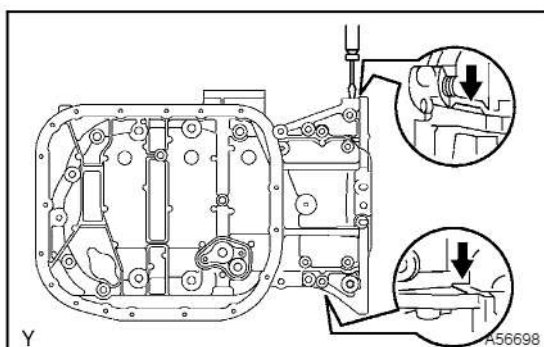
- (a) Remove the 2 bolts and 2 nuts, then remove the oil strainer and gasket.

**35. REMOVE OIL PAN INSULATOR**

- (a) Remove the bolt and oil pan insulator.

**36. REMOVE OIL PAN SUB-ASSY**

- (a) Remove the 19 bolts and 3 nuts.

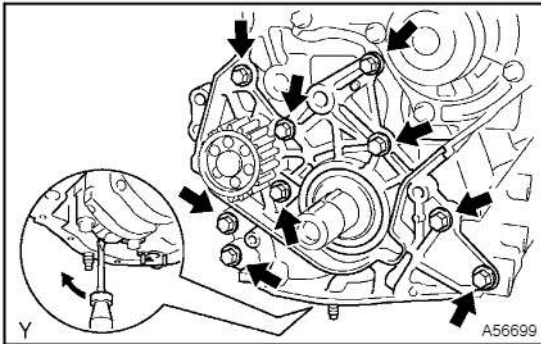


- (b) Using a screwdriver, remove the oil pan by prying between the cylinder block and No. 1 oil pan.

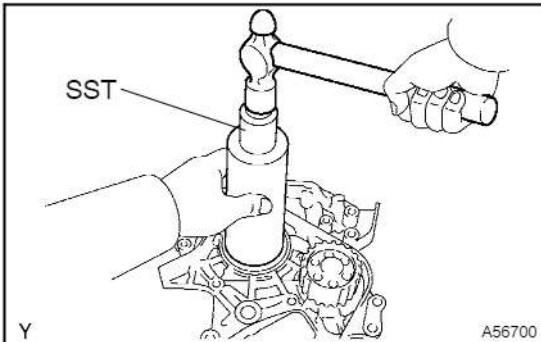
NOTICE:

Be careful not to damage the cylinder block and No. 1 oil pan.

37. REMOVE CRANKSHAFT POSITION SENSOR (See page 14-138)

**38. REMOVE OIL PUMP ASSY**

- (a) Remove the 9 bolts.
- (b) Remove the oil pump by prying between the oil pump and main bearing cap using a screwdriver.
- (c) Remove the gasket.

**39. INSTALL CRANKSHAFT SEAL**

- (a) Using SST and a hammer, tap in a new oil seal until its surface is flush with the oil pump edge.
SST 09316-60011 (09316-00011, 09316-00021)

40. INSTALL OIL PUMP ASSY

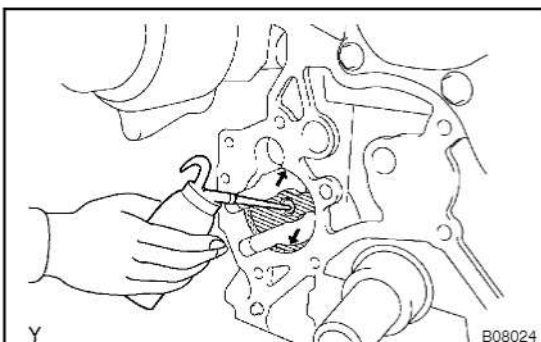
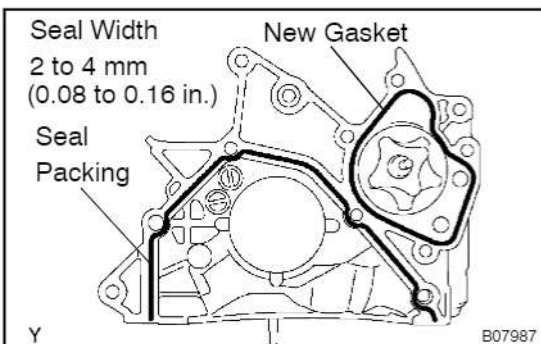
- (a) Remove any old packing (FIPG). Be careful not to drop any oil on the contact surfaces of the oil pump and cylinder block.
 - (1) Using a razor blade and gasket scraper, remove all the old packing from the gasket surfaces and sealing groove.
 - (2) Thoroughly clean all components to remove all the loose material.
 - (3) Using a non-residue solvent, clean both the sealing surfaces.
- (b) Apply seal packing to the oil pump as shown in the illustration.

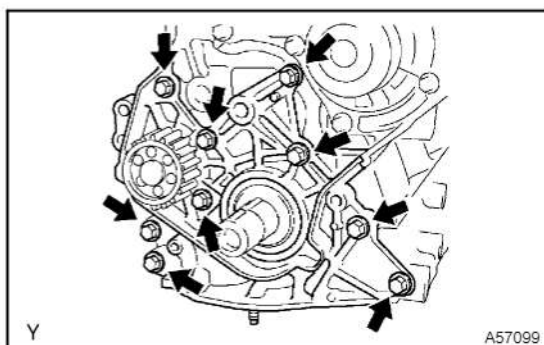
Seal packing: Part No. 08826-00080 or equivalent

NOTICE:

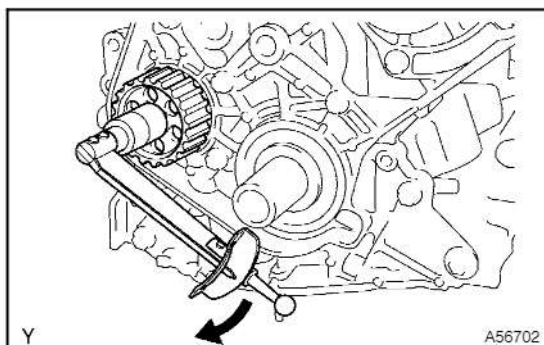
Avoid applying an excessive amount to the surface.

- (1) Install a nozzle of which opening is cut to 2 to 4 mm (0.08 to 0.16 in.).
 - (2) The parts must be set within 3 minutes and must be assembled within 15 minutes after applying seal packing. Otherwise the material must be removed and reapplied.
 - (3) Immediately remove the nozzle from the tube, then reinstall the cap.
- (c) Install a new gasket to the oil pump.
 - (d) Pour 0.5 cm³ (0.03 cu in.) or more of engine oil into the bushing of the cylinder block.
 - (e) Apply engine oil to the cylinder block side which contacts the oil pump driven rotor.





- (f) Install the oil pump with the 9 bolts.
Torque: 31 N·m (320 kgf·cm, 23 ft·lbf)



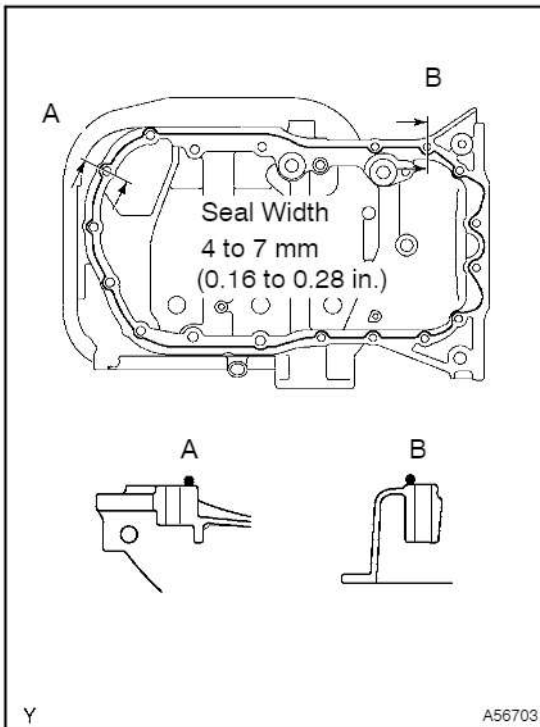
- (g) Measure the oil pump rotating torque.
 (1) Check that the pump rotates smoothly without making a noise.
 (2) Using a torque wrench, check the pump rotating torque.

Rotating torque: 3.0 N·m (31 kgf·cm, 27 in·lbf) or less

41. INSTALL CRANKSHAFT POSITION SENSOR ([See page 14-138](#))

42. INSTALL OIL PAN SUB-ASSY

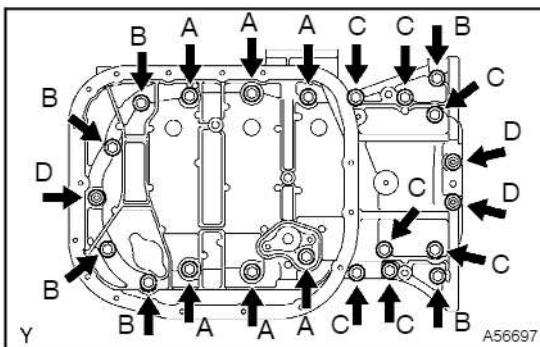
- (a) Remove any old packing (FIPG). Be careful not to drop any oil on the contact surfaces of the No. 1 oil pan, cylinder block, oil pump and rear oil seal retainer.
- (1) Using a razor blade and gasket scraper, remove all the old packing from the gasket surfaces.
 - (2) Thoroughly clean all components to remove all the loose material.
 - (3) Using a non-residue solvent, clean both the sealing surfaces.



- (b) Apply seal packing to the No. 1 oil pan as shown in the illustration.

Seal packing: Part No. 08826-00080 or equivalent

- (1) Install a nozzle of which opening is cut to 4 to 7 mm (0.16 to 0.28 in.).
- (2) The parts must be set within 3 minutes and must be assembled within 15 minutes after applying seal packing. Otherwise the material must be removed and reapplied.
- (3) Immediately remove the nozzle from the tube, then reinstall the cap.



- (c) Install the oil pan with the 19 bolts and 3 nuts.

Torque:

42 N·m (428 kgf·cm, 31 ft·lbf) for bolt A

21 N·m (209 kgf·cm, 15 ft·lbf) for bolt B

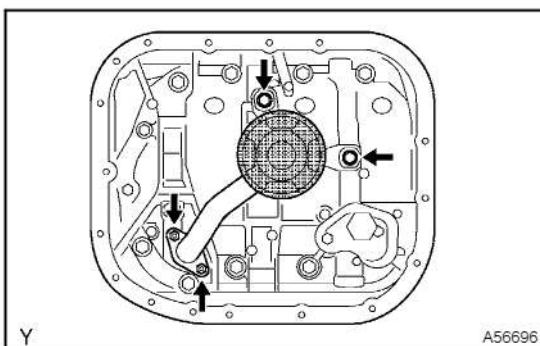
11 N·m (112 kgf·cm, 8 ft·lbf) for bolt C

11 N·m (112 kgf·cm, 8 ft·lbf) for nut D

43. INSTALL OIL PAN INSULATOR

- (a) Install the oil pan insulator with the bolt.

Torque: 7.5 N·m (76 kgf·cm, 66 in·lbf)



44. INSTALL OIL STRAINER SUB-ASSY

- (a) Install a new gasket and the oil strainer with the 2 bolts and 2 nuts.

Torque:

21 N·m (209 kgf·cm, 15 ft·lbf) for bolt

13 N·m (135 kgf·cm, 10 ft·lbf) for nut

45. INSTALL OIL PAN SUB-ASSY NO.2

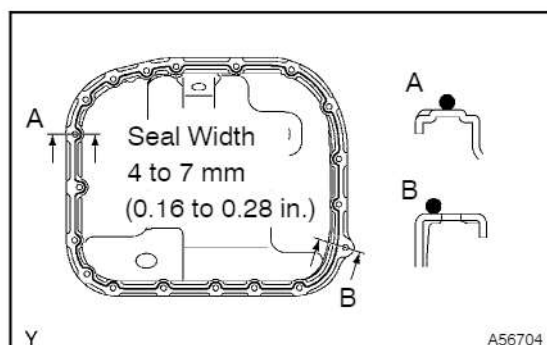
- (a) Remove any old packing (FIPG). Be careful not to drop any oil on the contact surfaces of the No. 1 and No. 2 oil pans.

- (1) Using a razor blade and gasket scraper, remove all the old packing from the gasket surfaces.
- (2) Thoroughly clean all components to remove all the loose material.

- (3) Using a non-residue solvent, clean both the sealing surfaces.

NOTICE:

Do not use a solvent. It will affect the painted surfaces.



- (b) Apply seal packing to the oil pan as shown in the illustration.

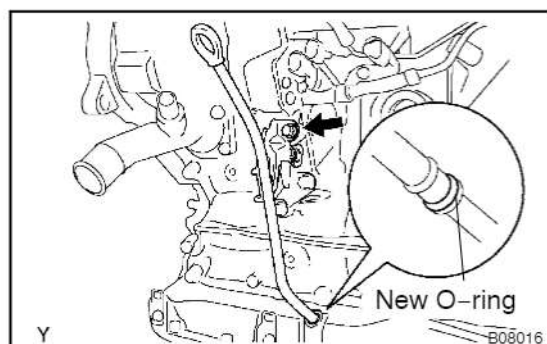
Seal packing: Part No. 08826-00080 or equivalent

- (1) Install a nozzle of which opening is cut to 4 to 7 mm (0.16 to 0.28 in.).
 - (2) The parts must be set within 3 minutes and must be assembled within 15 minutes after applying seal packing. Otherwise the material must be removed and reapplied.
 - (3) Immediately remove the nozzle from the tube, then reinstall the cap.
- (c) Install the oil pan with the 17 bolts and 2 nuts. Tighten the bolts and nuts uniformly in several steps.

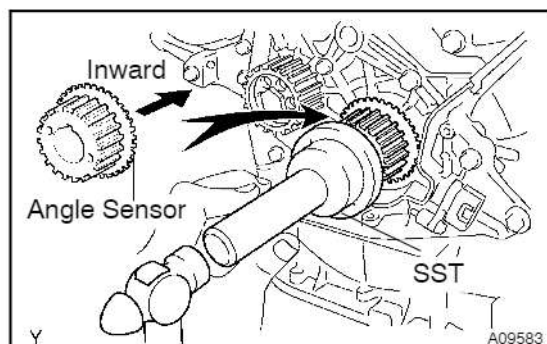
Torque: 12 N·m (119 kgf·cm, 9 ft·lbf)

46. INSTALL ENGINE OIL LEVEL SENSOR

Torque: 7.0 N·m (71 kgf·cm, 62 in·lbf)

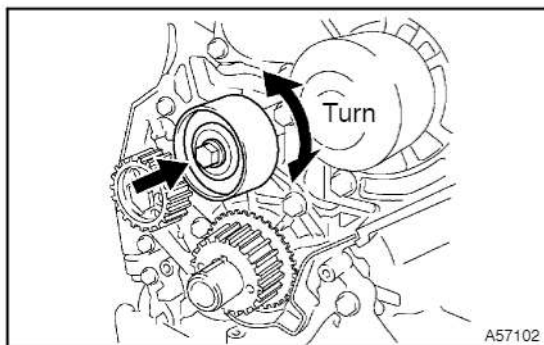
**47. INSTALL OIL LEVEL GAGE GUIDE**

- (a) Install a new O-ring to the oil level gage guide.
 - (b) Apply engine oil to the O-ring.
 - (c) Push the oil level gage guide end into the guide hole of the No. 1 oil pan.
 - (d) Install the oil level gage guide with the bolt.
- Torque: 18 N·m (184 kgf·cm, 13 ft·lbf)**
- (e) Apply engine oil to the O-ring on the oil level gage.
 - (f) Install the oil level gage.

48. INSTALL V-RIBBED BELT TENSIONER ASSY (See page 14-138)**49. INSTALL TIMING BELT IDLER SUB-ASSY NO.1 (See page 16-21)****50. INSTALL GENERATOR ASSY (See Pub. No. RM1018E on page 19-29)****51. INSTALL EXHAUST PIPE ASSY FRONT (See page 15-6)****52. INSTALL FLOOR PANEL BRACE FRONT (See page 15-6)****53. INSTALL CRANKSHAFT TIMING PULLEY**

- (a) Align the keyway of the timing pulley with the key located on the camshaft, then slide the pulley into place.
- (b) Using SST and a hammer, tap in the timing pulley with the angle sensor facing inward.

SST 09223-46011

**54. INSTALL TIMING BELT IDLER SUB-ASSY NO.2**

- (a) Install the idler pulley with bolt.

Torque: 47 N·m (475 kgf·cm, 34 ft·lbf)

- (b) Check that the idler pulley moves smoothly.

55. SET NO. 1 CYLINDER TO TDC/COMPRESSION (See page 14-138)

SST 09960-10010 (09962-01000, 09963-01000)

56. INSTALL TIMING BELT (See page 14-138)**57. CHECK VALVE TIMING (See page 14-138)****58. INSTALL TIMING CHAIN COVER PLATE (See page 14-138)****59. INSTALL TRANSVERSE ENGINE ENGINE MOUNTING BRACKET (See page 14-138)****60. INSTALL TIMING BELT GUIDE (See page 14-138)****61. INSTALL TIMING BELT NO.1 COVER (See page 14-138)****62. INSTALL TIMING BELT NO.2 COVER (See page 14-138)****63. INSTALL IDLER PULLEY SUB-ASSY (See page 14-138)****64. INSTALL CRANKSHAFT PULLEY (See page 14-138)**

SST 09213-54015 (09213-70020), 09330-00021

65. INSTALL ENGINE MOUNTING INSULATOR SUB-ASSY RH (See page 14-138)**66. INSTALL POWER STEERING IDLE PULLEY BRACKET (See page 14-108)****67. ADJUST V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1**
(See Pub. No. RM1018E on page 14-269)**68. INSTALL INJECTOR DRIVER (See page 14-108)****69. INSTALL ENGINE COVER SUB-ASSY NO.1 (See page 14-90)****70. INSTALL FRONT WHEEL RH**

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

71. ADD ENGINE OIL (See Pub. No. RM1018E on page 17-30)**72. CHECK FOR ENGINE OIL LEAKS**