ENGINE ASSY (15B–FTE)

1417C–01

REPLACEMENT

1. **DISCONNECT BATTERY NEGATIVE TERMINAL**
2. **DRAIN ENGINE COOLANT**
3. **DRAIN POWER STEERING FLUID**
4. **DISCONNECT RADIATOR RESERVE TANK HOSE OR PIPE**
5. **REMOVE FRONT SEAT ASSEMBLY (DRIVER SEAT) (W/O TILT CAB CAB TYPE) (See page 72–2)**
6. **REMOVE PARKING BRAKE HOLE COVER (W/O TILT CAB CAB TYPE) (See page 33–3)**
7. **REMOVE PARKING BRAKE LEVER ASSY (W/O TILT CAB CAB TYPE) (See page 33–3)**
8. **REMOVE FLOOR SHIFT SHIFT LEVER KNOB SUB–ASSY (W/O TILT CAB CAB TYPE) (See page 41–11)**
9. **REMOVE SHIFTING HOLE COVER SUB–ASSY AND SHIFT LEVER BOOT COVER (W/O TILT CAB CAB TYPE) (See page 41–11)**
10. **REMOVE SHIFT AND SELECT TRANSMISSION CONTROL CABLE ASSY (W/O TILT CAB CAB TYPE) (See page 41–19)**
11. **REMOVE FLOOR SHIFT ASSY (W/O TILT CAB CAB TYPE) (See page 41–11)**
12. **REMOVE ENGINE SERVICE HOLE SUB COVER SUB–ASSY (W/O TILT CAB CAB TYPE) (See page 14–62)**
13. **REMOVE ENGINE UNDER COVER**
14. **REMOVE EXHAUST PIPE ASSY FRONT**
15. **REMOVE MANUAL TRANSMISSION ASSY (See page 41–3)**
16. **REMOVE FUEL MAIN TUBE SUB–ASSY**

(a) Loosen the fuel tank cap to reduce the pressure inside the fuel tank.
(b) Remove the main tube so that fuel does not splash around.

17. **REMOVE FUEL RETURN TUBE**
18. **DISCONNECT AIR HOSE NO. 1**
19. **DISCONNECT AIR HOSE NO.2**
20. **DISCONNECT AIR HOSE NO.3**
21. **REMOVE RADIATOR ASSY (See page 16–27)**
22. **REMOVE A/C COMPRESSOR FROM ENGINE**
23. **REMOVE OIL RESERVOIR TO PUMP HOSE NO.1**
24. **REMOVE PRESSURE FEED HOSE**
25. **REMOVE FRONT FENDER APRON SUB–ASSY RH**
26. **REMOVE FENDER APRON SUB–ASSY LH**
27. **REMOVE AIR CLEANER ASSY**

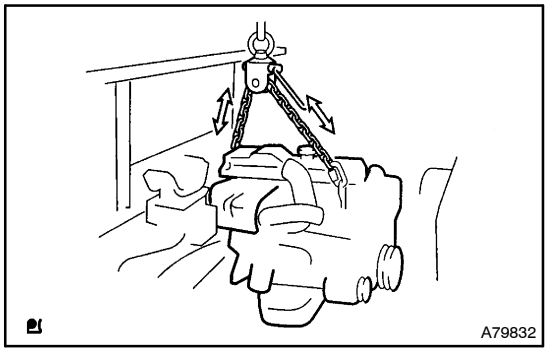
(a) Remove the 4 nuts and air cleaner.

28. **REMOVE AIR CLEANER STAY NO.1**

(a) Disconnect the relay block.
(b) Remove the 4 bolts and air cleaner stay.

29. **REMOVE CAB MOUNTING BRACKET SUB–ASSY NO.3**

(a) Disconnect the 2 vacuum hoses.
(b) Remove the 8 bolts and cab mounting bracket.



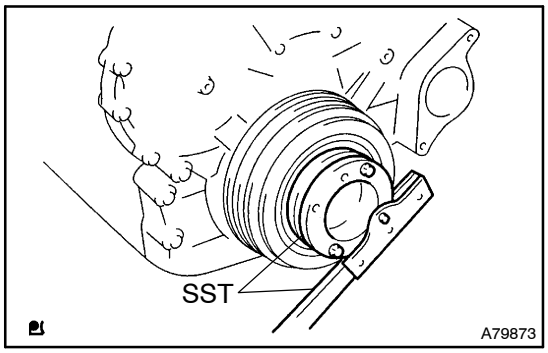
30. REMOVE ENGINE ASSY

(a) Using an engine lifter, hold the engine and separate the mount.

31. REMOVE STARTER ASSY (See page 19–3)

32. REMOVE CLUTCH COVER ASSY (See page 42–24)

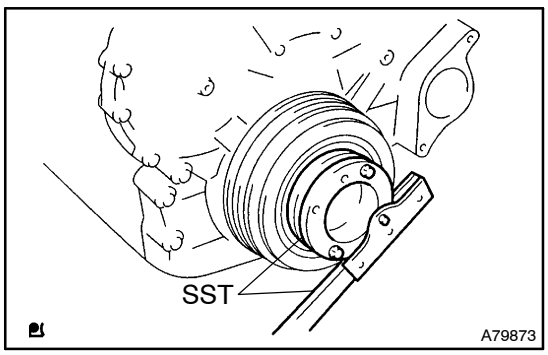
33. REMOVE CLUTCH DISC ASSY (See page 42–24)



34. REMOVE FLYWHEEL SUB–ASSY

(a) Using SST, fix the crankshaft pulley and remove the flywheel.

SST 09213–58013 (91111–50845), 09330–00021



35. INSTALL FLYWHEEL SUB–ASSY

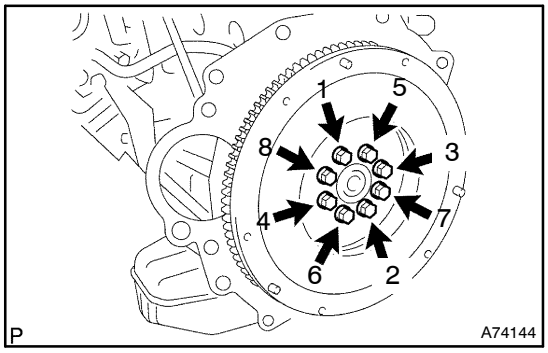
(a) Using SST, fix the crankshaft pulley.

SST 09213–58013 (91111–50845), 09330–00021

(b) Apply adhesive to 2 or 3 threads of the mounting bolt end.

Adhesive:

Part No. 08833–00080 THREE BOND 1344 or equivalent



(c) Install the bolts, as shown in the illustration.

Torque: 198 N·m (2,015 kgf·cm, 146 ft·lbf)

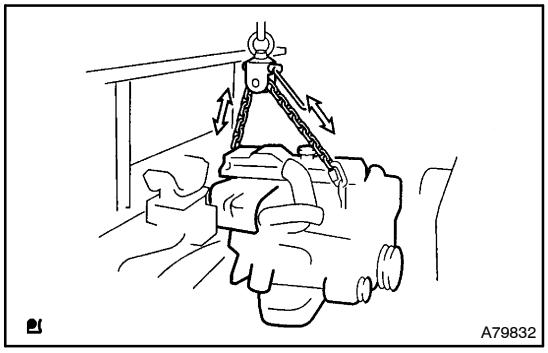
NOTICE:

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

36. INSTALL CLUTCH DISC ASSY (See page 42–24)

37. INSTALL CLUTCH COVER ASSY (See page 42–24)

38. INSTALL STARTER ASSY (See page 19–3)



39. INSTALL ENGINE ASSY

(a) Using an engine lifter, install the engine.
Torque: 98 N·m (1,000 kgf·cm, 72 ft·lbf)

40. REMOVE CAB MOUNTING BRACKET SUB–ASSY NO.3

(a) Install the cab mounting bracket with the 8 bolts.
Torque: 120 N·m (1,250 kgf·cm, 88 ft·lbf)

(b) Connect the vacuum hose and connector.

41. INSTALL AIR CLEANER STAY NO.1

(a) Install the air cleaner stay with the 4 bolts.
Torque: 40 N·m (410 kgf·cm, 29 ft·lbf)

42. REMOVE AIR CLEANER ASSY

(a) Install the air cleaner with the 4 nuts.
Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)

43. INSTALL FENDER SIDE APRON SUB–ASSY LH

44. INSTALL FRONT FENDER APRON SUB–ASSY RH
Torque: 11.5 N·m (117 kgf·cm, 8 ft·lbf)

45. INSTALL PRESSURE FEED HOSE

46. INSTALL OIL RESERVOIR TO PUMP HOSE NO.1

47. INSTALL A/C COMPRESSOR

48. INSTALL RADIATOR ASSY (See page 16–27)

49. CONNECT AIR HOSE NO.3

50. CONNECT AIR HOSE NO.2

51. CONNECT AIR HOSE NO. 1

52. CONNECT FUEL RETURN TUBE

53. CONNECT FUEL MAIN TUBE SUB–ASSY

54. INSTALL MANUAL TRANSMISSION ASSY (See page 41–3)

55. INSTALL EXHAUST PIPE ASSY FRONT

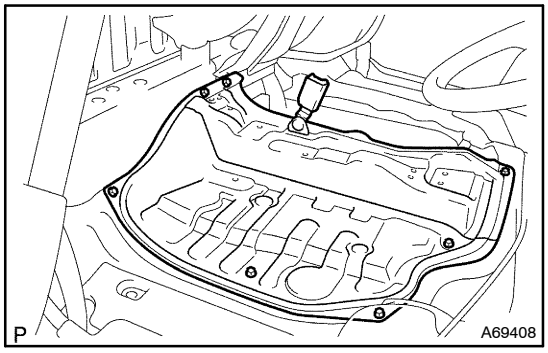
(a) Install a new gasket.

(b) Install the exhaust pipe with the 3 nuts.
Torque: 62 N·m (630 kgf·cm, 46 ft·lbf)

(c) Install the exhaust pipe clamp with the bolt.
Torque: 24 N·m (245 kgf·cm, 18 ft·lbf)

56. INSTALL ENGINE UNDER COVER

57. ADJUST FAN AND GENERATOR V BELT (See page 14–47)



58. **INSTALL ENGINE SERVICE HOLE SUB COVER SUB–ASSY (W/O TILT CAB CAB TYPE)**
Torque: 11.5 N·m (115 kgf·cm, 8 ft·lbf)
(a) Install the floor mat.

59. **INSTALL FLOOR SHIFT ASSY (W/O TILT CAB CAB TYPE)** (See page 41–11)
60. **INSTALL SHIFT AND SELECT TRANSMISSION CONTROL CABLE ASSY (W/O TILT CAB CAB TYPE)** (See page 41–19)
61. **INSTALL PARKING BRAKE LEVER ASSY (W/O TILT CAB CAB TYPE)** (See page 33–3)
62. **INSTALL FRONT SEAT ASSEMBLY (DRIVER SEAT) (W/O TILT CAB CAB TYPE)** (See page 72–2)
63. **ADJUST PARKING BRAKE SHOE CLEARANCE (CENTER PARKING BRAKE)** (See page 33–2)
64. **INSPECT AND ADJUST PARKING BRAKE LEVER TRAVEL** (See page 33–2)
65. **REFILL ENGINE COOLANT**
66. **BLEED FUEL** (See page 11–57)
67. **CONNECT BATTERY NEGATIVE TERMINAL**
68. **CHECK FOR ENGINE COOLANT LEAKS**
69. **INSPECT FOR FUEL LEAKS**
70. **INSPECT AND ADJUST FRONT WHEEL ALIGNMENT** (See page 26–2)