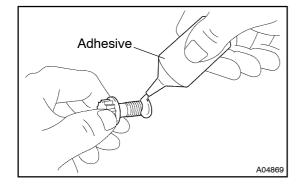
EM1LN-01

INSTALLATION

1. INSTALL DRIVE PLATE

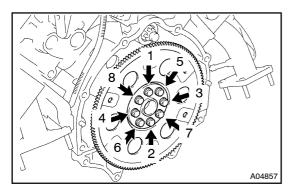
HINT:

- The mounting bolts are ightened n 2 progressive steps (steps c) and (e)).
- •□ If@any@ne@f[the@nounting@olts@broken@r@leformed,@e-place@t.



(a) Apply@dhesive[to[2]@r[3][threads@f[the[mounting[bolt@nd. Adhesive:

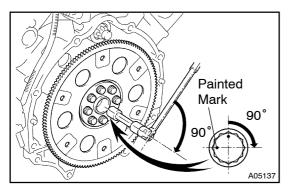
Part[No.[08833-00070,[THREE[BOND 1324[or[equivalent



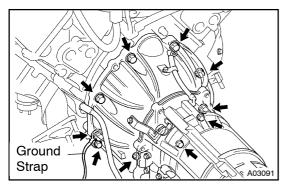
- (b) Install the front spacer, drive plate and rear spacer on the crankshaft.
- (c) Installand uniformly tighten the finounting bolts in several passes, in the sequence shown.

Torque: 49[N·m[500[kgf·cm, 36[ft·lbf)]

 $If \cite{Any} \cite{$



- (d) Mark the mounting bolt with paint.
- (e) Retighten he mounting olts by 90° in he mumerical order shown.
- (f) Check[that[the[painted[mark[is[now[ata]90° [angle[to]]e).



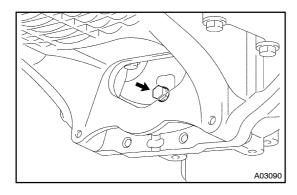
2. INSTALL TRANSMISSION TO ENGINE

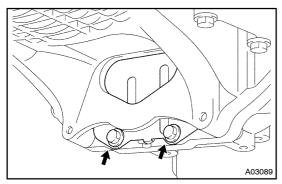
- (a) Check[]he[]orque[converter[clutch[]nstallation[]See[]page AT-39).
- (b) Attach the transmission to the engine.
- (c) Install the ground strap and 10 bolts.

Torque:

37 N·m (380 kgf·cm, 27 ft·lbf) for 14 mm head 72 N·m (730 kgf·cm, 53 ft·lbf) for 17 mm head

LEXUS[LS430] (RM792E)





INSTALL TORQUE CONVERTER CLUTCH BOLTS 3.

Apply adhesive to 2 or 3 threads of the bolt end. (a) Adhesive:

Part No. 08833-00070, THREE BOND 1324 or equiva-

Hold the crankshaft pulley bolt with a wrench, and install (b) the 6 bolts evenly.

Torque: 48 N·m (490 kgf·cm, 35 ft·lbf)

HINT:

First install the black colored bolt, install the other bolts.

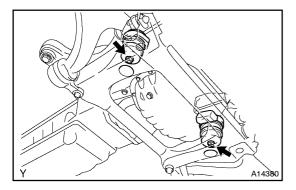
Install the flywheel housing under cover with the 2 bolts. Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)

- 4. INSTALL OIL COOLER PIPE FOR TRANSMISSION
- 5. INSTALL OIL DIPSTICK GUIDE AND DIPSTICK FOR **TRANSMISSION**
- (a) Install a new O-ring to the dipstick guide.
- Apply soapy water to the O-ring. (b)
- Connect the dipstick guide end to the dipstick tube of the (c)
- (d) Install the dipstick guide with the bolt.
- (e) Install the dipstick.

CONNECT ENGINE WIRE TO TRANSMISSION

Connect the connectors and wire:

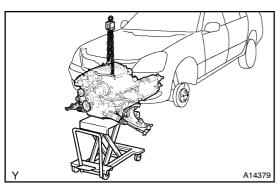
- Connect the VSV connector.
- Connect the PNP switch connector.
- Connect the solenoid connector.
- Connect the direct clutch speed sensor connector.
- Connect the 4 engine wire clamps to the bracket.



INSTALL SUSPENSION MEMBER TO ENGINE 7.

Install the suspension member with the 4 nuts and to the engine.

Torque: 70 N·m (714 kgf·cm, 52 ft·lbf)



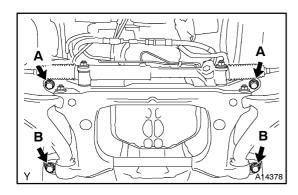
SET ENGINE JACK 8.

NOTICE:

Using a chain, hold the engine tightly.

- **INSTALL ENGINE AND TRANSMISSION ASSEMBLY IN VEHICLE**
- Raise the engine into the engine compartment. (a)

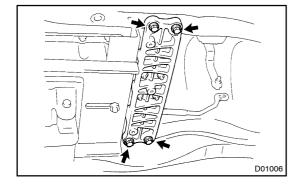
LEXUS LS430 (RM792E)



(b) Connect he suspension member with he foliate body.

Torque:

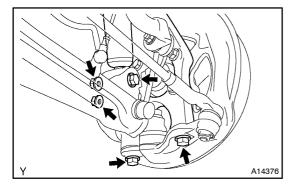
A: 176[N·m[(1,795[kgf·cm, 130[ft·lbf)]
B: 157[N·m[(1,600[kgf·cm, 116[ft·lbf)]]



(c) Install the trear regine mounting with the follows.

Torque: 22.5 N·m 260 kgf·cm, 19 ft·lbf)

(d) Remove the engine ack and chain.



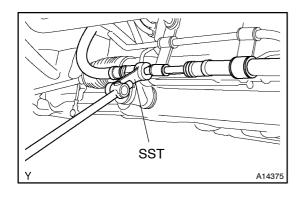
10. CONNECT LOWER ARM TO STEERING KNUCKLE Connect the lower arm to the steering knuckle with the 2 bolts.

11 CONNECT LEVEL HEIGHT SENSOR LINKAGE TO LOWER ARM

12. CONNECT SHOCK ABSORBER TO LOWER ARM Connect he shock absorber of he lower arm with the bolt and

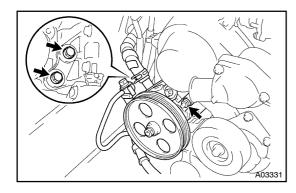
13. INSTALL[FRONT[\$TABILIZER[BAR[[See]page SA-49]]

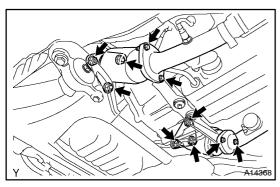
14. CONNECT SLIDING YOKE TO INTERMEDIATE SHAFT



15. CONNECT PS OIL TUBE

Using SST, connect the PS oil tube to the PS gear housing. SST 09633-00020





16. INSTALL PS PUMP AND OIL RESERVOIR

- (a) Install the PS bil eservoir to the RH fend-er apron with the holts.
- (b) Install the PS pump to the engine with the 2 bolts and but.
- 17. BLEED POWER STEERING SYSTEM See page SR-4)
- 18. CONNECT A/C COMPRESSOR TO ENGINE (See page AC-58)
- 19. | INSTALL | PROPELLER | SHAFT | (See | page | PR-9)
- 20. INSTALL HEAT INSULATORS
- 21. INSTALL TWC (unleaded gasoline) OR SUB-MUF-FLERS (leaded gasoline)
- 22. INSTALL FRONT EXHAUST PIPE, CENTER EXHAUST PIPE[AND[TAIL[PIPES[See[page[EM-123]]]
- 23. Unleaded Gasoline:
 CONNECT HEATED OXYGEN SENSORS TO FRONT
 EXHAUST PIPE
- 24. CONNECT ENGINE WIRE FROM ECU BOX
- (a) Connect the grommet and engine wire to the ECU box.
- (b) Connect the 5 ECU connectors and 2 wire connectors.
- (c) Install the ECU box cover.
- 25. CONNECT WIRE, CABLES AND HOSES
- Connect the 2 electric cooling fan ECU connectors.
- Connect the 2 electric cooling fan connectors.
- Connect the 2 A/T oil cooler hoses to the radiator.
- Connect the EVAP hose to the VSV for EVAP.
- Connect the PS air hose to the intake manifold.
- Connect the fuel inlet hose to the fuel main tube.
- Connect the starter cable to the battery.
- Connect the 2 ground straps to the body.
- Connect the 2 heater hoses to the water bypass pipe.
- Connect the brake booster vacuum hose to the intake manifold.
- 26. CONNECT RADIATOR UPPER HOSE TO WATER BY-PASS JOINT
- 27. CONNECT RADIATOR LOWER HOSE TO WATER IN-LET HOUSING
- 28. INSTALL DRIVE BELT (See page CH-1)
- 29. INSTALL AIR CLEANER AND INTAKE AIR CONNECTOR ASSEMBLY
- 30. INSTALL AIR CLEANER INLET
- 31. FILL WITH ENGINE COOLANT
- 32. FILL WITH ENGINE OIL
- 33. START ENGINE AND CHECK FOR LEAKS
- 34. INSTALL V-BANK COVER AND ENGINE ROOM SIDE COVER
- 35. INSTALL ENGINE UNDER COVER AND OIL PAN PRO-TECTOR
- 36. INSTALL HOOD

37. PERFORM ROAD TEST

Check for abnormal noise, shock, slippage, correct shift points and smooth operation.

38. RECHECK ENGINE COOLANT AND OIL LEVELS