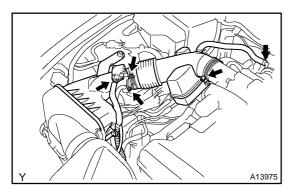
# REMOVAL

- 1. REMOVE ENGINE UNDER COVER
- 2. DRAIN ENGINE COOLANT
- 3. DRAIN ENGINE OIL
- 4. **REMOVE ENGINE COVER**

Remove the 4 nuts and engine cover.

- 5. REMOVE AIR CLEANER INLET
- 6. DISCONNECT BRAKE BOOSTER VACUUM HOSE
- 7. DISCONNECT RADIATOR UPPER AND LOWER HOSES FROM ENGINE
- 8. DISCONNECT ACCELERATOR CABLE FROM EN-GINE



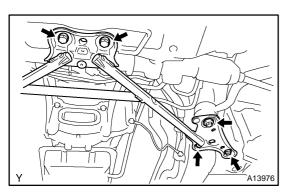
# 9. REMOVE INTAKE AIR RESONATOR

- (a) Disconnect the MAF meter connector.
- (b) Disconnect the engine wire clamp from the air cleaner case.
- (c) Disconnect the PCV hose from the No. 2 cylinder head cover.
- (d) Loosen the 2 hose clamp bolts, remove the intake air resonator from the throttle body.

10. M/T:

# **REMOVE DRIVE BELT TENSIONER ABSORBER** Remove the 2 nuts and absorber.

11. REMOVE DRIVE BELT (See page CH-1)



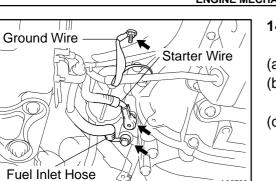
# 12. REMOVE FRONT SUSPENSION MEMBER BRACE

Remove the 8 bolts and brace.

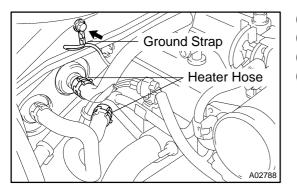
13. M/T:

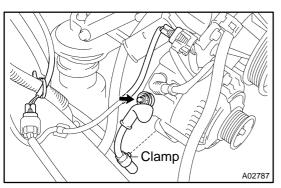
**REMOVE TRANSMISSION SHIFT LEVER** 

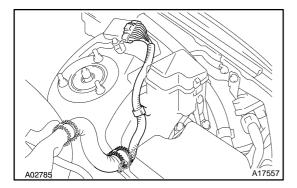
EM1JB-03

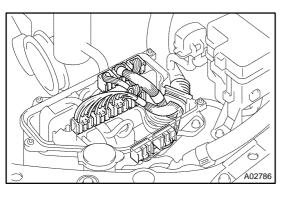


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ENGINE MECHANICAL - ENGINE UNIT

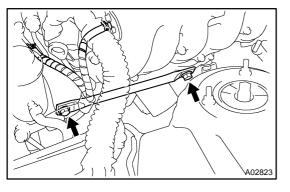
- 14. DISCONNECT WIRES, CABLE, STRAP, CONNEC-TORS, HOSES AND CLAMPS
- (a) Disconnect the ground wire from the floor.
- (b) Disconnect the starter wire from the terminal and manifold stay.
- (c) Disconnect the fuel inlet hose from the fuel pipe support.
- (d) Disconnect the ground strap from the dash panel.
- (e) Disconnect the heater hose from the heater pipe.
- (f) Disconnect the heater hose from the water bypass pipe.
- (g) Disconnect the EVAP hose from the pipe (from charcoal canister).
- (h) Disconnect the heater oxygen sensor (bank 1 sensor 1) connector.
- (i) Disconnect the heater oxygen sensor (bank 1 sensor 2) connector.
- (j) Disconnect the generator wire.
- (k) Disconnect the engine wire clamp from the wire clip of generator.
- (I) Disconnect the ground cable from the bracket on the cylinder block.
- (m) Disconnect the igniter connector.
- (n) Disconnect the 2 engine wire clamps from the clamp brackets.

# 15. DISCONNECT ENGINE WIRE FROM ECM BOX

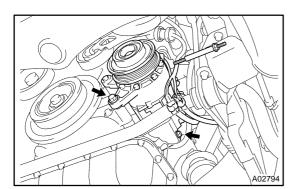
- (a) Remove the ECM hood and ECM cover.
- (b) Disconnect the 3 ECM connectors.
- (c) Disconnect the 4 wire harness connectors.
- (d) Disconnect the 2 junction connectors.
- (e) Disconnect the grommet and engine wire from the ECM box.

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- 16. DISCONNECT PS PUMP AND A/C COMPRESSOR WITHOUT DISCONNECTING HOSES
- (a) Disconnect the PS air hose from the No. 4 timing belt cover.
- (b) Disconnect the PS air hose from the air intake chamber(c) Remove the 2 bolts and pump rear stay.
- (d) Remove the 3 bolts and plate washer, and disconnect the vane pump assembly from the engine.



- (e) Loosen the nut.
- (f) Using a torx socket (E10), remove the stud bolt and nut.
- (g) Disconnect the PPS solenoid valve connector.
- (h) Disconnect the A/C compressor connector.
- (i) Remove the 2 bolts, and disconnect the compressor from the engine.

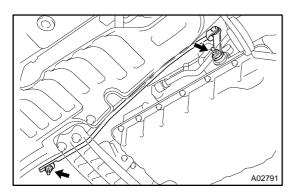
# HINT:

Put aside the vane pump and compressor, and suspend it securely.

17. M/T:

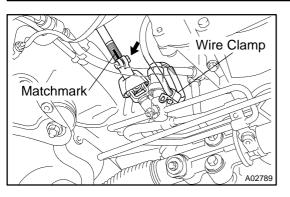
DISCONNECT CLUTCH RELEASE CYLINDER FROM TRANSMISSION

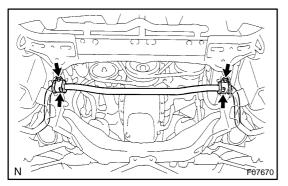
18. REMOVE PROPELLER SHAFT (See page PR-4)



# 19. A/T:

REMOVE TRANSMISSION CONTROL ROD Remove the 2 nuts and control rod. 20. REMOVE FRONT AND CENTER EXHAUST PIPES





## ENGINE MECHANICAL - ENGINE UNIT

# 21. DISCONNECT SLIDING YOKE

- (a) Check the steering wheel at the straight-ahead position, and place matchmarks on the sliding yoke and intermediate shaft.
- (b) Remove the bolt, and disconnect the sliding yoke from the steering intermediate shaft.
- (c) Disconnect the PS pressure switch connector and wire clamp.

# 22. REMOVE STABILIZER BAR

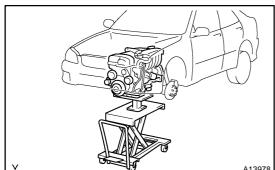
- (a) Remove the 2 nuts from the stabilizer bar links.
- (b) Remove the 4 bolts, 2 stabilizer bar brackets and 2 bushings.

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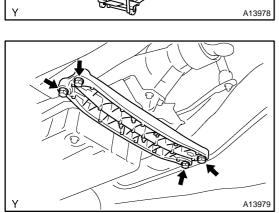
# 23. DISCONNECT SHOCK ABSORBER

Remove the bolt and nut, and disconnect the shock absorber from the shock absorber bracket.

- 24. DISCONNECT LOWER ARM
- (a) Remove the nut, and disconnect the height level sensor from the lower arm.
- (b) Remove the 2 bolts, and disconnect the lower arm from the steering knuckle.

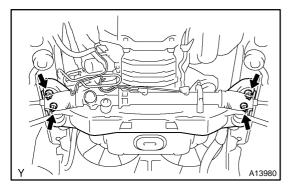


# 25. SET ENGINE JACK NOTICE: Using chain, hold the engine tightly.



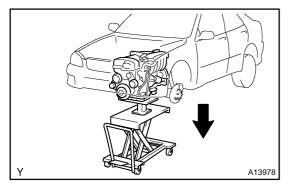
26. DISCONNECT REAR ENGINE MOUNTING MEMBER

Remove the 4 bolts and rear engine mounting member.



27. DISCONNECT SUSPENSION MEMBER

Remove the 4 bolts, and disconnect the suspension member from the body.



# 28. REMOVE ENGINE AND TRANSMISSION ASSEMBLY

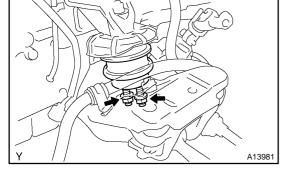
(a) Remove the engine out of vehicle slowly and carefully. **NOTICE:** 

Make sure the engine is clear of all wiring, hoses and cables.

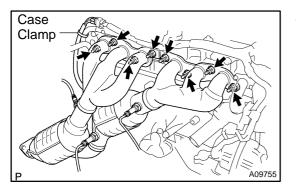
(b) Using a engine sliding device, and place the engine and transaxle assembly onto the stand.

# 29. REMOVE SUSPENSION MEMBER FROM ENGINE

Remove the 4 nuts and suspension member with the steering gear housing from the engine.



# O-Ring Pull A02743



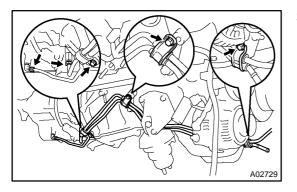
# 30. A/T:

# REMOVE OIL DIPSTICK AND GUIDE

- (a) Disconnect the engine wire clamp from the dipstick guide.
- (b) Remove the bolt.
- (c) Pull out the dipstick guide and dipstick from the dipstick tube.
- (d) Remove the O-ring from the dipstick guide.

# 31. REMOVE EXHAUST MANIFOLD

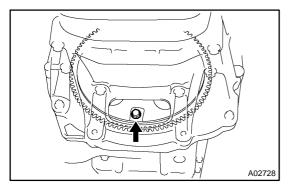
- (a) Remove the case clamp.
- (b) Disconnect the heated oxygen sensor (bank 2 sensor 1) connector.
- (c) Remove the 8 nuts, exhaust manifold and 2 gaskets.



## 32. A/T:

# **REMOVE OIL COOLER PIPES**

- Remove the 3 bolts and pipe clamps. (a)
- Loosen the 2 union nuts, and remove the 2 oil cooler (b) pipes.



# 33. A/T:

# **REMOVE TORQUE CONVERTER CLUTCH BOLTS**

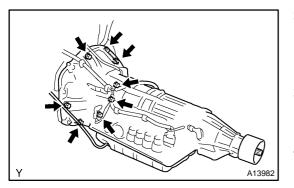
- (a) Remove the hole plug.
- Turn the crankshaft pulley bolt to gain access to each bolt. (b)
- Hold the crankshaft pulley bolt with a wrench, and remove (c) the 6 bolts.
- 34. **REMOVE 4 BOLTS HOLDING NO. 1 OIL PAN TO** TRANSMISSION
- 35. **REMOVE STARTER**
- (a) Disconnect the starter connector.
- Remove the 2 bolts, clamp bracket and starter. (b)
- **DISCONNECT ENGINE WIRE FROM TRANSMISSION** 36.
- Disconnect the VSS connector. (a)
- Disconnect the PNP switch connector. (b)
- (c) Disconnect the solenoid connector.
- (d) Disconnect the direct clutch speed sensor connector.
- (e) Disconnect the engine wire from the 3 wire clamps.

## M/T: 37.

A02730

# **DISCONNECT ENGINE WIRE FROM TRANSMISSION**

- (a) Disconnect the VSS connector.
- (b) Disconnect the back-up light switch connector.



## **REMOVE TRANSMISSION FROM ENGINE** 38.

- (a) Remove the 5 bolts and ground wire.
- Remove the transmission together with the torque con-(b) verter clutch from the engine.

#### 39. A/T:

# **REMOVE DRIVE PLATE**

Remove the 8 bolts, rear plate, drive plate and front spacer. 40.

# M/T:

# **REMOVE CLUTCH COVER AND DISC**

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