

REMOVAL

1. REMOVE HOOD

NOTICE:

Be careful not to damage the body or glass with the hood end.

2. Europe and G.C.C. Countries:

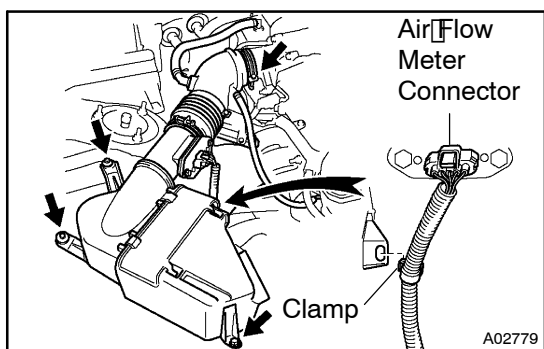
REMOVE NO.2 ENGINE UNDER COVER

3. REMOVE ENGINE UNDER COVER

4. DRAIN ENGINE COOLANT

5. DRAIN ENGINE OIL

6. REMOVE AIR CLEANER INLET

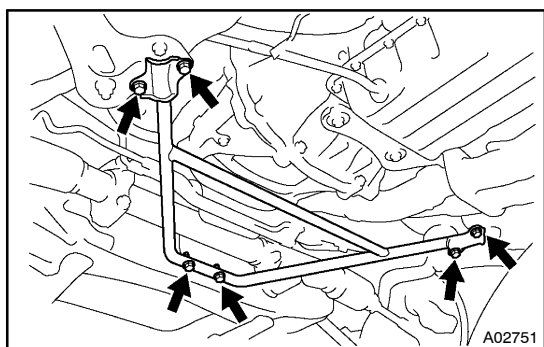


7. REMOVE AIR CLEANER, AIR FLOW METER AND INTAKE AIR RESONATOR ASSEMBLY

(a) Disconnect these connector, clamp and hoses:

- Air flow meter connector
- Engine wire clamp from air cleaner case
- PS air hose from No.4 timing belt cover
- PCV hose from No.2 cylinder head cover

(b) Loosen the hose clamp bolt holding the intake air resonator to the throttle body.



(c) Remove the 3 bolts, the air cleaner, air flow meter and intake air resonator assembly.

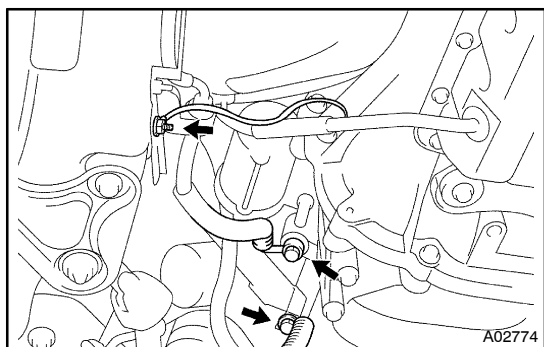
8. DISCONNECT ACCELERATOR CABLE FROM ENGINE

9. REMOVE RADIATOR ASSEMBLY (See page CO-15)

10. REMOVE DRIVE BELT (See page CH-15)

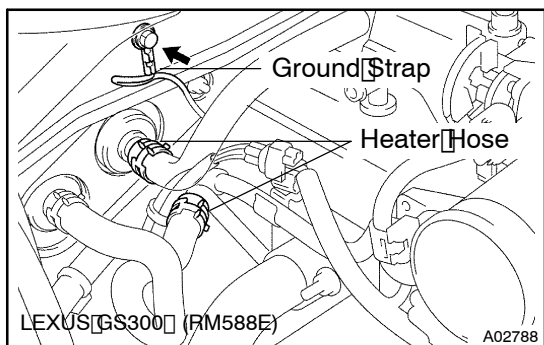
11. REMOVE FRONT FRAME BRACE

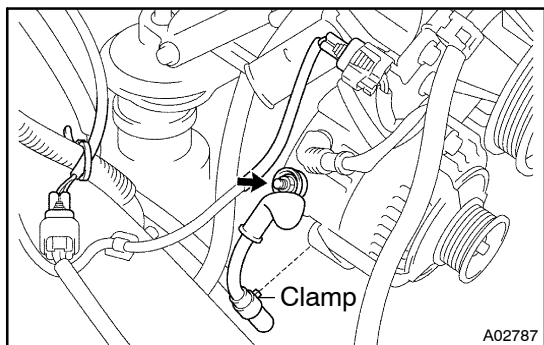
Remove the 6 bolts and brace.



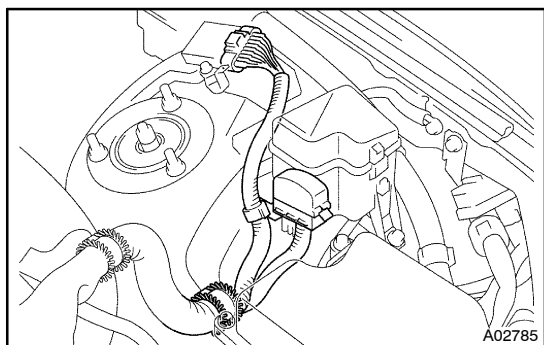
12. DISCONNECT WIRES, CABLE, STRAP, CONNECTORS, HOSES AND CLAMPS

- Ground wire from body
- Starter wire from terminal B and manifold stay
- Fuel inlet hose from fuel pipe support
- Australia and G.C.C. Countries:
Ground cable from manifold stay
- Ground strap from dash panel
- Heater hose from heater pipe
- Heater hose from water bypass pipe
- EVAP hose from pipe (from charcoal canister)

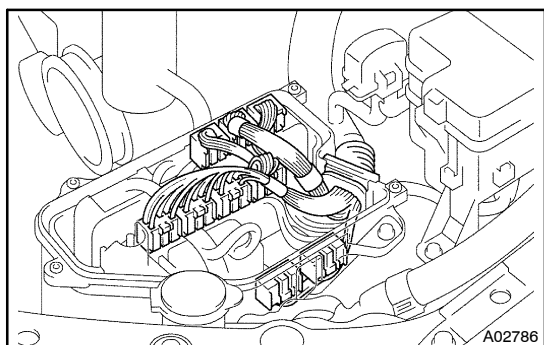




- w/ TWC:
Oxygen sensor (bank 1 sensor 1) connector
- w/ TWC:
Oxygen sensor (bank 1 sensor 2) connector
- Alternator wire
- Engine wire clamp from wire clip of alternator
- LHD:
Ground cable from bracket on cylinder block

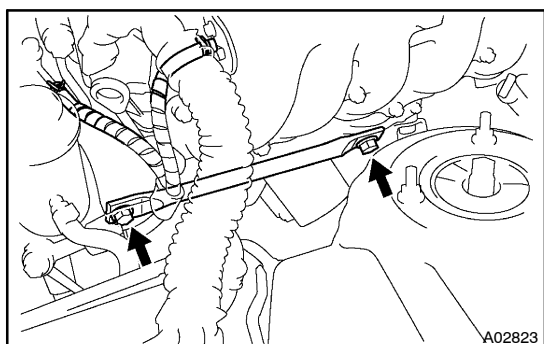


- Igniter connector
- Check connector
- 2 engine wire clamps from clamp brackets



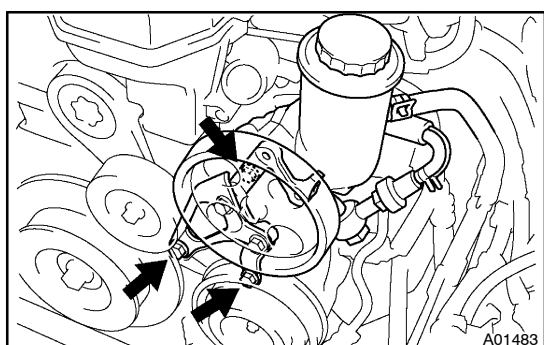
13. DISCONNECT ENGINE WIRE FROM ECU BOX

- (a) Remove these parts:
 - ECU hood
 - ECU cover
- (b) Disconnect these connectors:
 - 3 ECU connectors
 - 4 wire harness connectors
 - 2 junction connectors
- (c) Disconnect the grommet and engine wire from the ECU box.

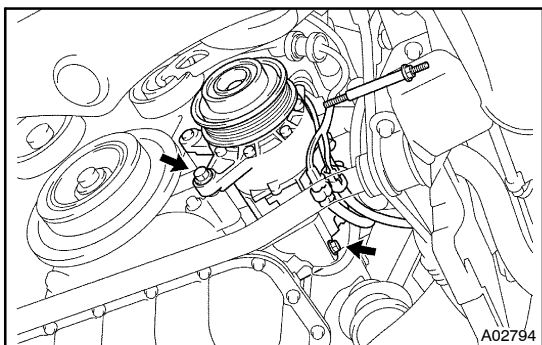


14. DISCONNECT PS PUMP AND A/C COMPRESSOR WITHOUT DISCONNECTING HOSES

- (a) Disconnect these hoses:
 - PS air hose from No.4 timing belt cover
 - PS air hose from air intake chamber
- (b) Remove the 2 bolts and pump rear stay.



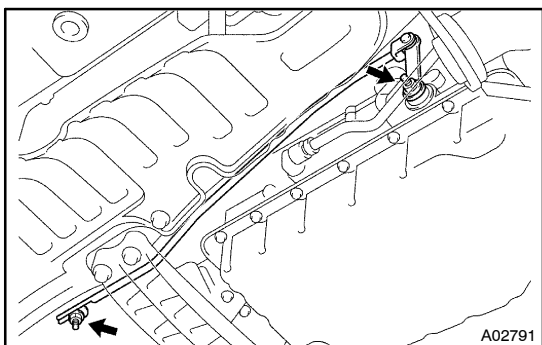
- (c) Remove the 3 bolts and plate washer, and disconnect the vane pump assembly from the engine.



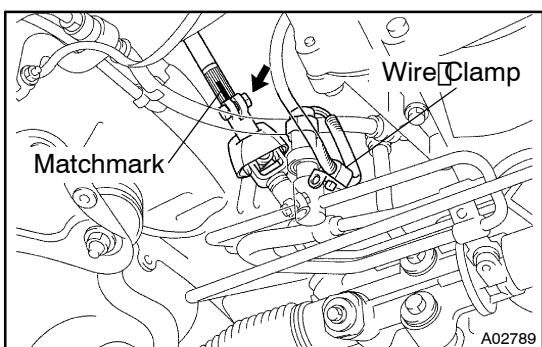
- (d) Loosen the nut.
- (e) Using a Torx socket (E10), remove the stud bolt and nut.
- (f) Disconnect the PPS solenoid valve connector.
- (g) Disconnect the A/C compressor connector.
- (h) Remove the 2 bolts, and disconnect the compressor from the engine.

HINT:

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

**15. REMOVE PROPELLER SHAFT (See page PR-4)****16. REMOVE TRANSMISSION CONTROL ROD**

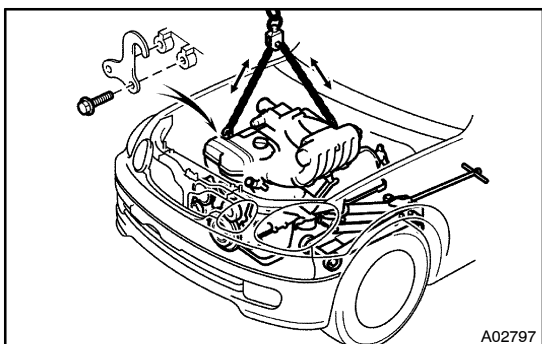
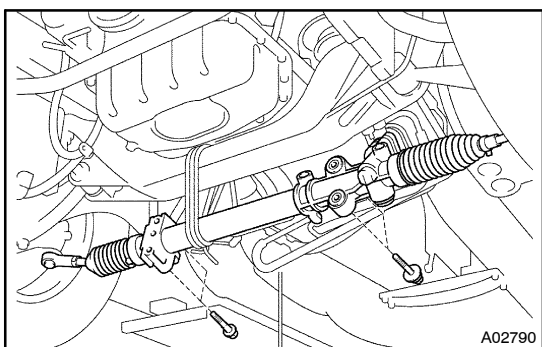
Remove the 2 nuts and control rod.

**17. DISCONNECT PS GEAR HOUSING**

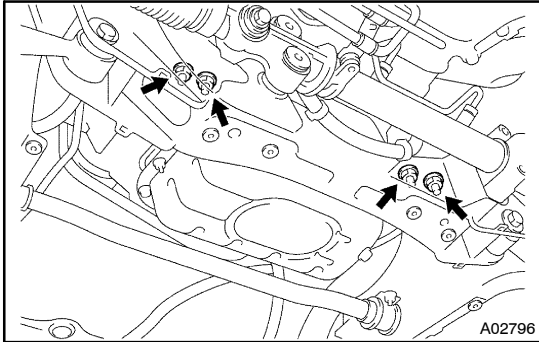
- (a) Check the steering wheel at the straight-ahead position, and place matchmarks on the sliding yoke and intermediate shaft.
- (b) Remove the bolt holding the sliding yoke to the steering intermediate shaft.
- (c) Disconnect the PS pressure switch connector and wire clamp.
- (d) Remove the bolt, and disconnect the 2 PS oil tubes from the front frame.
- (e) Remove the 4 bolts, and disconnect the PS housing from the front frame.
- (f) Disconnect the sliding yoke from the intermediate shaft.

HINT:

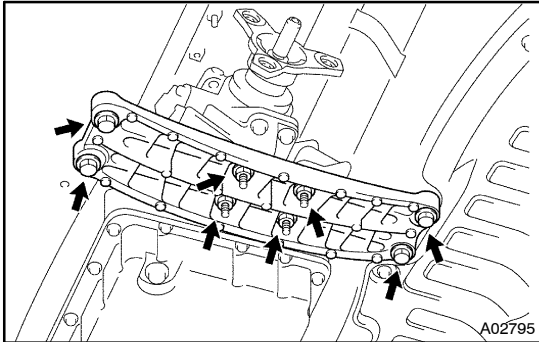
Suspend the PS gear housing securely.

**18. REMOVE ENGINE AND TRANSMISSION ASSEMBLY FROM VEHICLE**

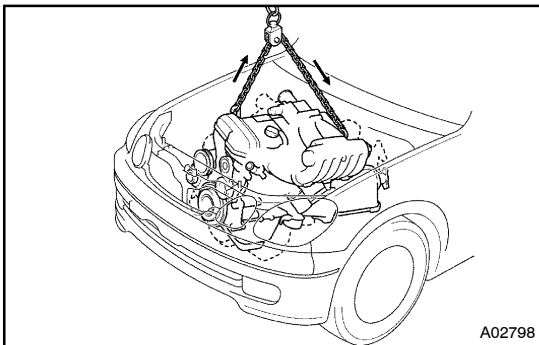
- (a) Install a No.1 engine hanger in the correct direction.
Part No.:
No.1 engine hanger 12281-46050
Bolt 90105-10345
Torque: 40 N·m (400 kgf·cm, 30 ft·lbf)
- (b) Attach the engine chain hoist to the engine hangers.



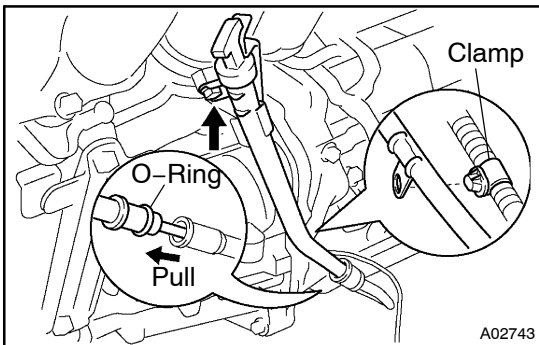
- (c) Remove the 2 hole plugs.
- (d) Remove the 4 nuts holding the engine mounting insulators to the front suspension crossmember.



- (e) Remove the 4 bolts, 4 nuts and rear engine mounting member.

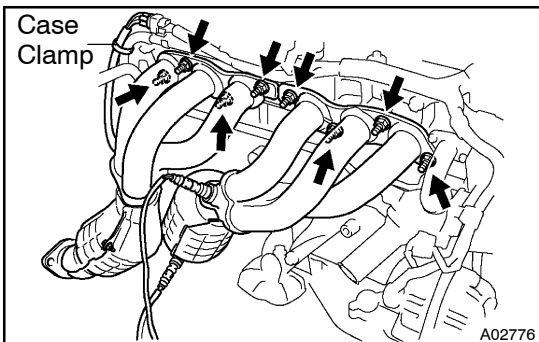


- (f) Lift the engine out of the vehicle slowly and carefully.
- HINT:**
Make sure the engine is clear of all wiring, hoses and cables.
- (g) Place the engine and transmission assembly onto the stand.



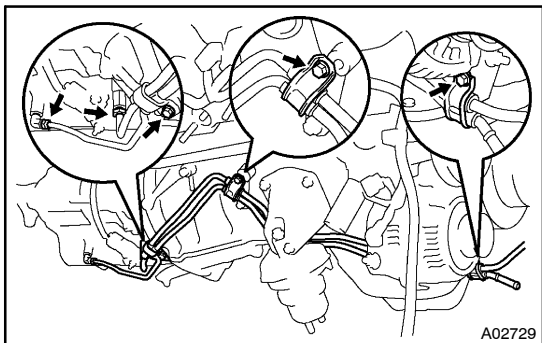
19. REMOVE OIL DIPSTICK AND GUIDE FOR A/T

- (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.

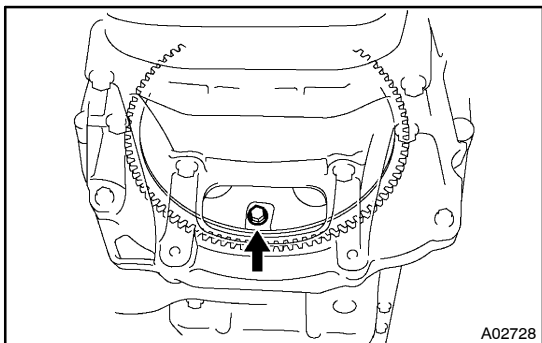


20. REMOVE EXHAUST MANIFOLD

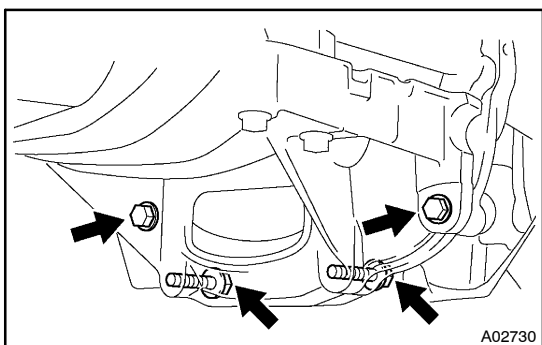
- (a) w/ TWC:
Remove the case clamp.
- (b) w/ TWC:
Disconnect the oxygen sensor (bank 2 sensor 1) connector.
- (c) Remove the 8 nuts, exhaust manifold and 2 gaskets.

**21. REMOVE OIL COOLER PIPES FOR A/T**

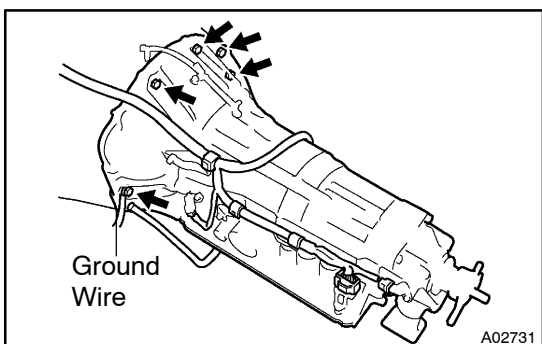
- (a) Remove the 3 bolts and pipe clamps.
- (b) Loosen the 2 union nuts, and remove the 2 oil cooler pipes.

**22. REMOVE TORQUE CONVERTER CLUTCH BOLTS**

- (a) Remove the hole plug.
- (b) Turn the crankshaft pulley bolt to gain access to each bolt.
- (c) Hold the crankshaft pulley bolt with a wrench, and remove the 6 bolts.

**23. REMOVE 4 BOLTS HOLDING NO.1 OIL PAN TO TRANSMISSION****24. REMOVE STARTER**

- (a) Disconnect the starter connector.
- (b) Remove the 2 bolts, clamp bracket and starter.

**25. DISCONNECT ENGINE WIRE FROM TRANSMISSION**

Disconnect these connectors and wire:

- Vehicle speed sensor connector
- Neutral switch connector
- Solenoid connector
- Direct clutch speed sensor connector
- Engine wire from 3 wire clamps

26. REMOVE TRANSMISSION FROM ENGINE

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

27. REMOVE DRIVE PLATE

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