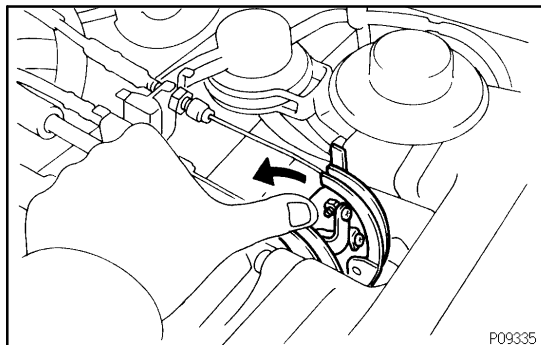


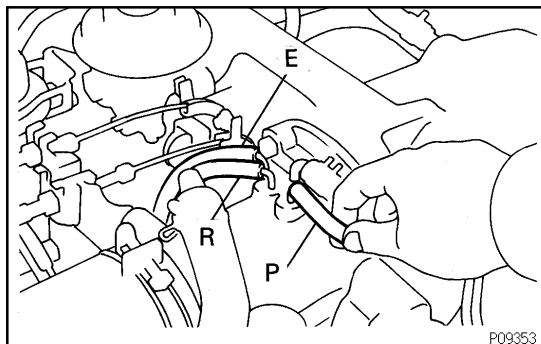


THROTTLE BODY ON-VEHICLE INSPECTION

SF1EU-02

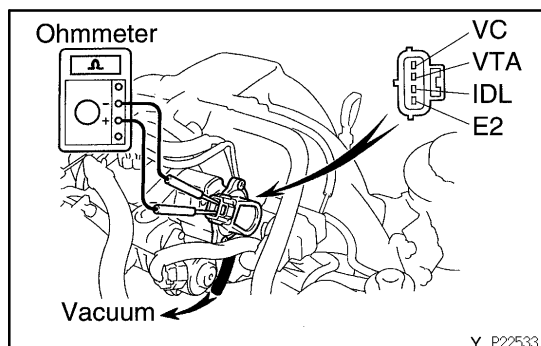
1. INSPECT THROTTLE BODY

- (a) Check that the throttle linkage moves smoothly.



- (b) Check the vacuum at each port.
- Start the engine.
 - Check the vacuum with your finger.

Port name	At idle	At 3,500 rpm
P	No vacuum	Vacuum
E	No vacuum	Vacuum
R	No vacuum	Vacuum



2. INSPECT THROTTLE POSITION (TP) SENSOR

- (a) Disconnect the TP sensor connector.
 (b) Apply vacuum to the throttle opener.
 (c) Using an ohmmeter, measure the resistance between each terminal.

Throttle valve condition	Between terminals	Resistance
Fully closed	VTA - E2	0.2 - 5.7 kΩ
Fully closed	IDL - E2	2.3 kΩ or less
Open	IDL - E2	Infinity
Fully open	VTA - E2	2.0 - 10.2 kΩ
-	VC - E2	2.5 - 5.9 kΩ

- (d) Reconnect the TP sensor connector.

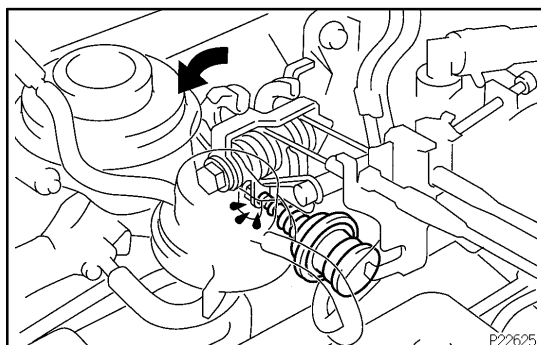
3. INSPECT AND ADJUST DASHPOT

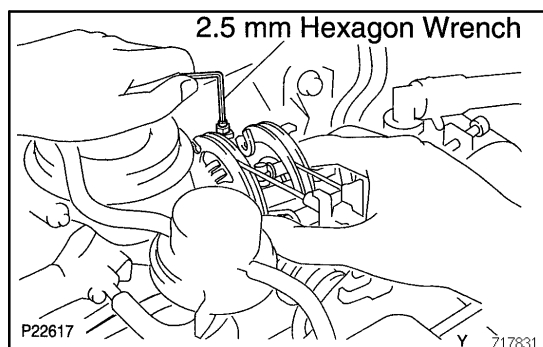
- (a) Allow the engine to warm up to normal operating temperature.
 (b) Connect the LEXUS hand-held tester or OBD II scan tool.
 (c) Check the idle speed.

Idle speed: 650 ± 50 rpm (N position)

- (d) Open the throttle valve until the throttle lever separates from the dashpot end.
 (e) Release the throttle valve gradually, and check the dashpot setting speed when the throttle lever touched the dashpot end.

Dashpot setting speed: 2,200 ± 300 rpm





If not as specified, adjust using the following procedure:

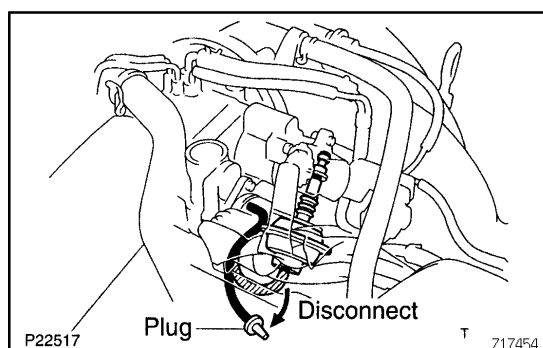
- Stop the engine.
- Loosen the lock nut of the stopper bolt.
- Adjust the dashpot setting speed by turning the stopper bolt.
- Start the engine and check the dashpot setting speed.
- Retighten the lock nut.

- (f) Maintain the engine at 3,500 rpm.
- (g) Release the throttle valve, and check that the engine returns to idle in a few seconds.
- (h) Disconnect the LEXUS hand-held tester or OBD II scan tool.

4. INSPECT THROTTLE OPENER

- (a) Allow the engine to warm up to a normal operating temperature.
- (b) Connect the LEXUS hand-held tester or OBD II scan tool.
- (c) Check idle speed.

Idle speed: 650 ± 50 rpm (N position)



- (d) Disconnect the vacuum hose from the throttle opener, and plug the hose end.
- (e) Check the throttle opener setting speed.

Throttle opener setting speed: 700 - 1,000 rpm

If the throttle opener setting is not as specified, replace the throttle body.

- (f) Stop the engine.
- (g) Reconnect the vacuum hose to the throttle opener.
- (h) Start the engine, and check that the idle speed returns to the correct speed.

Idle speed: 650 ± 50 rpm (N position)

- (i) Disconnect the LEXUS hand-held tester or OBD II scan tool.