

Idle Speed: Adjustments

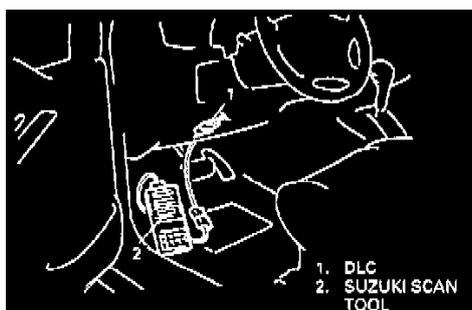
Before idle speed/IAC duty check and adjustment, make sure of the following.

- Lead wires and hoses of Electronic Fuel Injection and engine emission control systems are connected securely.
- Accelerator cable has some play, that is, it is not tight.
- Valve lash is checked and adjusted according to maintenance schedule.
- Ignition timing is within specification.
- All accessories (wipers, heater, lights, A/C, etc.) are out of service
- Air cleaner has been properly installed and is in good condition.

After above items are all confirmed, check idle speed and IAC duty as follows.

NOTE: Before starting engine, place transmission gear shift lever in "Neutral" (shift selector lever to "P" range for A/T vehicle), and set parking brake and block drive wheels.

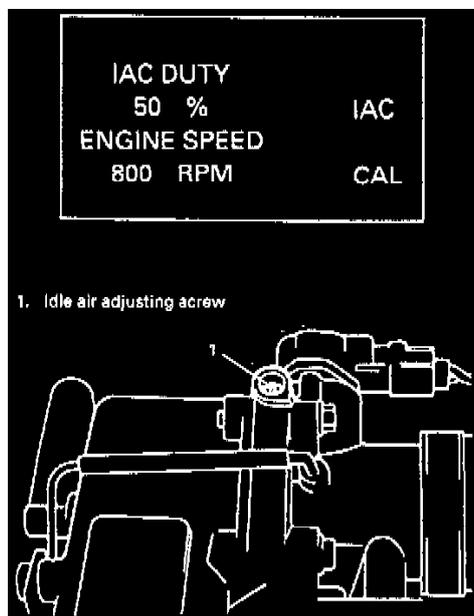
[Using SUZUKI scan tool]



- 1) Connect SUZUKI scan tool to DLC with ignition switch OFF.
- 2) Warm up engine to normal operating temperature.

SPECIFIED ENGINE IDLE SPEED AND IAC DUTY	
Engine idle speed	800 ± 50 r/min.
IAC duty as specified idle speed	50 %

- 3) Check IAC duty and idle speed by using "IAC CAL AIR" mode of SUZUKI scan tool.



If duty and/or idle speed is out of specifications, adjust it by turning idle air adjusting screw.

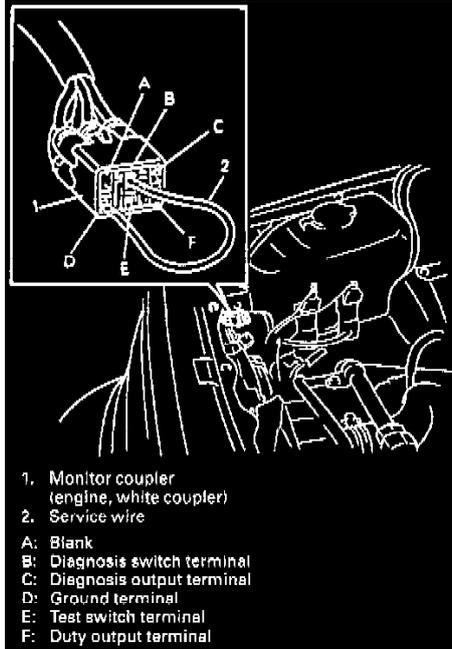
M/T vehicle		
	A/C OFF	A/C ON
Engine idle speed specification	800 ± 50 r/min.	1,000 ± 50 r/min.

A/T vehicle			
		A/C OFF	A/C ON
Engine idle speed specification	"P" or "N" range	800 ± 50 r/min.	1,000 ± 50 r/min.
	"R", "D" "2" or "L" range	800 ± 50 r/min.	800 ± 50 r/min.

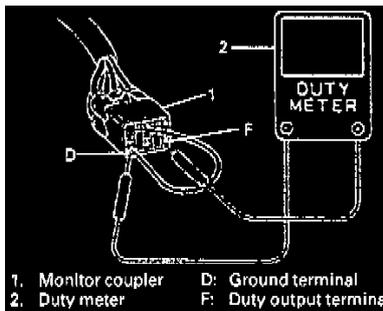
- 4) Check that specified engine idle speed is obtained with A/C ON if vehicle is equipped with A/C. If idle speed is not as specified, check A/C ON signal circuit.

[Not using SUZUKI scan tool]

- 1) Warm up engine to normal operating temperature.



- 2) Using service wire, ground diagnosis switch terminal in monitor coupler. The monitor coupler is located beside right side head light.



- 3) Stop engine and connect duty meter between duty output terminal and ground terminal of monitor coupler.
 4) Set tachometer.
 5) Start engine and warm it up completely.



ENGINE IDLE SPEED AND IAC DUTY	
Engine idle speed	800 ± 50 r/min.
IAC duty at specified idle speed	50 % (7V when battery voltage is 14V)

- 6) Check IAC duty and idle speed. If duty and/or idle speed is out of specifications, adjust it by turning idle air adjusting screw.

NOTE: IAC duty can be checked by using analog type voltmeter. IAC duty to voltage relation is as follows.

ON DUTY METER INDICATION (%)	OFF DUTY METER INDICATION (%)	VOLTMETER INDICATION (V)
0	100	0
50	50	0.5 x V _B
100	0	V _B

- "OFF DUTY METER" is such duty meter that indicates approx. 100% when terminal voltage is approx. OV".

- "V_B" represents battery voltage while engine of vehicle being checked is running.

If duty remains unchanged or is not outputted even when adjusting screw is turned, check duty output terminal circuit, A/C signal circuit, PSP switch signal circuit, "D" range signal circuit (A/T) and ECT sensor performance.

- 7) Upon completion of adjustment, install adjusting screw cap to throttle body.
 8) Remove service wire from monitor coupler.
 9) Install cap to monitor coupler.

M/T vehicle		
	A/C OFF	A/C ON
Engine idle speed specification	800 ± 50 r/min.	1,000 ± 50 r/min.

A/T vehicle			
		A/C OFF	A/C ON
Engine idle speed specification	"P" or "N" range	800 ± 50 r/min.	1,000 ± 50 r/min.
	"R", "D" "2" or "L" range	800 ± 50 r/min.	800 ± 50 r/min.

- 10) Check that specified engine idle speed is obtained with A/C ON if vehicle is equipped with A/C.