

Idle Speed: Adjustments

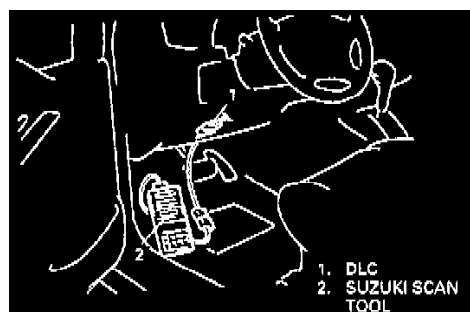
Before idle speed/IAC duty check and adjustment, make sure of the following.

- 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.

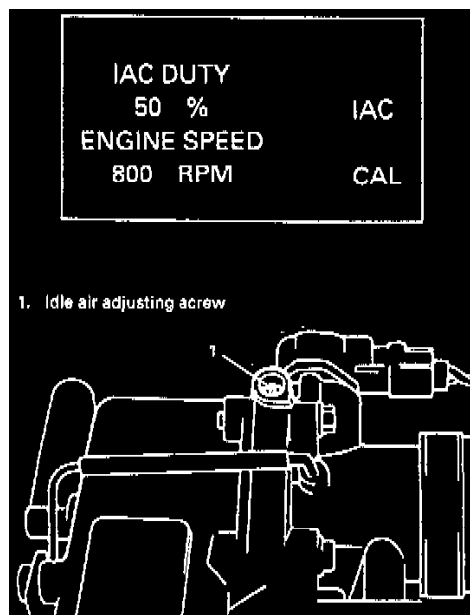
[Using SUZUKI scan tool]



- 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.

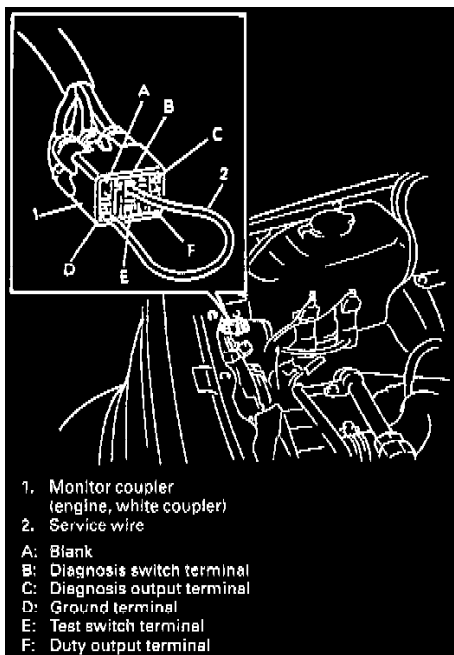
M/T vehicle		
	A/C OFF	A/C ON
Engine idle speed specification	800 ± 50 r/min.	1,000 ± 50 r/min.

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.

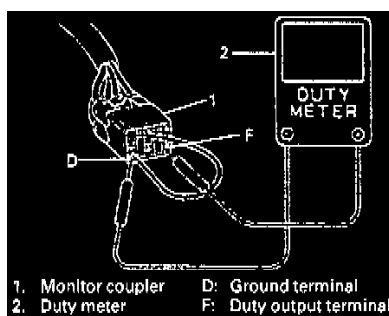
- 4) Check that specified engine idle speed is obtained with A/C ON if vehicle is equipped with A/C.
If idle speed is not as specified, check A/C ON signal circuit.

[Not using SUZUKI scan tool]

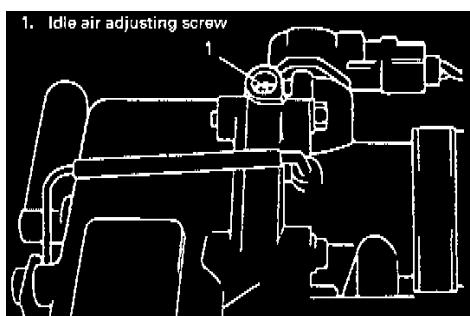
- 1) Warm up engine to normal operating temperature.



- 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 INDICA- TION (%)	OFF DUTY METER INDICA- TION (%)	VOLTMETER INDICATION (V)
0	100	0
50	50	0.5 x VB
100	0	VB

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

- "VB" 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.