

Idle Speed and Mixture

Adjustment

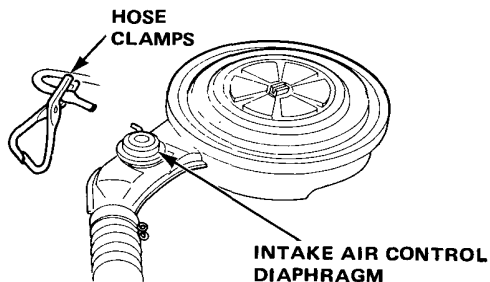
[Australian and Swiss Models]

Propane Enrichment Method

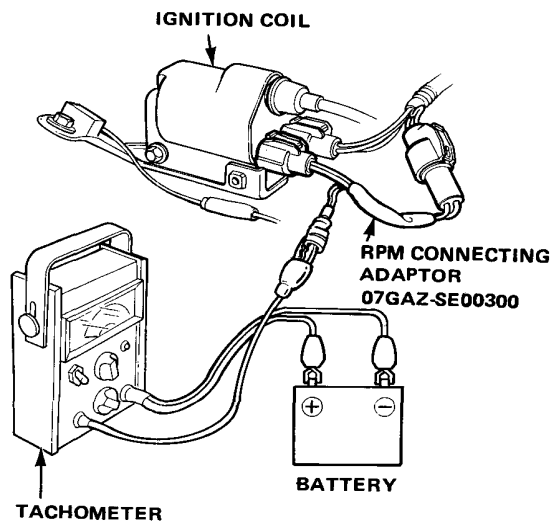
WARNING Do not smoke during this procedure. Keep any open flame away from your work area.

NOTE: This procedure requires a propane enrichment kit.

1. Start engine and warm up to normal operating temperature; the cooling fan will come on.
2. Remove the vacuum hose from the intake air control diaphragm and clamp the hose end.



3. Connect a tachometer.

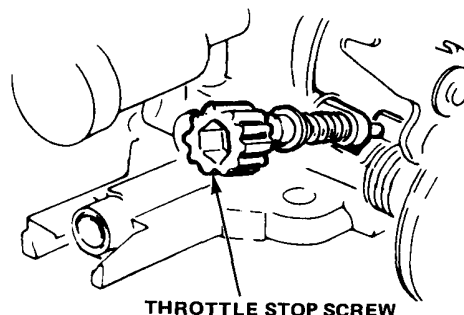


4. Check idle speed with the headlights, heater blower, rear window defroster, cooling fan and air conditioner off.

Transmission	Idle Speed
Manual (in neutral)	750±50 min ⁻¹ (rpm)
with P/S	800±50 min ⁻¹ (rpm)
Hondamatic (in gear)	700±50 min ⁻¹ (rpm)
with P/S	750±50 min ⁻¹ (rpm)

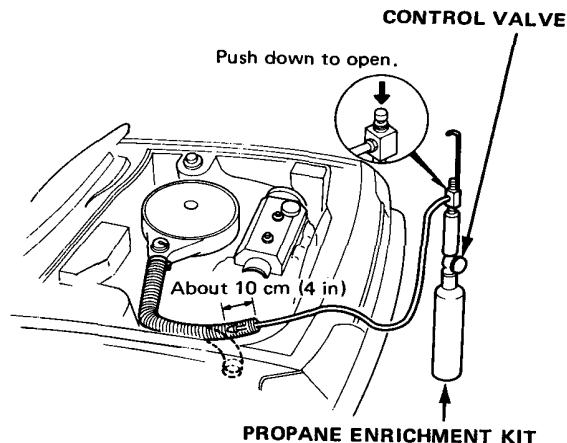
P/S: Power Steering

Adjust the idle speed, if necessary, by turning the throttle stop screw.



5. Disconnect air cleaner intake tube from air duct.
6. Insert the hose of the propane enrichment kit into the intake tube about 10 cm (4 in).

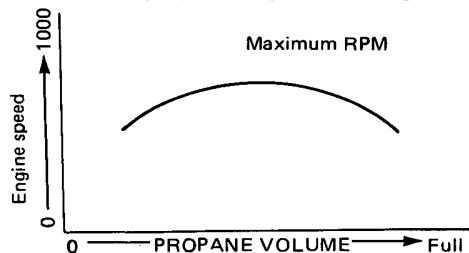
NOTE: Check that propane bottle has adequate gas before beginning test.





7. With engine idling, depress push button on top of propane device, then slowly open the propane control valve to obtain maximum engine speed. Engine speed should increase as percentage of propane injected goes up.

NOTE: Open the propane control valve slowly; a sudden burst of propane may stall the engine.

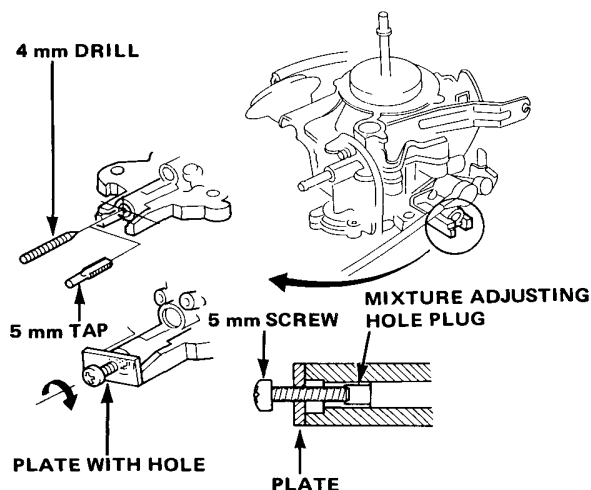


Propane Enriched Maximum Engine Speed

Engine speed increase should be:

Transmission	Engine speed
Manual	$160 \pm 30 \text{ min}^{-1} \text{ (rpm)}$
Hondamatic	$70 \pm 25 \text{ min}^{-1} \text{ (rpm)}$

- If engine speed does not increase per specification, mixture is improperly adjusted. Go to step 8.
 - If engine speed increases per specification, go to step 17.
8. Close the propane control valve and remove the air cleaner.
 9. Disconnect vacuum tubes, fuel line, throttle cable and choke cable from carburetor.
 10. Remove carburetor.
 11. To remove the mixture adjusting screw hole plug;



12. Reinstall the carburetor, vacuum hoses, fuel line, throttle cable and choke cable.
13. Install air cleaner.
14. Start engine and warm up to normal operating temperature; the cooling fan will come on.
15. Remove the vacuum hose from intake air control diaphragm and clamp the hose end.
16. Reinstall the propane enrichment kit and recheck maximum propane enriched engine speed.
 - If the propane enriched speed is too low, mixture is too rich: turn the mixture screw 1/4-turn clockwise and recheck.
 - If the propane enriched speed is too high, mixture is too lean: turn the mixture screw 1/4-turn counterclockwise and recheck.

17. Close the propane control valve and recheck idle speed.

NOTE: Raise the engine speed to $2,500 \text{ min}^{-1} \text{ (rpm)}$ 2 or 3 times, and after 10 seconds of that, check the idle speed.

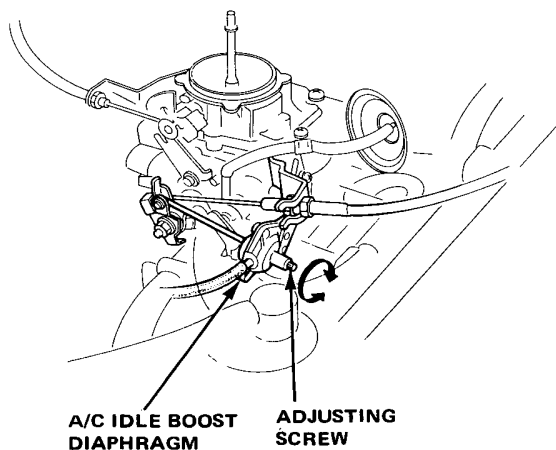
- If idle speed is as specified (step 4), go to step 18.
 - If idle speed is not as specified (step 4), go to step 16.
18. Recheck idle speed and, if necessary, adjust by turning throttle stop screw, then repeat steps 16 and 17.
 19. Remove the propane enrichment kit and reconnect air cleaner intake tube.
 20. Reinstall the mixture adjusting screw hole cap.

(cont'd)

Adjustment (cont'd)

21. If equipped with air conditioner, check the idle speed with the A/C on: speed should still be within specification.

Adjust the idle speed, if necessary, by turning the adjusting screw B.



Tailpipe Emission Inspection

NOTE: It is not possible to use a CO meter to adjust the idle mixture; the effect of the catalytic converter prevents accurate tracking of such small changes in air-fuel ratio.

WARNING Do not smoke during this procedure. Keep any open flame away from your work area.

1. Follow steps 1, 3, 4, and 5 of the propane enrichment.
2. Warm up and calibrate the CO meter according to the meter manufacturer's instructions.
3. Check the CO with the headlights, heater blower, rear window defroster, cooling fan, and air conditioner off.

CO meter should indicate 0.1% maximum.

[Other Models]

NOTE: The following inspections and adjustments should be completed before measurement.

- Air cleaner element
- Ignition timing and control system
- Spark plugs
- Idle speed
- Valve clearance
- Intake air control system
- PCV valve

WARNING Do not smoke during this procedure. Keep any open flame away from your work area.

CO Meter Method

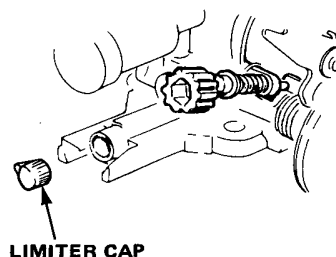
1. Warm-up and calibrate the NDIR CO Meter in accordance with the manufacturer's recommended procedures.
2. Insert exhaust gas sampling probe into the tail pipe at least 40 cm (16-inches).
3. Check specification for idle speed and CO with the headlights OFF (on Swedish model: on) and cooling fan OFF.

Transmission	Idle Speed
Manual (in neutral) with P/S	750±50 min ⁻¹ (rpm) 800±50 min ⁻¹ (rpm)
Hondamatic (in gear) with P/S	700±50 min ⁻¹ (rpm) 750±50 min ⁻¹ (rpm)

	Specified CO %
Swedish Model	0.2–1.0%
Other Models	0.2–1.0%

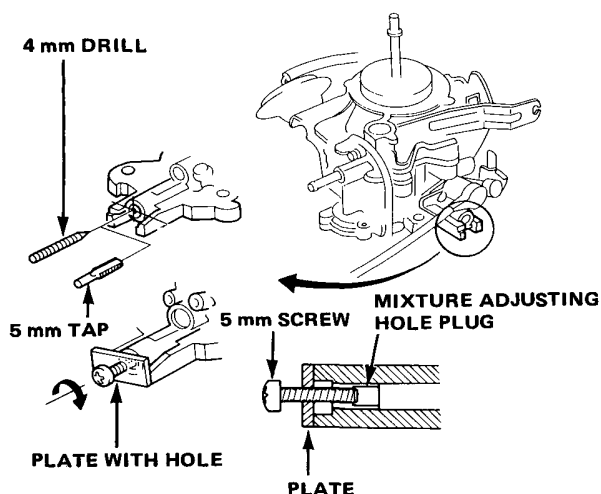
- If idle speed and specified CO% do not increase per specification:

– Limiter equipped car: Adjust idle CO with the limiter cap. If still out of spec, remove the carburetor and limiter cap, then reinstall the carburetor.





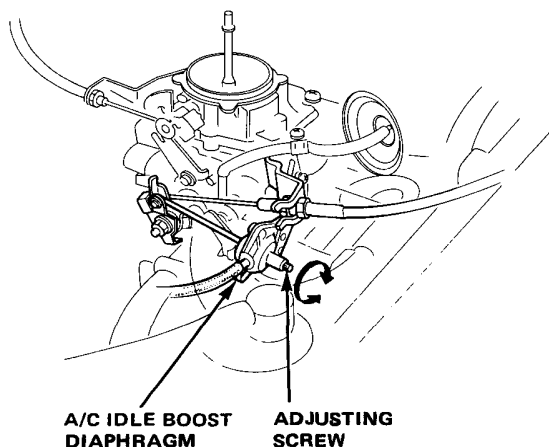
— Hole cap equipped car: Remove the carburetor and hole cap, then install the carburetor.



5. Adjust the mixture adjusting screw to obtain specified CO%, recheck the engine idle speed and reset if necessary. Finally recheck the CO reading and replace the hole cap. If unable to obtain a CO reading of specified % by this procedure, check the engine turn-up condition.

If car is equipped with air conditioner, recheck idle speed with A/C on. Speed should still be within specification.

If the speed is outside the spec, remove the rubber cap on the idle boost diaphragm and adjust by turning adjusting screw.



- If the idle boost diaphragm does not operate, go on to idle boost control system inspection (page 12-15).

Idle-Drop Method

1. Start the engine and warm up to the normal operating temperature (cooling fan comes on).
2. Remove the limiter cap or hole plug.
3. With the headlights OFF (on Swedish model; on) and the cooling fan OFF, adjust the engine speed and mixture to proper idle as below.

Displacement	Transmission	Idle Speed
1300	Manual with P/S	800 min ⁻¹ (rpm) 900 min ⁻¹ (rpm)
	Hondamatic with P/S	730 min ⁻¹ (rpm) 780 min ⁻¹ (rpm)
1500	Manual with P/S	820 min ⁻¹ (rpm) 870 min ⁻¹ (rpm)
	Hondamatic with P/S	750 min ⁻¹ (rpm) 800 min ⁻¹ (rpm)

4. Turn the mixture adjusting screw clockwise until engine speed drops as below:

Displacement	Transmission	Idle Speed
1300	Manual with P/S	750 min ⁻¹ (rpm) 850 min ⁻¹ (rpm)
	Hondamatic with P/S	700 min ⁻¹ (rpm) 750 min ⁻¹ (rpm)
1500	Manual with P/S	750 min ⁻¹ (rpm) 800 min ⁻¹ (rpm)
	Hondamatic with P/S	700 min ⁻¹ (rpm) 750 min ⁻¹ (rpm)

5. Replace the limiter cap or hole plug.

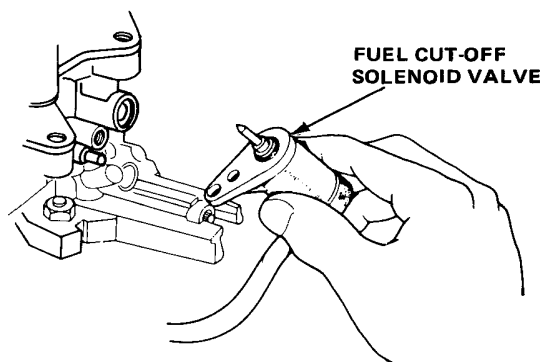
Fuel Cut-off Solenoid Valve

Inspection

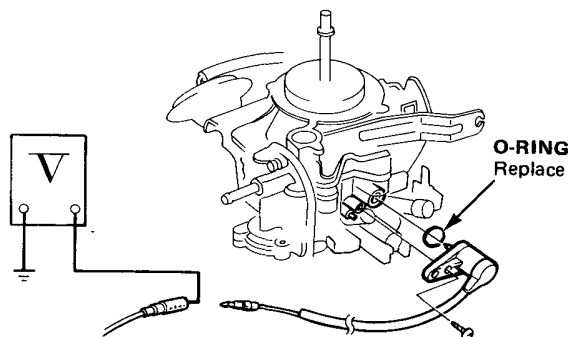
1. Place a clean shop towel around the solenoid valve, to soak up any gasoline, then loosen the screws and remove the solenoid valve.

WARNING

- Wipe up any spilled gasoline before testing.
- If cut-off valve is removed for testing, be sure you ground it to prevent sparking or fire when the key is turned on.

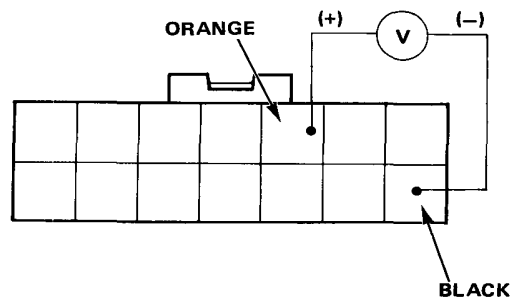


2. Ground the valve as far from the carburetor as possible and turn on the ignition while you watch the valve needle.
 - If the needle retracts, go on to step 3.
 - If the needle does not retract, check the voltage at connector.



- If voltage is present, replace the solenoid valve and re-test.
- If voltage is not present, check the wiring and fuse. If no problem, go on to troubleshooting (page 12-23) (Australian and Swiss models).

3. Reinstall the solenoid valve. Go on to step 4 (Australian and Swiss models) or test is complete (other models).
4. Attach the voltmeter probes to the device control unit connector as shown.



5. Start the engine and accelerate, then suddenly release the throttle and check for voltage during deceleration above 1,800 min⁻¹ (rpm).

There should be no voltage.

- If voltage is not present, test is complete.
- If voltage is present, go on to troubleshooting (page 12-23).