1995 ENGINE PERFORMANCE
Volvo - On-Vehicle Adjustments
850 - Turbo

ENGINE COMPRESSION

Warm engine to normal operating temperature. Disconnect single wire from negative terminal of ignition coil(s). Check compression with all spark plugs removed, throttle valve wide open and at normal cranking speed (250-300 RPM).

CAUTION: Failure to disconnect ignition coil negative terminal may cause damage to ignition system control unit(s).

COMPRESSION SPECIFICATIONS TABLE

<table>
<thead>
<tr>
<th>Application</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compression Ratio</td>
<td>8.5:1</td>
</tr>
</tbody>
</table>

VALVE CLEARANCE

NOTE: Hydraulic lifters used. No adjustment is required.

IGNITION TIMING

Ignition timing is computer-controlled and is not adjustable.

IGNITION TIMING TABLE (Degrees BTDC @ RPM)

<table>
<thead>
<tr>
<th>Application</th>
<th>(1) Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbo</td>
<td>4-8 @ 850</td>
</tr>
</tbody>
</table>

(1) - Ignition timing is computer-controlled. Not adjustable.

IDLE SPEED & MIXTURE

NOTE: Cold (fast) idle is computer-controlled. Basic idle speed is not adjustable.

IDLE SPEED & CO LEVEL

NOTE: Idle mixture is not adjustable.

IDLE SPEED & CO LEVEL TABLE

<table>
<thead>
<tr>
<th>Application</th>
<th>Idle RPM</th>
<th>(1) CO Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbo</td>
<td>850</td>
<td>.20-1.0%</td>
</tr>
</tbody>
</table>

(1) - CO level is measured before catalytic converter.
THROTTLE CONTROLS

THROTTLE SWITCH

Checking
Open throttle slightly and listen for a click. Click indicates throttle switch opens.

Adjusting
Ensure throttle valve is closed. Loosen TPS retaining screws. Turn TPS switch clockwise slightly. Turn TPS switch back again until a click is heard. Tighten retaining screws. Recheck setting. Open throttle slightly, a click should be heard. Click indicates switch is activating.

THROTTLE LINK ROD

1) Loosen throttle link lock nut so link is separated and can spring back easily to its innermost position. Mount link in position.

NOTE: Lubricate link with petroleum jelly if needed.

2) Attach link end with ball and lock nut to throttle spindle. Ensure throttle spindle is in contact with adjusting screw "B" and pulley is seated against idle stop "C". Tighten link lock nut "A". Rotate pulley to ensure link seats against adjusting screw "B" before pulley seats against idle stop "C". See Fig. 1.

THROTTLE CABLE
Throttle pulley should move freely without sticking. Cable should be taut in idling position, without altering pulley position. Pulley should rest against idle stop. See Fig. 2. Adjust cable as necessary. Press accelerator pedal to floor and ensure pulley reaches full-load stop.

**Fig. 2: Adjusting Throttle Cable (Typical)**
Courtesy of Volvo Cars of North America.

**BASIC THROTTLE SETTING**

**NOTE:** If basic throttle setting adjusted, throttle position will change. Therefore, throttle switch must be adjusted whenever basic throttle setting is adjusted. See THROTTLE SWITCH under THROTTLE CONTROLS.

Loosen basic throttle setting adjustment screw lock nut. See Fig. 3. Turn screw until throttle is completely closed. Tighten adjustment screw until it touches throttle lever and then turn an additional 1/2 turn. Tighten lock nut, making sure not to change adjustment. Recheck basic throttle setting.

**Fig. 3: Adjusting Basic Throttle Setting (Typical)**
Courtesy of Volvo Cars of North America.