

Service adjustments

Preparatory conditions

- ☐ Engine at normal operating temperature.
- ☐ Plug gaps and ignition timing correct.
- ☐ All auxiliary equipment switched off.
- ☐ Radiator fan must not run during adjustment.
- ☐ Idle switch closed.
- ☐ Connect exhaust gas analyser to connecting pipe.

1.1 Idle speed

Technical Data

Idle speed	920±25 rpm
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Preparatory conditions

- ☐ Clamp crankcase breather hose.
- ☐ Remove camshaft cover oil filler cap.

Adjustment - 1

- Start engine and allow to idle until fan has cut-in once.
- Engine idling, disconnect coolant temperature sensor multi-plug.
- Rev engine three times to over 3000 rpm and allow to idle.

NOTE: If engine stalls, reconnect coolant temperature sensor connector before restarting.

- Compare idle speed indicated with that specified.
- If necessary reset idle speed with adjusting screw.

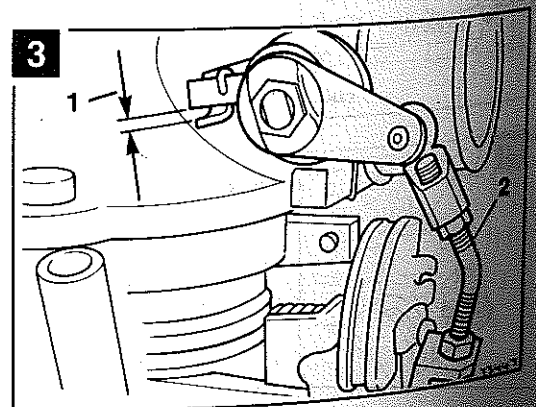
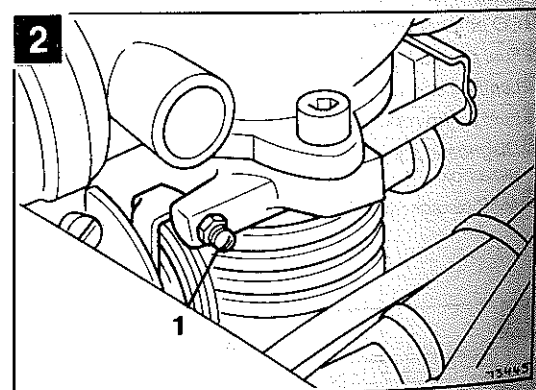
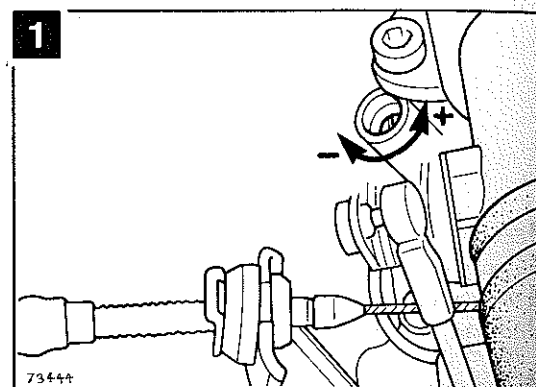
1.2 Throttle initial position

Adjusting - 2

- Pre-set during manufacture.
- No service adjustment required.
- If the position inadvertently altered re-set as follows.
- Unscrew stop screw [1] until clearance exists between screw and stop.
- Adjust screw [1] until it just touches lever and then screw in further 1/2 turn.
- Tighten locknut.
- Check and if necessary adjust the idle speed.

Adjusting by-pass flap - 3

- Pre-set during manufacture.
- No service adjustment required.
- If position inadvertently altered re-set as follows.
- Open by-pass flap lever fully and check gap [1].
- If gap not 1,5-0,2 mm at narrowest point, adjust connecting rod [2].



1.3 CO level

Self-diagnosis
code: 2242

Technical Data

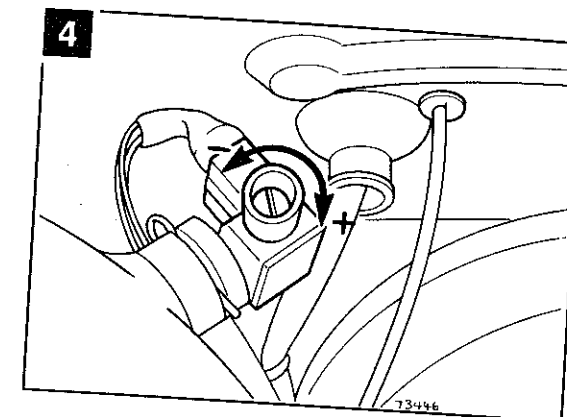
All models	0,7±0,2%
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Preparatory conditions

- ☐ Ensure temperature sensor multi-plug disconnected.
- ☐ Rev engine three times to over 3000 rpm and allow to idle.

Checking - 4

- Compare CO level with that specified.
- Re-set by turning potentiometer adjusting screw.
- When idle speed and CO levels correct, reconnect coolant temperature sensor.
- Rev engine three times over 3000 rpm and allow to idle.
- Check idle adjustment and CO level.



Checks & adjustments

2.1 Fuel pressure

Technical Data

System pressure (vacuum disconnected)	approx 3,0 bar
Regulated pressure (vacuum connected)	2,5 bar
Holding pressure after 10 minutes	2,0 bar (min.)

Preparatory conditions - 5

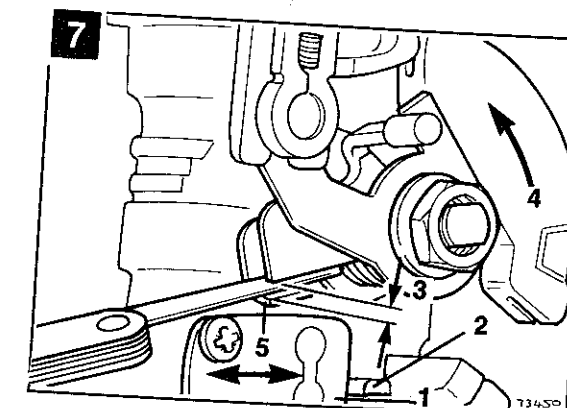
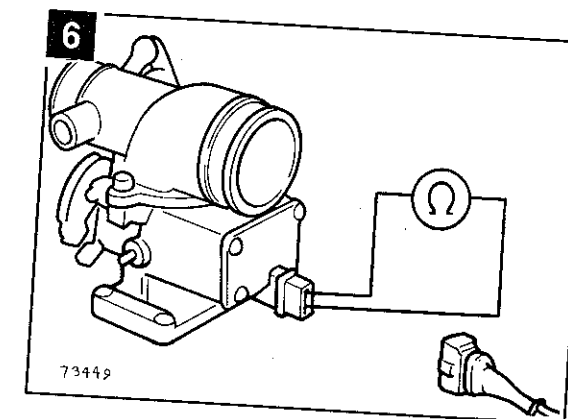
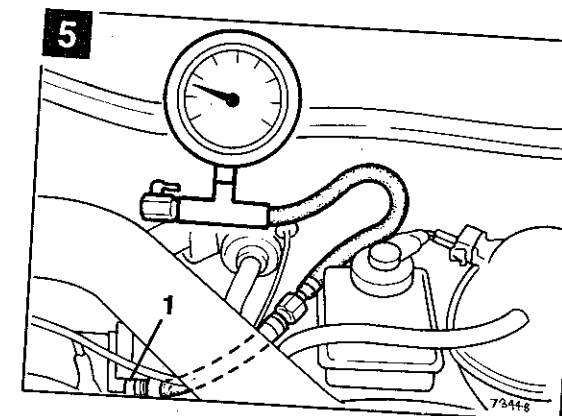
- ☐ Connect pressure gauge to test point on injector fuel rail.
- ☐ Ensure pressure gauge tap, if fitted, in closed position.

Checking pressure - 5

- Start engine and allow to idle.
- Compare pressure indicated with regulated pressure specified.
- Disconnect vacuum hose from pressure regulator.
- Compare pressure indicated with system pressure specified.
- Switch ignition OFF.
- Note pressure reading.
- Pressure should be at minimum specified after 10 minutes.
- If holding pressure drops below minimum specified.
- Start engine and run at idle.
- Switch ignition OFF and clamp fuel return hose.
- Pressure should drop.
- If pressure does not drop, pressure regulator is faulty.

Adjusting idle switch - 6 & 7

- Disconnect switch multi-plug from throttle body.
- Connect ohmmeter between terminals 1 & 2 [6].



2.2 Throttle switches

Self-diagnosis
code: 2212