

REPAIR GUIDE

Ford Ranger/Explorer/Mountaineer 1991-1999

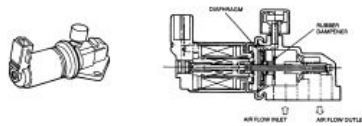
- ▶ OPERATION
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Idle Air Control (IAC) Valve

OPERATION

See Figure 1

The Idle Air Control (IAC) valve controls the engine idle speed and dashpot functions. The valve is located on the side of the throttle body. This valve allows air, determined by the Powertrain Control Module (PCM) and controlled by a duty cycle signal, to bypass the throttle plate in order to maintain the proper idle speed.



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Fig. Fig. 1: Typical Idle Air Control (IAC) valve which is mounted to the throttle body-cutaway view shows air bypass direction

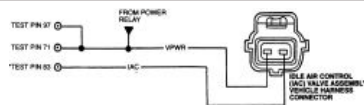
TESTING

See Figure 2

1. Turn the ignition switch to the *OFF* position.
2. Disengage the wiring harness connector from the IAC valve.
3. Using an ohmmeter, measure the resistance between the terminals of the valve.

Due to the diode in the solenoid, place the ohmmeter positive lead on the VPWR terminal and the negative lead on the ISC terminal.

4. If the resistance is not 7-13 ohms, replace the IAC valve.

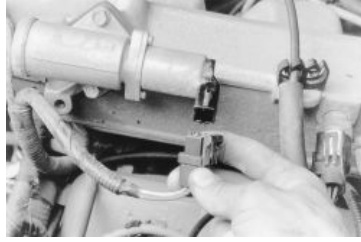


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Fig. Fig. 2: IAC valve wiring harness connections

REMOVAL & INSTALLATION

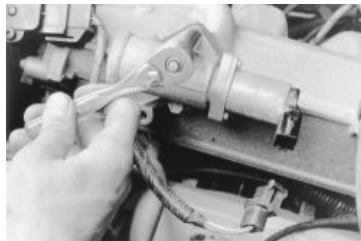
1. Disconnect the negative battery cable.



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Fig. Fig. 3: To remove the IAC valve, first disconnect the negative battery cable, then the IAC wire harness plug



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Fig. Fig. 4: Next, remove the two IAC valve attaching bolts ...



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Fig. Fig. 5: ... and pull the valve from the intake manifold

2. Disengage the wiring harness connector from the IAC valve.
3. Remove the two retaining screws, then remove the IAC valve and discard the old gasket.

To install:



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Fig. Fig. 6: When installing the valve, always discard the old gasket and install it using a new one

4. Clean the IAC valve mounting surface on the throttle body of old gasket material.
5. Using a new gasket, position the IAC valve on the throttle body. Install and tighten the retaining screws to 71-106 inch lbs. (8-12 Nm).
6. Attach the wiring harness connector to the IAC valve.

7. Connect the negative battery cable.

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