



AUSTRALIAN X-TRAIL FORUM



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QR25DE Engine Idle Re-Learn Procedure

Accelerator Pedal Released Position Learning

DESCRIPTION

Accelerator Pedal Released Position Learning is an operation to learn the fully released position of the accelerator pedal by monitoring the accelerator pedal position sensor output signal. It must be performed each time harness connector of accelerator pedal position sensor or ECM is disconnected.

OPERATION PROCEDURE

1. Make sure that accelerator pedal is fully released.
2. Turn ignition switch ON and wait at least 2 seconds.
3. Turn ignition switch OFF and wait at least 10 seconds.
4. Turn ignition switch ON and wait at least 2 seconds.
5. Turn ignition switch OFF and wait at least 10 seconds.

Throttle Valve Closed Position Learning

DESCRIPTION

Throttle Valve Closed Position Learning is an operation to learn the fully closed position of the throttle valve by monitoring the throttle position sensor output signal. It must be performed each time harness connector of electric throttle control actuator or ECM is disconnected.

OPERATION PROCEDURE

1. Make sure that accelerator pedal is fully released.
 2. Turn ignition switch ON.
 3. Turn ignition switch OFF and wait at least 10 seconds.
- Make sure that throttle valve moves during above 10 seconds by confirming the operating sound.

Idle Air Volume Learning

DESCRIPTION

Idle Air Volume Learning is an operation to learn the idle air volume that keeps each engine within the specific range. It must be performed under any of the following conditions:

- _ Each time electric throttle control actuator or ECM is replaced.
- _ Idle speed or ignition timing is out of specification.

Without CONSULT-II

NOTE:

- _ It is better to count the time accurately with a clock.

_ It is impossible to switch the diagnostic mode when an accelerator pedal position sensor circuit has a malfunction.

1. Perform **EC-501, "Accelerator Pedal Released Position Learning"** (see above procedure)
2. Perform **EC-502, "Throttle Valve Closed Position Learning"** (see above procedure)
3. Start engine and warm it up to normal operating temperature.
4. Check that all items listed under the topic PREPARATION (previously mentioned) are in good order.
5. Turn ignition switch OFF and wait at least 10 seconds.
6. Confirm that accelerator pedal is fully released, turn ignition switch ON and wait 3 seconds.
7. Repeat the following procedure quickly five times within 5 seconds.
 - a. Fully depress the accelerator pedal.
 - b. Fully release the accelerator pedal.
8. Wait 7 seconds, fully depress the accelerator pedal and keep it for approx. 20 seconds until the MI stops blinking and turned ON.
9. Fully release the accelerator pedal once MIL is ON and within 3 seconds start the car.
10. Let engine idle.
11. Wait 20 seconds.
12. Rev up the engine two or three times and make sure that idle speed and ignition timing are within the specifications (see below).
13. If idle speed and ignition timing are not within the specification, Idle Air Volume Learning will not be carried out successfully. In this case, please take the car to your nearest dealer to perform the required diagnostics and idle relearn using Consult II

ITEM SPECIFICATION

Idle speed QR25DE: 700+/-50 rpm [in P or N (A/T), Neutral (M/T) position]

Ignition timing M/T: 15+/-5° BTDC (in Neutral position)

A/T: 15+/-5° BTDC (in P or N position)