



SERVICE BULLETIN

Classification:

EC04-002

Reference:

NTB04-015

Date:

February 3, 2004

UNABLE TO MAINTAIN IDLE OR LOW/ROUGH IDLE AT START

APPLIED VEHICLES: 2002-03 Sentra (B15)
2002-03 Altima (L31)

APPLIED ENGINE: QR25DE

IF YOU CONFIRM:

An applied vehicle has the following symptoms:

- Engine RPM rises at start and then drops and cannot maintain idle

OR

- Engine has low/rough idle

AND

- Engine runs well if the throttle is held open

NOTE: The above symptoms may occur after an ECM reprogram or the vehicle battery was run down (discharged).

ACTIONS:

- Conduct the “**Engine Running and Warm Up**” procedure
- Perform the “**Idle Air Volume Learning (IAVL)**” procedure
- If the IAVL does not finish (“CMPLT”), perform the “**Corrected Idle RPM Check**”. Then, perform the IAVL procedure again.
- Refer to the Service Procedure starting on page 2 for details

IMPORTANT: The purpose of "ACTIONS" (above) is to give you a quick idea of the work you will be performing. You **MUST** closely follow the entire Service Procedure (starting on page 2) as it contains information that is essential to successfully completing this repair.

CLAIMS INFORMATION

Submit a Primary Operation (PO) line claim using the following claims coding:

DESCRIPTION	OP CODE	SYM	DIA	FRT
Perform Idle Air Volume Learning Operation	DE96AA	AF or AG	32	0.3 hrs

SERVICE PROCEDURE

Engine Running and Warm Up

1. If the engine is able to maintain an idle, but is rough or low, then move to step 4.
2. Start the engine and hold the throttle part way open to maintain 1500-2000 RPM at “no-load” for 20 seconds.

IMPORTANT: Follow step 3 (next step) exactly as described.

3. Release the throttle SLOWLY OVER 5 SECONDS back to the closed-throttle position.
4. Let the engine idle for one minute (even if the idle is rough or low).
5. Make sure the engine coolant is above 70°C before proceeding.
6. Make sure all electrical loads are turned OFF, including A/C, defroster, radio, lights, etc. while performing the following procedures. Also, make sure the engine cooling fans are NOT operating during the following procedures.

Idle Air Volume Learning (IAVL)

7. Connect CONSULT-II to the vehicle.
8. In the **CONSULT WORK SUPPORT** mode, select **IDLE AIR VOL LEARN**. See Figure 1.

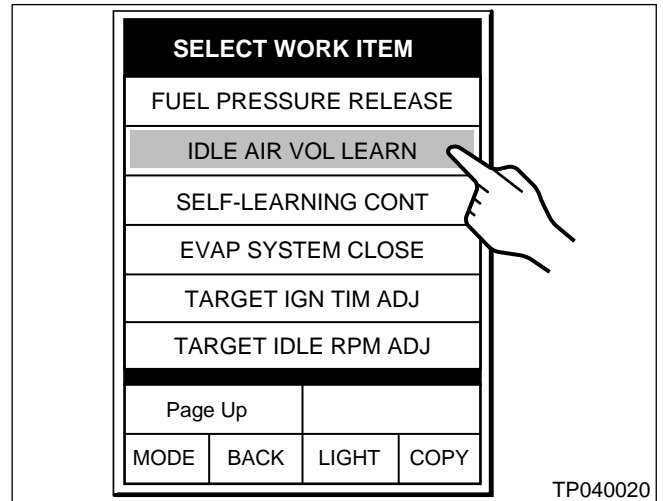


Figure 1

9. Press **START** on the "IDLE AIR VOL LEARN" screen. See Figure 2.

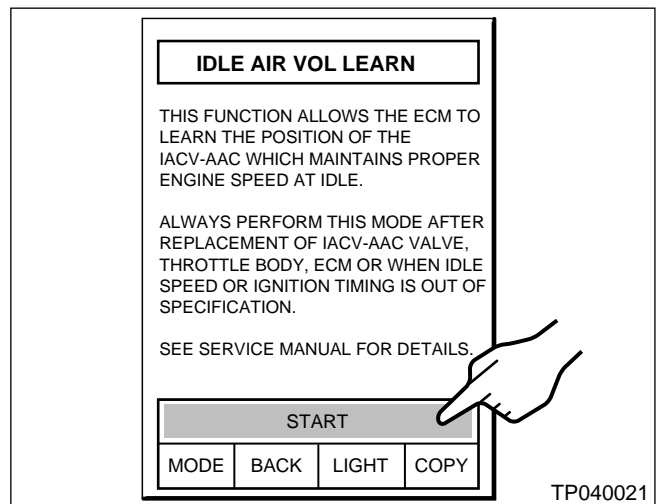


Figure 2

10. Press **START** on the “WORK SUPPORT” screen to begin the Idle Air Volume Learning (IAVL) procedure. See Figure 3.

- The IAVL procedure will take several minutes to complete
- CONSULT will display “Please Wait” in the center of the screen while the IAVL procedure is in process. See Figure 4.
- CONSULT will display “CMPLT” in the top right corner of the screen when the IAVL procedure is finished. See Figure 5.
- If the IAVL procedure does not finish (“CMPLT”), perform the “**Corrected Idle RPM Check**” procedure starting on page 5. Then repeat steps 8 through 10 of the IAVL procedure.

11. Confirm the engine correctly starts and idles (after the Idle Air Volume Learning procedure is complete).

12. The repair is complete. Disconnect CONSULT-II from the vehicle.

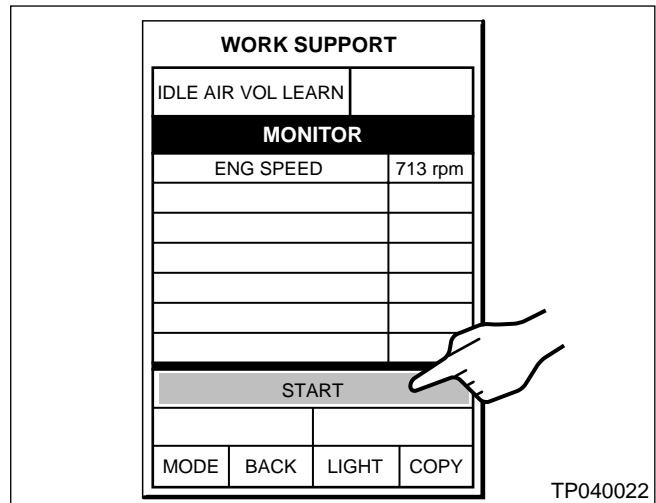


Figure 3

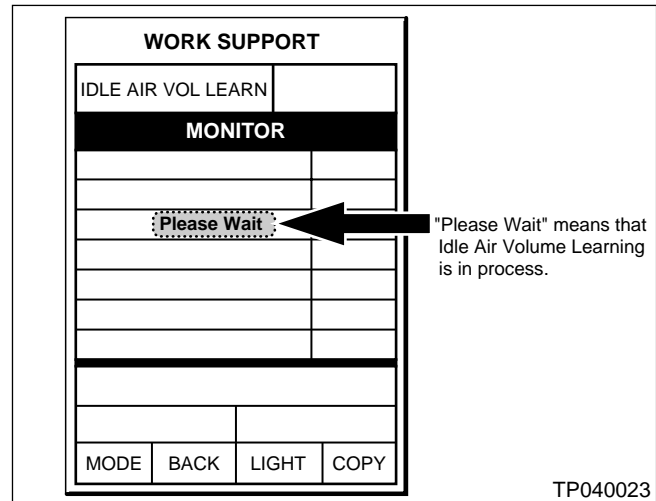


Figure 4

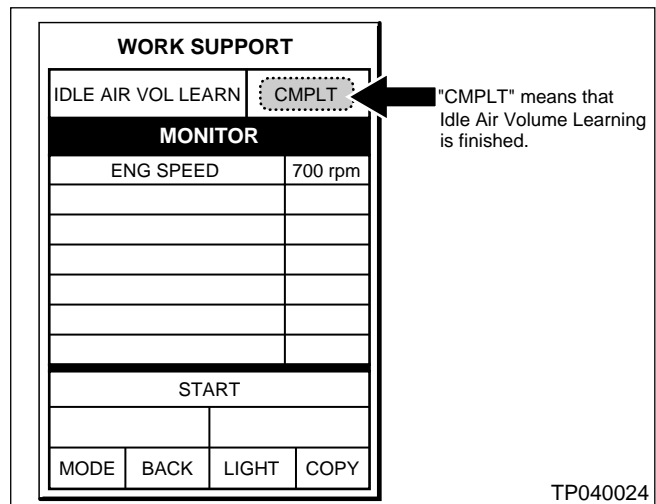


Figure 5

Corrected Idle RPM Check (only necessary if IAVL did not finish “CMPLT”)

1. In the **CONSULT WORK SUPPORT** mode, select **TARGET IDLE RPM ADJ.** See Figure 6.

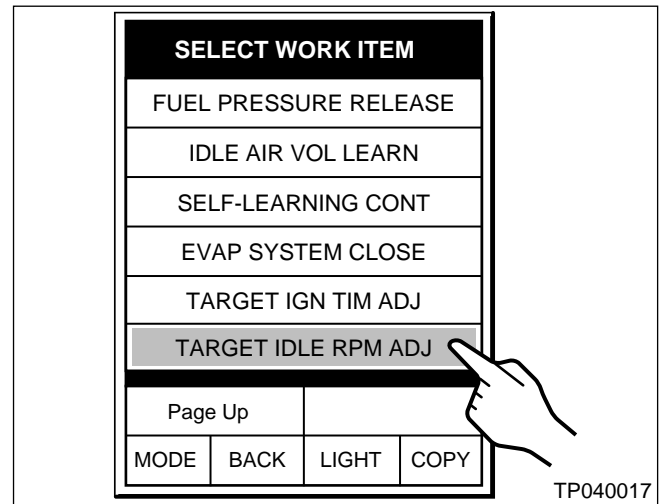


Figure 6

2. Press **START** on the “TARGET IDLE RPM ADJ” screen. See Figure 7.

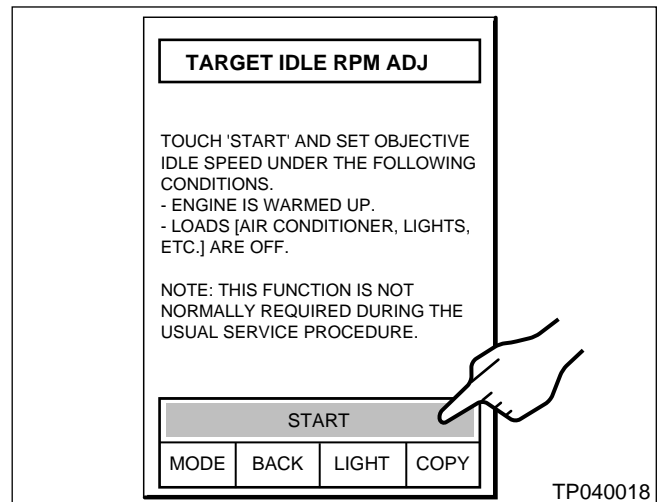


Figure 7

3. Check the CORRECTED IDLE RPM (see Figure 8):

- a. If the CORRECTED IDLE RPM is “0” (zero), press **BACK** two times, then perform the “Idle Air Volume Learning” (IAVL) procedure starting on page 3.
- b. If the CORRECTED IDLE RPM is NOT “0” (zero):
 - adjust the value to “0” (zero) using the **DOWN** key
 - press **UPDATE**
 - press **BACK** two times
 - perform the IAVL procedure starting on page 3.

NOTE: The CORRECTED IDLE RPM must be at “0” (zero), before you can perform the IAVL (starting on page 3).

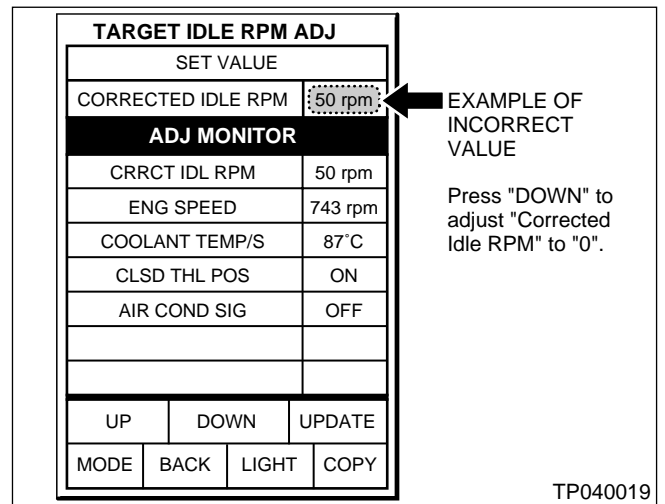


Figure 8



SERVICE BULLETIN

Classification: EC05-009	Reference: NTB05-067	Date: October 5, 2005
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PROCEDURE TO COMPLETE IAVL WHEN IDLE SPEED NEEDS TO BE REDUCED.

APPLIED VEHICLES: All 2002 – 2005 models

IF YOU CONFIRM

The idle, in Park or Neutral, is more than 25 rpm above specification (with the engine warm), and/or

DTC P0507 (ISC SYSTEM) is stored,

NOTE:

- This incident may be the result of recent cleaning or replacement of the throttle body. The vehicle "in-use" learned idle (IAVL) may be higher after throttle body deposits are reduced (by cleaning or replacement).
- If DTCs other than P0507 are stored, you must correct the cause for those DTCs first. After correcting other DTCs, if you still have a P0507 and/or an idle condition above specification, continue with this bulletin.

ACTIONS

To reduce idle RPM, perform the following in this order until IAVL successfully completes:

1. Check engine for vacuum leaks.
2. Perform IAVL procedure.
3. For 2002 and 2003 models: Check for newer ECM reprogramming data. If it's available, perform reprogramming, then try IAVL again. 2004 and 2005 models: Skip this step.
4. Reduce idle speed manually:
 - a. Disconnect injectors one at a time until IAVL completes (see step 4 of the Service Procedure for details),
 - b. Reconnect the injectors, clear DTCs, and perform final IAVL.

IMPORTANT: The purpose of "ACTIONS" (above) is to give you a quick idea of the work you will be performing. You **MUST** closely follow the entire Service Procedure (starting on page 2) as it contains information that is essential to successfully completing this repair.

Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

CLAIMS INFORMATION

Submit a Primary Failed Part (PP) line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Perform IAVL Procedure	(1)	DE96AA	ZE	32	(2)

(1) Reference the final CONSULT-II print-out and use the indicated ECM P/N as the PFP.

(2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

AND IF applicable:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
DTC P0507	(3)	EJ53AA	ZE	32	(4)

(3) Reference the final CONSULT-II print-out and use the indicated ECM P/N as the PFP.

(4) Reference the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

AND IF necessary:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram ECM	(5)	DE98AA	ZE	32	0.7 hrs

(5) Reference the final CONSULT-II print-out and use the indicated ECM P/N as the PFP.

AND IF necessary:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Manual Idle Reduce Procedure (injector(s) disconnected)	(6)	EX11AA	ZE	32	0.6 hrs

(6) Reference the final CONSULT-II print-out and use the indicated ECM P/N as the PFP.

SERVICE PROCEDURE

NOTE: After completing repairs in this procedure, make sure any stored DTCs are erased.

1. Make sure there are no engine vacuum leaks. Repair any vacuum leaks that are found.
Make sure to check:
 - Hoses
 - Intake Manifold
 - Ducting between Intake Manifold and MAFS

2. Perform Idle Air Volume Learning (IAVL) procedure as follows.

NOTE: The IAVL procedure will normally complete within 2 minutes after Procedure Start.

A. Make sure all DTCs are cleared (erased).

B. Use CONSULT-II to confirm / perform the following Pre-Conditions:

NOTE: The IAVL procedure will self-cancel if any of the following Pre-Conditions are not met and maintained for as long as the procedure is running.

DATA MONITOR SIGNALS (ENGINE)	PRE-CONDITIONS
BATTERY VOLT [V]	More than 12.9V at idle.
COOLAN TEMP/S [°C] OR [°F]	Between 158 - 210°F (70 - 99°C).
P/N POSI SW [ON/OFF]	ON (Transmission in either Neutral or Park).
AIR COND SIG [ON/OFF]	OFF (Air conditioner/HVAC switch off).
LOAD SIGNAL [ON/OFF]	OFF (Lighting switch and/or rear defogger off).
COOLING FAN [ON/OFF]	OFF (Engine cooling fan motor not running).
PW/ST SIGNAL [ON/OFF]	OFF (Steering wheel is straight ahead).
VHCL SPEED SE [km/h] or [mph]	0 (Vehicle speed 0 mph).
WORK SUPPORT SETTING (ENGINE)	
CONSULT TARGET IDLE RPM ADJ	0 (Zero)

In addition, for vehicles with CVT:

DATA MONITOR SIGNALS (TRANSMISSION)	PRE-CONDITIONS
FLUID TEMP SE	Less than 0.9V .

C. Turn ignition switch “OFF” and wait at least 10 seconds.

D. Start the engine and let it idle for at least 30 seconds.

E. Using CONSULT-II, select **WORK SUPPORT** > **IDLE AIR VOL LEARN**.

F. Touch **START** and wait 20 seconds to 2 minutes.

- If “CMPLT” is displayed on CONSULT-II screen; go to G, next step.
- If “INCMP” is displayed within 2 minutes, or test is not finished within 2 minutes, “Idle Air Volume Learning” was not carried out successfully; go to step H.

G. Rev up the engine two or three times, then let the engine idle. Verify the idle speed is within specifications. Refer to the EC section of the appropriate Service Manual for specifications. If OK, procedure ends here. If not, go to step H.

H. If IAVL did not complete and you’re sure you:

- **Set all of the preconditions exactly as shown in the chart above, and**
- **Performed steps A through F exactly as shown above.**

Go to step 3 on the next page.

NOTE: Step 3 below covers 2002 and 2003 vehicles only. For 2004 and 2005 vehicles; skip to step 4 on the next page.

- For 2004 and 2005 model years, ECM reprogramming will not clear the vehicle “in-use” learned IAVL. Reprogramming won’t reduce the idle speed.

3. For 2002 - 2003 vehicles; you may be able to reduce the engine idle speed by performing ECM reprogramming. Reprogramming may clear the vehicle “in-use” learned IAVL.

A. With the ignition ON and CONSULT-II connected to the vehicle, print your current ECM Part Number (P/N) as follows:

START(Nissan) >> ENGINE >> ECM PART NUMBER >> COPY

B. Go to ASIST: Select CONSULT Utilities > ECM/TCM Data. Then choose Model and Model Year of the vehicle you’re working on (see Figure 1).

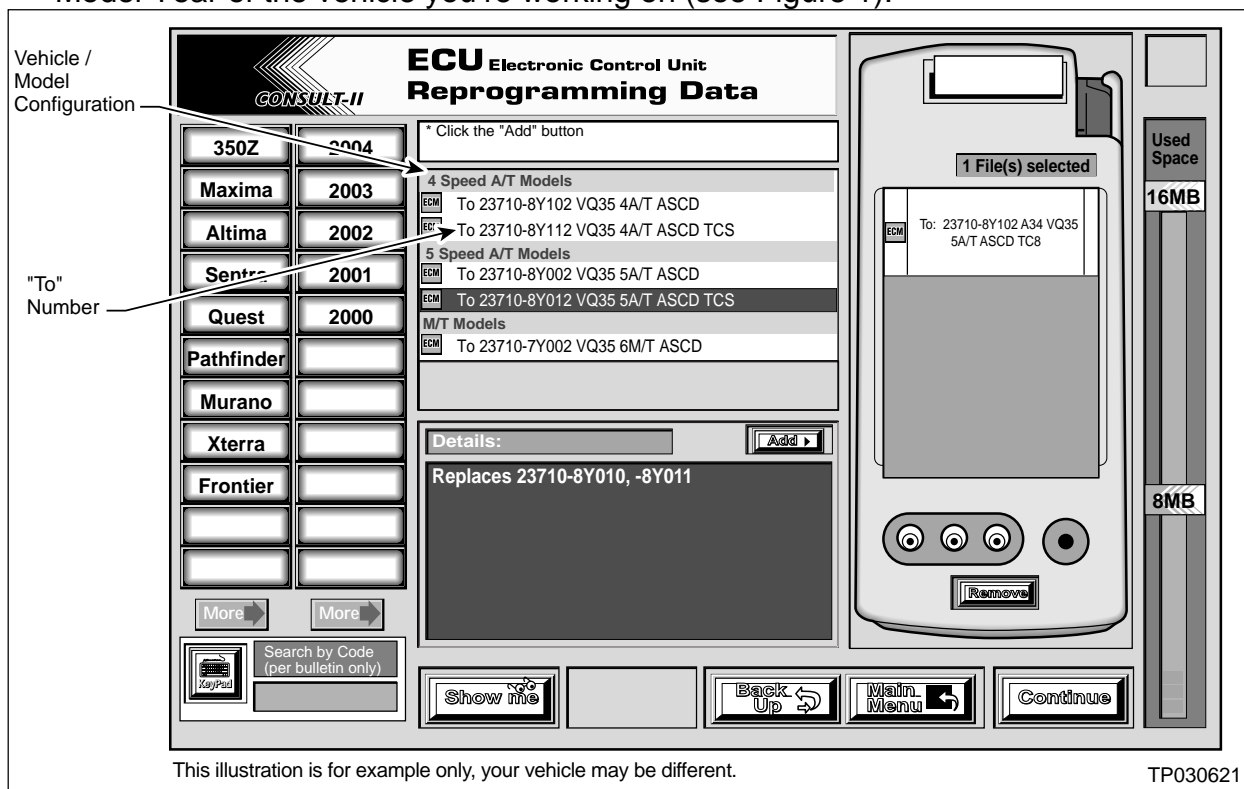


Figure 1

C. Select the “configuration” on the screen for the vehicle you’re working on. Then **make sure** that your current ECM P/N is listed in the “Replaces 23710-XXXXX, -XXXXX, etc” section in the lower, center “Details” panel of the ASIST screen (see Figure 1).

- If your current ECM P/N is listed in the “Details” panel, you can perform a reprogramming using the latest (newer) data update, then go to D on the next page.

Click [here](#) to link to the Reprogramming Procedure for Nissan Vehicles – or refer to Attachment A in the print copy of this bulletin.

- If your current ECM P/N is not listed in the “Details” panel, new ECM data is not available for your vehicle, go to step 4 on the next page.

- D. After following all steps of the reprogramming procedure, perform IAVL again (back to step 2 on page 3)
- If the IAVL procedure now completes, the incident is fixed and you're done.
 - If the IAVL procedure still does not complete, go to step 4.

4. Reduce the engine idle speed manually and perform IAVL as follows:

- A. With the engine running, disconnect 1 fuel injector (engine rpm should drop, MIL may come ON).

CAUTION: Do Not disconnect the ignition (coils or spark plugs) for this step. Disconnecting the ignition while the engine is running may cause damage to the catalyts.

- B. With the injector(s) disconnected and the engine running, perform IAVL (step 2 on page 3).

NOTE: Make sure all DTCs are cleared

- If "CMPLT" is displayed on CONSULT-II screen within 2 minutes; go to step 5.
- If "INCMP" is displayed, or test is not finished within 2 minutes:
 - a. Disconnect another injector.
 - b. Repeat step B above,

NOTE:

- For 4 cylinder engines up to 2 injectors can be disconnected one at a time.
- For 6 and 8 cylinder engines up to 3 injectors can be disconnected one at a time. It is best that 3 disconnected injectors (particularly on V6 engines) not all be on the same engine bank.

5. Final IAVL procedure.

- A. Make sure all injectors are connected.
- B. Use CONSULT-II to erase any DTC that may be stored and clear Self Learn.
- C. Turn OFF the engine, then re-start it.
- D. After the engine idle has stabilized, perform IAVL again (step 2 on page 3).



SERVICE BULLETIN

Classification: EC05-008	Reference: NTB05-073	Date: August 17, 2005
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2002-2003 ALTIMA AND SENTRA WITH QR25 ENGINE; IDLE IS HIGHER THAN NORMAL (APPROX. 1000-1500 RPM WARM IN PARK OR NEUTRAL)

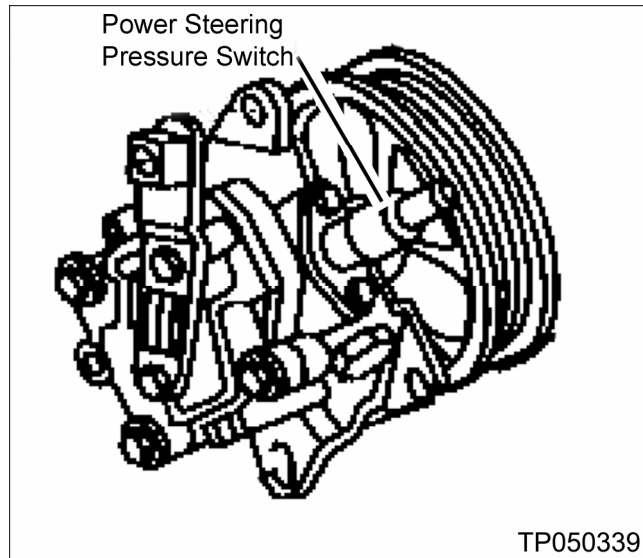
APPLIED VEHICLES: 2002-2003 Altima (L31) and Sentra (B15)
APPLIED ENGINES: QR25 Only

IF YOU CONFIRM

- The engine idle speed is typically between 1000 and 1500 rpm **when**
- the engine is at a normal operating temperature and
- the transmission is in either the “Park” or “Neutral” position and
- there are no DTC stored and
- the power steering pressure switch is “ON” when the steering wheel is straight ahead.

ACTION

Replace the power steering pressure switch.



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PARTS INFORMATION

DESCRIPTION	PART #	QUANTITY
Power Steering Pressure Switch	49761-5M010	1

CLAIMS INFORMATION

Submit a Primary Failed Part (PP) line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL Power Steering Pressure Switch	(1)	QE22AA	ZE	32	(2)

1. Reference the Parts Information Table and use the applicable Power Steering Pressure Switch P/N as the PFP.
2. Reference the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

SERVICE INFORMATION

1. Using CONSULT in the Data Monitor Mode, monitor the value of the power steering switch "PW/ST" signal when the steering wheel is straight ahead.

NOTE: It should normally be "OFF" in the above condition.

- If it indicates "ON" proceed to step 2.
- If it stays "OFF" this bulletin does **not** apply. Refer to ASIST for further diagnostic assistance.

2. Replace the power steering pressure switch in the power steering pump.

NOTE: You do not need to remove the power steering pump from the vehicle to replace the switch. There will be some fluid lost when the switch is removed so make sure you top it off.

3. Warm up the engine and confirm the RPM dropped (it still may be a bit high).
4. Perform the Idle Air Volume Learning (IAVL) in CONSULT Work Support Mode.

Click [here](#) to link to the "Performing The Idle Air Volume Learning (IALV) Procedure" general procedure or refer to it in the print copy of this bulletin.

5. After completing the IAVL procedure, confirm proper idle speed near 700 RPM.