



# Paisley News



Issue 11 14/02/11 **J . E . PAISLEY & C O L T D**

**For all your Diesel Fuel Injection  
& Turbocharger Requirements**

4 Nen Street  
Oamaru

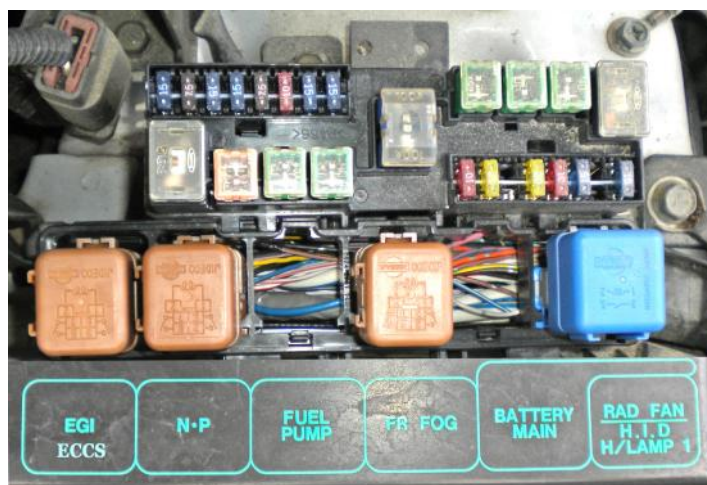
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**Phone 03 434 8967**

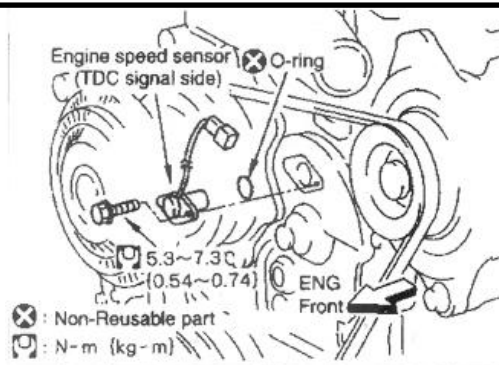
**Fax 03 434 8389**

**E Mail [john@jep.co.nz](mailto:john@jep.co.nz)**

**Fault finding the Nissan TD27Ti and QD32** fitted with an electronic COVEC pump, both these engines will exhibit a hunt at idle or erratic running when the pumps actuator becomes worn. This is often accompanied with a touchy throttle and hard starting. Generally this will throw codes 18 and 22. The two most common engine components to cause trouble are the EGI or ECCS relay located in the drivers side fuse box (engine bay) and the engine TDC sensor mounted in the front of the engine



The **EGI or ECCS relay** controls the stop solenoid in the pump. Failure or erratic operation can cause a no start situation, erratic starts, and sometimes rough running. If the vehicle is auto there should be a N/P relay next to the ECCS relay, you swap these around to isolate the fault to the ECCS relay. Both these relays are the same part number and colour BROWN. The Nissan number is 25230-7996A. We can supply these relays for \$35.70



The engine **TDC** sensor located in the front of the engine will throw code 47. It's Nissan Part number is 25977-0W801

*We look forward to talking to you at the great  
southern road shows*

*Nelson, Greymouth and Christchurch*

## **FREE FREIGHT AND LOLLIES**

Does not apply to parts only sales

Exchange pumps and injectors Available , ring us with the vehicle model and engine type

Authorised Service to the world's leading Diesel Fuel Injection systems



**BOSCH**

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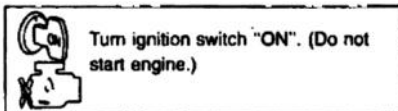
**STANADYNE**

**DENSO**

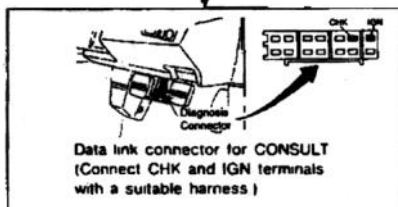


## Diesel & Electrical Systems Oamaru

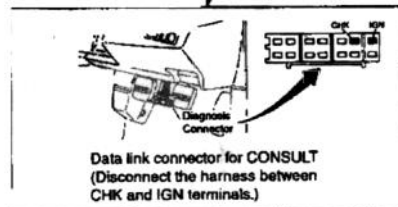
### To access the codes:



### Diagnostic Test Mode I — BULB CHECK

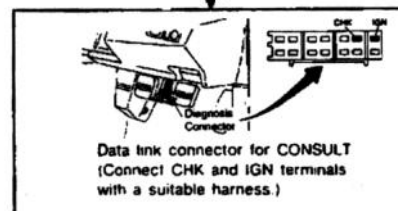


Wait at least 2 seconds.

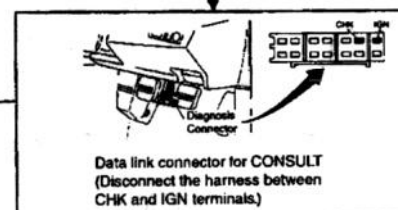


### DIAGNOSTIC TEST MODE II — SELF-DIAGNOSTIC RESULTS

### (ERASING ECM MEM)



Wait at least 2 seconds.



### Erasure of Self-Diagnostic Results

- In Mode-2, with engine OFF (Ignition switch in ON position), connect diagnostic connector terminals CHK and IGN for at least 2 seconds, then leave open. Turn ignition switch to the OFF position for at least 4 seconds.

CODE No.	DIAGNOSIS ITEM	MALFUNCTION (CODE NUMBER) DISPLAY CONDITION (MALFUNCTION DETECTION CONDITION)	ENGINE WARNING LAMP MALFUNCTION WARNING DISPLAY	INSPECTION AREA
11	Engine speed sensor (pump installation side) signal system	When engine speed sensor malfunction, harness broken wire or short circuit is detected	Flashing	Engine speed sensor (pump installation side), harness
12	Mass air flow meter signal system	When hot wire is broken When there is a broken wire or short circuit in mass air flow meter power supply, earth or signal system		Mass air flow meter, harness
13	Water temperature sensor signal system	When there is a broken wire, short circuit or malfunction in water temperature sensor signal system	Flashing	Water temperature sensor, harness
14	Vehicle speed sensor signal system	When there is a broken wire or short circuit in vehicle speed sensor system		Vehicle speed sensor, harness
(15)	Control sleeve position sensor signal system	When there is a broken wire, short circuit or when malfunction values are detected in control sleeve position sensor signal system	Flashing	Control sleeve position sensor, harness
17	Pump compensation resistance signal system	When there is a broken wire or short circuit in pump compensation resistance system		Pump compensation resistance, harness
(18)	Fuel injection pump volume feedback system 2	When there is a malfunction in fuel injection pump volume feedback system	Flashing	Injection pump, ECCS C/U, C/U power supply (power system) fuse, electric governor and control sleeve position sensor harness
21	Fuel injection timing feedback system	When there is a malfunction in fuel injection timing feedback system		Injection nozzle with needle lift sensor, harness, timing control valve, engine speed sensor (TDC signal side)
(22)	Fuel injection volume feedback system	When there is a malfunction in fuel injection volume feedback system	Flashing	C/U power supply (power system) fuse, electric governor and control position sensor harness, injection pump, ECCS C/U
	Accelerator switch signal system	When accelerator switch short circuit (continuity) continues for a certain period	Flashing	Accelerator switch, harness
(25)	Electric governor excess electric current	When there is a short circuit in fuel injection system harness	Flashing	Harness, ECCS C/U
		When there is a malfunction in control unit	Flashing	ECCS C/U
28	Overheat	When water temperature is abnormally high		Cooling water system etc.
(31)	Control unit 2 system	When there is a malfunction in control unit		ECCS C/U
34	Needle lift sensor	When there is a broken wire or short circuit in needle lift sensor signal system		Injection nozzle with needle lift sensor, harness
36	Fuel cut solenoid valve 1	When there is a short circuit or malfunction in fuel cut solenoid valve	Flashing	Fuel cut solenoid valve, harness
	electric current)	When there is a short circuit in fuel cut solenoid valve harness	Flashing	C/U power supply (power system) fuse, harness
37	fuel cut solenoid	when there is a malfunction in fuel cut sol	flashing	power supply, fuse harness
38	Control unit 3 (fuel cut solenoid valve drive) system	When there is a broken wire or circuit malfunction in fuel cut solenoid valve	Flashing	C/U power supply (power system) fuse, harness
42	Fuel temperature sensor signal system	When there is a broken wire, short circuit or malfunction in fuel temperature sensor signal system		Fuel temperature sensor, harness
43	Accelerator sensor signal system	When there is a broken wire, short circuit or malfunction in accelerator sensor signal system	Flashing	Accelerator sensor, Idle SW Full SW, accelerator SW, harness
47	Engine speed sensor (TDC signal side) system	When an engine speed sensor malfunction, harness broken wire or short circuit is detected	Flashing	Engine speed sensor (TDC signal side) system, harness
48	Control unit 4 (revolution unit) system	When there is an accelerator switch short circuit, engine speed sensor or ECCS C/U malfunction	Flashing	Accelerator SW, harness, ECCS C/U, engine speed sensor (pump installation side)
54	A/T communication line system	When there is a malfunction in A/T communication line		A/T communication line harness
55	No malfunction	When malfunction is not detected in any of above signal systems		