



Paisley News



Issue 9 30/04/10 **J . E . P A I S L E Y & C O L T D**

**For all your Diesel Fuel Injection,
Turbocharger & Auto Electrical
Requirements**

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Oamaru

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Basic trouble shooting equipment and knowledge will save you and your staff time and money

Fuel feed restriction and air The pressure - vacuum gauge can be a useful tool in diagnosing diesel systems. Fitted between the fuel filter and the fuel injection pump it should read either a slight vacuum or a pressure depending on the system. On systems with VE pumps such as Toyota Hilux, Nissan Terrano etc it will generally fall between 2-4in/Hg with a new fuel filter as the pump is drawing its own fuel from the tank. . When it climbs above approximately 8in/Hg you will start to get white - blue smoke and rough running, as the revs are increased. Reason, aeration in the pump causing low or no advance piston movement. Fit a piece of plastic hose in the line and you will be able to see any air is coming through. If you find you have a high vacuum reading and or air coming through, fit the gauge before the filter. Now if you have no air and or a low vacuum reading you know the fault lies with the filter assembly. If you still have a high reading or air, move the gauge back to the next join in the fuel line toward the tank until you find the fitting or unit reasonable. eg a water trap at the tank or mounted on the chassis, a 90deg fitting blocked or something floating around in the tank. As well as the earlier systems this simple test is also applicable to the latest common rail systems were you will have a positive pressure at the pump. If a pre supply pump is fitted or as in the above example a slight vacuum were the pump is drawing its own fuel. At \$80.00 from Repco **PART # 70374**, some clear plastic hose from the hardware store makes this is a cheap and useful diagnostic tool. **Tip**, you can squirt oil on a fitting to temporary seal it and prove quickly if its responsible for the air coming through the line



FREE FREIGHT AND LOLLIES

Does not apply to parts only sales

DENSO

South islands only authorized V3 service dealer

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BOSCH

ZEXEL



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J E Paisley & Co Ltd



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On the right, are the pin out codes for Isuzu 4WDs with the 4JG2-T engine and electronic fuel pump (COVEC type)

Below, is our web site services page. The two things that should be of interest for Capricorn members is the tab to access technical data and the tab to download our product catalogue. The location of these are highlighted below. A password is required to access the Capricorn data. If you don't have yours yet give us a ring.

• Failure mode table For Isuzu 4JG2

Failure mode	Item	Location
42	Backup Np sensor	<p>Bridge pins 6 & 4 for flash codes</p>
21	Accelerator sensor	
33	Accelerator sensor learning	
14	Water temperature sensor	
24	Boost sensor	
23	Intake air temperature sensor	
11	Vehicle speed sensor	
26	Atmospheric pressure sensor	
13	Idle switch	
31	GE servo	
34	CSP sensor	GE actuator
15	Fuel temperature sensor	TPS
32	TPS	
54	TPS learning	Compensation resistor
25	Compensation resistance	
44	EEPROM	TCV
22	IT servo	
41	Np sensor	Np sensor
27	Magnet valve	Mg / V
01	Normal	

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Diesel Fuel Injection and Turbo Specialists

www.jep.co.nz & Click on Services Page

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Services

COMMON RAIL INJECTORS In January our Bosch EPS200 Common Rail test equipment was commissioned, the first and only unit in the South Island to date. This allows us to comprehensively test common rail injectors for:

- Leakage
- Nozzle tip leakage
- Idle and full load flows
- Backflow quantity
- Electrical chatter test.

Helping ensure maximum engine HP output, economy and the unnecessary replacement of serviceable units. With the increasing numbers of common rail vehicles on the roads, and the growing trend towards common rail engines, the EPS200 will prove a valuable asset for our customers, testing will enable them to eliminate injector faults when diagnosing vehicles, and or the unnecessary replacement of serviceable units at the time of engine overhaul, assuring maximum HP output.



TWO SPRING INJECTORS The EPS200 also allows a full leakage test, spray pattern check and the verification of the 1st and 2nd opening pressures of two spring injectors that were previously unable to be tested due to their design. We have also found it necessary to flow test these injectors as experience has shown that pop testing on a standard injector tester will fail to prove whether an injector is suitable for further service. This is especially true when looking for a lack of power complaint.

DENSO V3 fitted to Toyota 2LTE, 1KZTE, 5LE and 3CTE engines. J E Paisley have recently completed the factory training and invested in the service tools and test equipment necessary to fully overhaul and test Denso V3 resistor and ROM pumps. Now these pumps are able to be stripped, clean, re-kitted and tested at realistic prices.

Petrol Injectors and Turbochargers: Remember we also offer a full petrol injector testing and cleaning service, along with turbocharger overhauls, balancing and spare parts supply.

DELPHI DP210 DYNAMIC TIMING As the most southern authorised Delphi DP210 service dealer, we can offer DP210 dynamic timing. The timing of these pumps requires specialized dynamic timing equipment in order to achieve the high level of timing accuracy necessary for optimum engine output.

Areas of Expertise

Click on the images below



Click on this tab for Capricorn members **technical data**

Capricorn - Jepco customers only



Repair Workshops



Product Catalog



JEPCO

Click on this tab to load the **product catalogue (PDF)**

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