

Injectronics

Remanufactured Automotive Electronics Components

PRODUCT SERVICE INFORMATION

Document number: P0004

For further technical information regarding testing, repairs or to search for New or Remanufactured Automotive electronic products, please visit www.injectronics.com.au, call our office on (+613) 8792 6999, or email sales@injectronics.com.au

Vehicle: Holden / Daewoo

Subject: Delco ECM

Various Delco Electronic Control Modules and transmission control modules, fitted to a variety of Holden and Daewoo vehicles, are not supplied with a removable Mem-Cal (Memory calibration unit). The Mem-cal from the failed control unit must be carefully removed and installed into the new unit, as per manufacturer instructions. If the Mem-cal is not fitted, faults such as no start, engine thermo fans on, transmission in limp home mode will occur.

After replacing the control module, the unit may require re-learning to the vehicle - check manufacturers specifications before test driving. Please note that intermittent faults with Delco control modules can be attributed to loose / relaxed loom connector terminals (see overleaf).



P0004.doc

This publication is distributed with the understanding that the authors, editors and publishers are not responsible for the results of any actions or works of whatsoever kind undertaken on the basis of information contained in this publication, nor for any errors or omissions contained herein. The publishers, authors and editors expressly disclaim all and any liability to any person whomsoever whether a purchaser of this publication or not in respect of anything and of the consequences of anything done or omitted to be done by any such persons in reliance, whether whole or partial upon the whole or any part of the contents of this publication. Injectronics Australia Pty Ltd. © Copyright 2001.

Injectronics

Remanufactured Automotive Electronics Components

Vehicle: Holden - various

Subject: Intermittent Delco problems

Various intermittent problems have been found on the Delco system and can be traced back to faulty components, such as the wiring, Hall sensors or DFI modules. Some intermittent faults are often attributed to the ECM (some are found to be faulty) and it has also been found that replacing the ECM may solve an intermittent problem but only for a short time. Injctronics has found that often the ECM is replaced and the fault disappears, then after some time the customer is back with a similar complaint. When testing the Delco system it is advisable to do the standard EFI checks and also check the actual connections to the ECM because when the ECM is replaced the connections are disturbed (wiped) and often this may temporarily fix the problem. If any of the terminals are relaxed or oxidised the simple action of unplugging the ECM may temporarily repair an intermittent Delco problem.

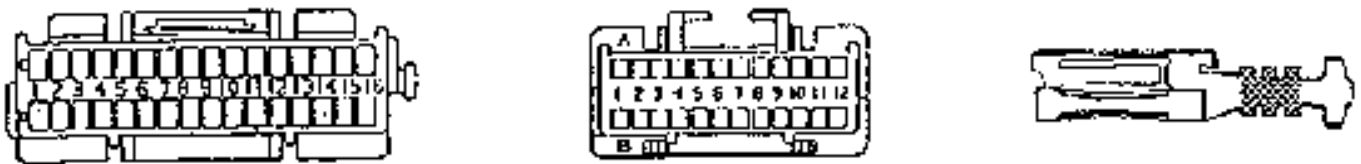


Figure 1. Terminals & connectors for Delco systems

To check individual terminals carefully insert a 0.95mm drill bit into each terminal to ensure that there is a reliable connection between the ECM and the vehicle plug. If any terminals appear to be loose or relaxed, the terminal will have to be backed out of the connector and re-tightened. It is advisable to do each terminal individually, that is back it out of the plug, re-tighten it then re-install into the connector. This is done to avoid any confusion and prevent replacing the terminal into the wrong place in the housing. To remove the terminal from the housing, insert the correct extraction tool and remove the terminal from the rear of the plug. To retighten the terminal once it is out of the housing insert the 0.95mm drill bit, used previously, and very gently re-clip the terminal in the places shown in figure 2. Ensure there is sufficient friction between the terminal and drill shank, remove drill bit, replace the terminal into the housing and proceed to the next terminal.

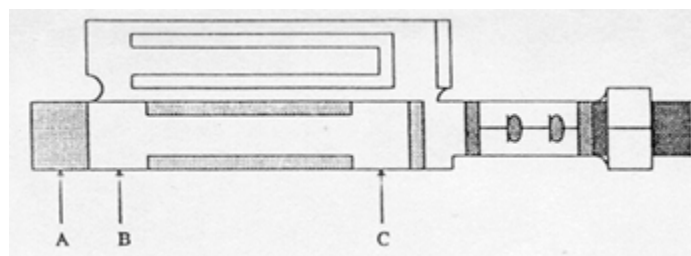


Figure 2. Shows the terminal removed from the connector. A is the 0.95mm drill. B & C show where the connector must gently be re-secured to increase the tension on the ECM terminal.

P0004.doc