

Remanufactured Automotive Electronics Components

# **PRODUCT SERVICE INFORMATION**

**Document number: P0017** 

For further technical information regarding testing, repairs or to search for New or Remanufactured

Automotive electronic products, please visit <a href="www.injectronics.com.au">www.injectronics.com.au</a>, call our office on (+613) 8792 6999,

or email <a href="mailto:sales@injectronics.com.au">sales@injectronics.com.au</a>

Vehicle: Toyota RAV4 / Avensis

**Subject: PCM Installation instructions** 

This instruction applies to the installation of remanufactured, change-over Toyota RAV4 (2001-2003) 1AZFE, and Toyota Avensis 1AZFSE Power Train Control Modules as supplied by Injectronics.

#### **Key Matching:**

- 1. Ensure that the Ignition is in the OFF position. Remove the original PCM and install the Injectronics supplied exchange PCM (located behind the vehicles glove box).
- 2. Start and run the vehicle using the primary ignition key. Turn ignition to OFF position and remove primary ignition key.
- 3. If a second ignition key is available, start and run the vehicle using the second key, then turn the ignition to OFF and remove the key.

# Security Light Reset:

This procedure is only necessary if the security light is flashing with the engine running.

- 1. Close All Doors.
- 2. Remove Ignition Key.
- 3. Replace Ignition Key (Do Not Turn, must be in the OFF position).
- 4. Press the Accelerator Pedal to the floor 5 times in 15 Seconds.
- 5. Press the Brake Pedal 6 times within 20 seconds.
- 6. The light should now only flash when the ignition is in the OFF position.

Note: The ECM will be security locked after the key matching procedure is completed. The ECM cannot be used in another vehicle without the ECM being reset. Injectronics can reset the ECM.

Note: If the transmission fault is still present after replacing the ECM, the automatic transmission direct clutch assembly may also require replacement.

PART NUMBER: 8966142701 or 8966144290

PLEASE READ THESE INSTRUCTIONS BEFORE INSTALLING

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# Injectronics

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# Toyota RAV4 / Avensis 2001-2003 2.0L 1AZFE

#### **Customer complaint:**

Harsh gear shifting, thumping into gear.

# **Diagnostic sequence:**



Some 2001 – 2003 model RAV4 vehicles equipped with an automatic transmission may exhibit a harsh shift condition during normal driving or even when putting into gear, and/or M.I.L. (malfunction indicator lamp) "ON". Upon checking fault codes, often the following DTC's are present: DTC P0750 (transmission shift solenoid A malfunction), DTC P0753 (transmission shift solenoid A electrical), DTC P0755 (trans shift solenoid B malfunction), DTC P0758 (transmission shift solenoid B electrical), and/or DTC P1760 (shift solenoid SLT malfunction) stored.

# Fault description:

Upon diagnosis, it has been found that the ECM does not fully release the (SLT) direct clutch solenoid. This clutch is applied on the 2<sup>nd</sup> to 3<sup>rd</sup> gear change. To test for this condition, connect a pressure gauge to the direct clutch pressure port. Shift solenoid SLT is used to alter fluid pressure to the direct clutch. When driving in 3<sup>rd</sup> gear there should be pressure (approx. 120 Psi) seen on the gauge. In 2<sup>nd</sup> and 4<sup>th</sup> there should be a zero pressure reading on the gauge. If there is any pressure seen on the gauge in 1<sup>st</sup>, 2<sup>nd</sup> or 4<sup>th</sup>, it is a sign that the ECM has failed. If it has slight pressure whilst in 1<sup>st</sup>, 2<sup>nd</sup> or 4<sup>th</sup> gears (3 to 20 PSI), it is enough to keep the direct clutch slightly applied and will cause it to eventually burn out.

# Fault solution:

Replace the ECM (situated behind glove box compartment) as per manufacturer instruction. Test drive the vehicle from cold to normal operating temperature to confirm fault has been rectified. If the fault condition is still present after replacing the ECM, the automatic transmission direct clutch assembly may also require replacement due to having been driven for too long whilst in a partially applied state.

Injectronics are now able to bench test and repair customers own ECM's for the above mentioned fault, and also carry exchange ECM's in stock, which are supplied in an unlocked state (call Injectronics technical department for programming instructions). Injectronics have also found this type of fault to be common in Toyota Avensis and Tarago with the U241E transmission (2000-2004)





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