

# Injectronics

Remanufactured Automotive Electronics Components

## TECHNICAL BULLETIN

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Make: Toyota

Model: RAV 4 / Avensis

Subject: 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:

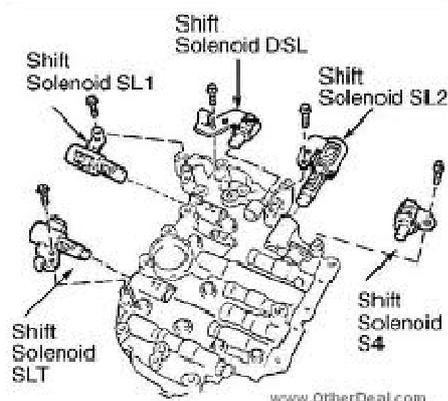
Upon diagnosis, it has been found that the ECM does not fully release the (SLT) direct clutch solenoid. This clutch is applied on the 2nd to 3rd gear change. To test for this condition, connect a pressure gauge to the direct clutch pressure port. Shift solenoid SLT is used to alter fluid pressure to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



2001-2003 Toyota RAV4 Shift Solenoids Assy



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