Componet Location



General Description

ITCC(Intelligent Torque Control Coupling) 4WD :
Vehicle uses 2WD(2 wheel drive) for driving at normal speed, but sometimes it uses 4WD (4 wheel drive) accordign to driving condition. (cornering or acceleration)
EMC(Electric Magnetic Clutch) distributes proper torque to front wheel by controling amount of current inside EMC coil.
That time power pressing the multi plate clutch by apply cam is changed by a rate of EMC duty. after multi plate clutch start slip the force for acceletion at front/rear wheel is controlled at a range of 100:0 ~ 50 : 50.

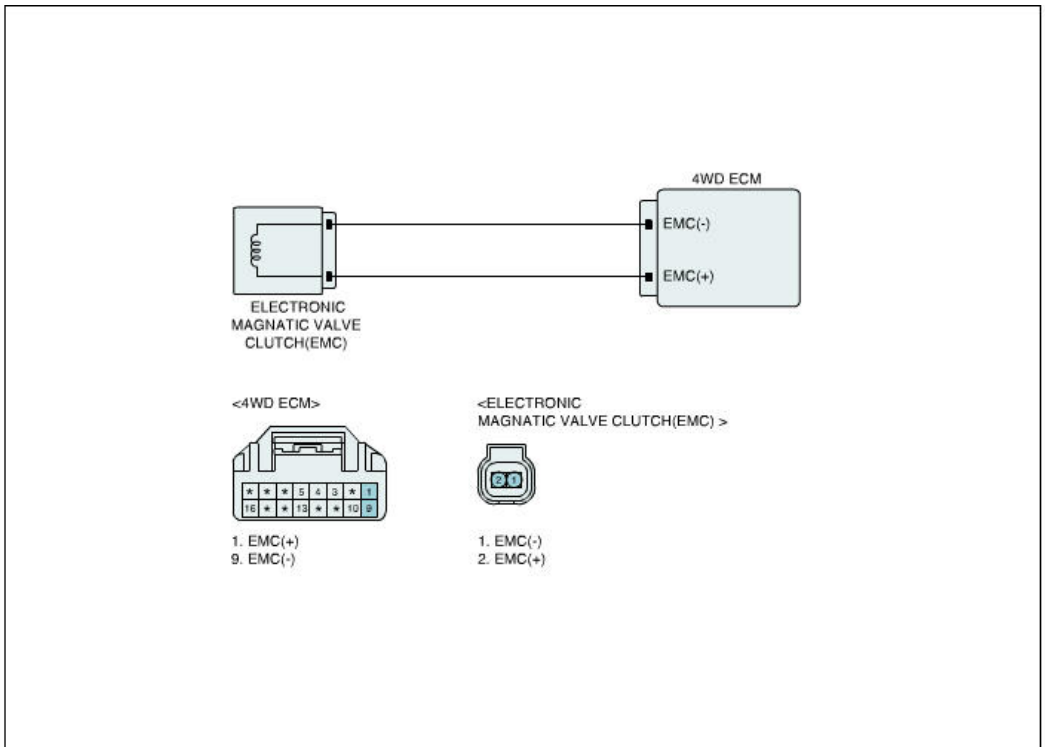
DTC Description

This DTC code is related to the EMC and is set If control harness has an short to battery source.
If failure is detected "4WD-ECM" prohibits the "ITCC" control and vehicle is controlled with 2WD by intercepting EMC current.

DTC Detecting Condition

Item	Detecting Condition	Possible cause
DTC Strategy	• EMC Internal current	• Poor Connection • EMC circuit short to battery. • Faulty 4WD-ECM .
Enable Conditions	• IG KEY ON	
Threshold value	• Supply voltage lowering flag not set(0), And No over current error. PWM DUTY 90% and Coil current 0.1A or PWM DUTY 10% and Coil current 3.0A	
MIL ON Condition	• Lamp ON	

Diagnostic Circuit Diagram


4WD ECM
EMC(-)
EMC(+)
ELECTRONIC
MAGNATIC VALVE
CLUTCH(EMC)
<4WD ECM>
1. EMC(+)
9. EMC(-)
<ELECTRONIC
MAGNATIC VALVE CLUTCH(EMC) >
1. EMC(-)
2. EMC(+)