

Fault Sources

1. Short circuit to ground
2. Short circuit to battery voltage or open circuit.

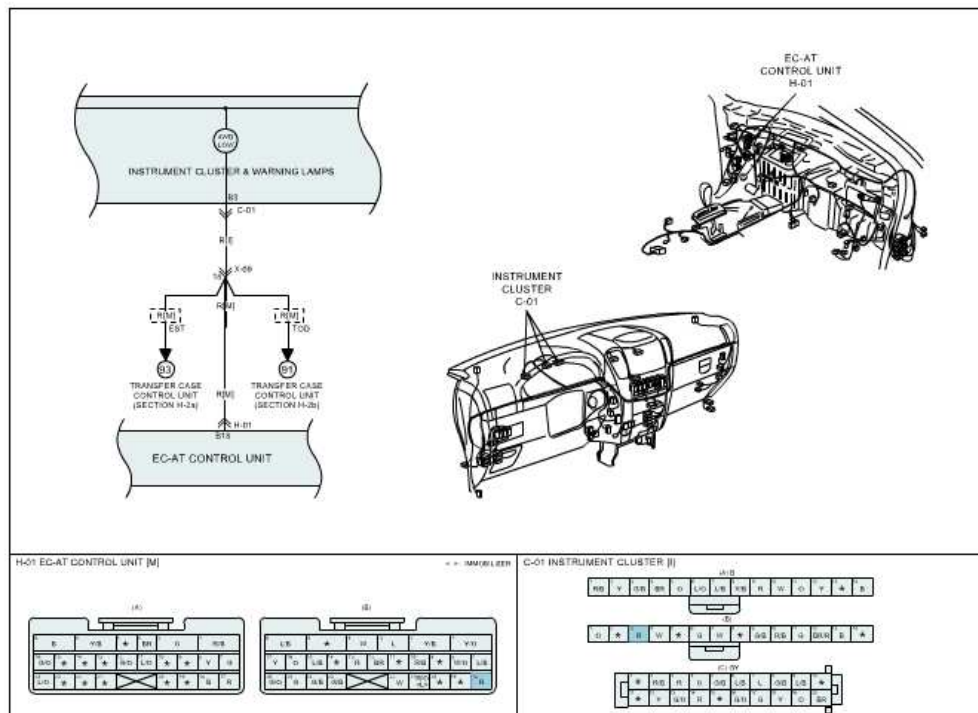
DTC Strategy	Enable Conditions	Threshold value	Diagnosis Time	MIL on condition
Circuit continuity	Throttle opening (%) is higher than 2%.	(Open)N1/N2 ≥ 1.74 with L4 switch off N1 : output speed from output speed sensor N2 : output speed from meter set	20secs	after 2nd driving cycle
	A/T range switch : D	output speed from meter set	continuous	
	Vehicle speed (regarded Transfer gear ratio) is higher than 1500rpm.	(Short)N1/N2 < 1.74 with L4 switch off N1 : output speed from output speed sensor N2 : output speed from meter set	continuous	

Transfer high/low switch installed dash board at the driver side. To change the 4L mode, the vehicle should be stopped (3km/h or less). At the moment a shift lever should be positioned "N" range(AT) or a "Clutch" pedal should be ON before selecting a 4L mode. After a mode change is successfully finished, the 4L lamp will be turned on. If the TCM receives abnormal signal from transfer high/low switch, the DTC will be set.

The diagram illustrates the electrical connection between the Instrument Cluster & Warning Lamps, the EC-AT Control Unit, and the Transfer Case Control Units. The Instrument Cluster & Warning Lamps are connected to the EC-AT Control Unit via a series of relays (R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100). The EC-AT Control Unit is connected to the Transfer Case Control Units (Section H-2a) via a series of relays (R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100).

Photographs show the physical layout of the EC-AT Control Unit (H-01) and the Instrument Cluster (C-01) within the vehicle's chassis.

1/3



Full Circuit

