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FOR:

ALLISON, CATERPILLAR, CUMMINS,
ICU 3, ICU 3 C2, MERCEDES, WABCO, PCM-FS-65

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FAULT CODES

1000 TRANSMISSIONS

2000 TRANSMISSIONS

ALLISON 1000/2000/24000 SERIES ELECTRONIC CONTROLS TROUBLESHOOTING MANUAL

DIAGNOSTIC TROUBLE COPDES (DTC)

5-5. DIAGNOSTIC TROUBLE CODES (DTCs)

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DIAGNOSTIC TROUBLE COPDES (DTC)

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FAULT CODES

3000 MH
TRANSMISSIONS

Code Listings And Procedures

CODES		QUICK CHECKS
MAIN CODE	SUB CODE	
13	12	Check: a. Battery direct ground and power connections are tight and clean. b. Vehicle batteries are charged. c. Vehicle charging system is not over- or under-charging. d. VIM fuse is good. e. VIM connections are tight, clean, and undamaged. f. Vehicle manufacturer supplied wiring is correct. g. ECU connectors are tight, clean, and undamaged.
ECU Input Voltage Low		
13	13	
ECU Input Voltage Medium Low		
13	23	
ECU Input Voltage High		
14	12, 23	Check: a. Is transmission equipped with oil level sensor? b. Engine speed sensor, output speed sensor, temperature sensor, and oil level sensor are working correctly. c. Wiring harness has no opens, shorts to ground, or shorts to battery.
Oil Level Sensor		
21	12, 23	Check: a. TPS connector is properly connected. b. End of TPS cable is pulled out properly. c. Engine fuel lever is in idle position. d. Engine fuel lever provides proper amount of stroke on TPS cable. e. Wiring harness to TPS has no opens, shorts between wires, or shorts to ground. f. TPS for proper operation and resistance readings.
Throttle Position Sensor		

Code Listings And Procedures (cont'd)

CODES		QUICK CHECKS
MAIN CODE	SUB CODE	
22	14, 15, 16	Check: <ol style="list-style-type: none"> a. Speed sensors and connectors are tight, clean, and undamaged. b. Wiring harness to sensors has no opens, shorts between wires, or shorts to ground.
Speed Sensors		
23	12, 13, 14, 15, 16	Check: <ol style="list-style-type: none"> a. ECU connectors are tight, clean, and undamaged. b. Shift selector connector is tight, clean, and undamaged. c. Wiring harness has no opens, shorts between wires, or shorts to ground. d. Shift selector(s) for proper operation.
Shift Selectors		
24	12	Check: <ol style="list-style-type: none"> a. Air temperature is below -32°C (-25°F) <ul style="list-style-type: none"> • If yes, this is a correct response for temperature. • If no, check that main transmission connector is tight, clean, and undamaged. b. ECU connectors are tight, clean, and undamaged.
Sump Fluid Temperature Cold		
24	23	Verify the overheat situation. Check: <ol style="list-style-type: none"> a. Correct dipstick is installed. b. Fluid level is correct. Refer to CARE AND MAINTENANCE section. <ul style="list-style-type: none"> • If fluid level is incorrect—correct fluid level. • If fluid level is correct—check for cause of overheating. c. Check if ECU and transmission connectors are tight, clean, and undamaged.
Sump Fluid Temperature Hot		