



# Technical Service Information

## ***DIAGNOSTIC TROUBLE CODES FOR THE ALLISON 1000/2000***

<b>DTC</b>	<b>DESCRIPTION</b>	<b>“CHECK TRANS” LAMP ON*</b>
P0117	Engine Coolant Temperature Circuit Voltage Low (High Temp)	NO
P0118	Engine Coolant Temperature Circuit Voltage High (Low Temp)	NO
P0121	Pedal Position Sensor Performance Problem	NO
P0122	Pedal Position Sensor Circuit Voltage Low	YES
P0123	Pedal Position Sensor Circuit Voltage High	YES
P0218	Transmission Fluid Over Temp	NO
P0561	Unrealistic Variations In System Voltage	NO
P0562	System Voltage Low	YES
P0563	System Voltage High	YES
P0602	TCM Not Programmed	YES
P0606	Controller Internal Performance	YES
P0613	TCM Processing Error	NO
P0614	Torque Control Data Mismatch...ECM/TCM	YES
P0634	TCM Internal Temperature Too High	YES
P0658	Actuator Supply Voltage High Side Driver 1 Low	YES
P0659	Actuator Supply Voltage High Side Driver 1 High	YES
P0700	MIL Illumination Request	YES
P0701	Transmission Control System Performance	NO
P0703	Brake Switch Circuit Malfunction	NO
P0705	Transmission Range Sensor Circuit (PRNDL Input)	YES
P0706	Transmission Range Sensor Circuit Performance	YES
P0708	Transmission Range Sensor Circuit Input High	YES
P0710	Transmission Fluid Temperature Sensor Circuit Fault	YES
P0711	Transmission Fluid Temperature Sensor Circuit Performance	YES
P0712	Transmission Fluid Temperature Sensor Circuit Input Low (High Temp)	YES
P0713	Transmission Fluid Temperature Sensor Circuit Input High (Low Temp)	YES
P0716	Turbine Speed Sensor Circuit Performance	YES
P0717	Turbine Speed Sensor Circuit No Signal	YES
P0719	Brake Switch Circuit Fault	NO
P0721	Output Speed Sensor Circuit Performance	YES
P0722	Output Speed Sensor Circuit No Signal	YES
P0726	Engine Speed Input Circuit Performance	YES
P0727	Engine Speed Sensor Circuit No Signal	YES
P0729	Incorrect 6th Gear Ratio	YES

**\*The MIL Lamp may not illuminate on vehicles that are not OBD-II compliant**



## ***DIAGNOSTIC TROUBLE CODES FOR THE ALLISON 1000***

DTC	DESCRIPTION	"CHECK TRANS" LAMP ON*
P0731	Incorrect 1st Gear Ratio	YES
P0732	Incorrect 2nd Gear Ratio	YES
P0733	Incorrect 3rd Gear Ratio	YES
P0734	Incorrect 4th Gear Ratio	YES
P0735	Incorrect 5th Gear Ratio	YES
P0736	Incorrect Reverse Gear Ratio	YES
P0741	Torque Converter Clutch System Stuck Off	YES
P0742	Torque Converter Clutch System Stuck On	YES
P0743	Torque Converter Clutch PWM Solenoid Electrical Circuit Fault	YES
P0746	Solenoid "A" Controlled Clutch Stuck Off	YES
P0747	Solenoid "A" Controlled Clutch Stuck On	YES
P0748	Pressure Control (Trim) Solenoid "A" Electrical Circuit Fault	YES
P0751	Shift Solenoid 1 Performance (Stuck Off)	YES
P0752	Shift Solenoid 1 Performance (Stuck On)	YES
P0756	Shift Solenoid 2 Performance (Stuck Off)	YES
P0757	Shift Solenoid 1 Performance (Stuck On)	YES
P0761	Shift Solenoid 3 Performance (Stuck Off)	YES
P0762	Shift Solenoid 3 Performance (Stuck On)	YES
P0763	Shift Solenoid "C" Electrical Circuit Fault	YES
P0768	Shift Solenoid "D" Electrical Circuit Fault	YES
P0773	Shift Solenoid "E" Electrical Circuit Fault	YES
P0776	Solenoid "B" Controlled Clutch Stuck Off	YES
P0777	Solenoid "B" Controlled Clutch Stuck On	YES
P0778	Pressure Control (Trim) Solenoid "B" Electrical Circuit Fault	YES
P0826	Tap Up & Tap Down Shift Switch Circuit Fault	NO
P0827	Tap Up & Tap Down Shift Switch Circuit Low	NO
P0828	Tap Up & Tap Down Shift Switch Circuit High	NO
P0836	Four Wheel Drive Low Switch Malfunction	NO
P0840	Transmission Pressure Switch/Solenoid "C" (PS1) Circuit Fault	YES
P0841	Transmission Pressure Switch/Solenoid "C" (PS1) Circuit Stuck Open	YES
P0842	Transmission Pressure Switch/Solenoid "C" (PS1) Circuit Stuck Closed	YES
P0843	Transmission Pressure Switch/Solenoid "C" (PS1) Circuit High	YES
P0845	Transmission Pressure Switch/Solenoid "D" (PS2) Circuit Fault	YES
P0846	Transmission Pressure Switch/Solenoid "D" (PS2) Circuit Stuck Open	YES

**\*The MIL Lamp may not illuminate on vehicles that are not OBD-II compliant**



## ***DIAGNOSTIC TROUBLE CODES FOR THE ALLISON 1000***

<b>DTC</b>	<b>DESCRIPTION</b>	<b>“CHECK TRANS” LAMP ON*</b>
P0847	Transmission Pressure Switch/Solenoid “D” (PS2) Circuit Fault	YES
P0848	Transmission Pressure Switch/Solenoid “D” (PS2) Circuit High	YES
P0870	Transmission Pressure Switch/Solenoid “E” (PS3) Circuit Fault	YES
P0871	Transmission Pressure Switch/Solenoid “E” (PS3) Circuit Stuck Open	YES
P0872	Transmission Pressure Switch/Solenoid “E” (PS3) Circuit Stuck Closed	YES
P0873	Transmission Pressure Switch/Solenoid “E” (PS3) Circuit High	YES
P0875	Transmission Reverse Pressure Switch (PS4) Circuit Malfunction	YES
P0876	Transmission Reverse Pressure Switch (PS4) Circuit Stuck Open	YES
P0877	Transmission Reverse Pressure Switch (PS4) Circuit Stuck Closed	YES
P0878	Transmission Reverse Pressure Switch (PS4) Circuit High	YES
P0880	TCM Power Supply Loss	NO
P0881	TCM Power Input Signal Performance Problem	NO
P0882	TCM Power Supply Low	NO
P0883	TCM Power Supply High	NO
P0960	Pressure Control Solenoid (“G”) Main Mod Circuit Control Open	NO
P0962	Pressure Control Solenoid (“G”) Main Mod Circuit Control Low	YES
P0963	Pressure Control Solenoid (“G”) Main Mod Circuit Control High	YES
P0964	Pressure Control Solenoid 2 (PCS 2) Control Circuit Open	YES
P0966	Pressure Control Solenoid 2 (PCS 2) Control Circuit Low	YES
P0967	Pressure Control Solenoid 2 (PCS 2) Control Circuit High	YES
P0972	Shift Solenoid 1 (SS1) Control Circuit Open	YES
P0973	Shift Solenoid 1 (SS1) Control Circuit Low	YES
P0974	Shift Solenoid 1 (SS1) Control Circuit High	YES
P0975	Shift Solenoid 2 (SS2) Control Circuit Open	YES
P0976	Shift Solenoid 2 (SS2) Control Circuit Low	YES
P0977	Shift Solenoid 2 (SS2) Control Circuit High	YES
P0978	Shift Solenoid 3 (SS3) Control Circuit Open	YES
P0979	Shift Solenoid 3 (SS3) Control Circuit Low	YES
P0980	Shift Solenoid 3 (SS3) Control Circuit High	YES
P1688	Unmanaged Engine Torque Delivered to TCM	YES
P1709	See DTC P0870	YES
P1710	See DTC P0871	YES
P1711	See DTC P0872	YES
P1712	See DTC P0873	YES

**\*The MIL Lamp may not illuminate on vehicles that are not OBD-II compliant**



## ***DIAGNOSTIC TROUBLE CODES FOR THE ALLISON 1000***

<b>DTC</b>	<b>DESCRIPTION</b>	<b>“CHECK TRANS” LAMP ON*</b>
P1713	See DTC P0875	YES
P1714	See DTC P0876	YES
P1715	See DTC P0877	YES
P1716	See DTC P0878	YES
P1720	See DTC P0746	YES
P1721	See DTC P0776	YES
P1723	See DTC P0747	YES
P1724	See DTC P0777	YES
P1760	See DTC P0880	NO
P1779	Engine Torque Delivered to TCM Error	NO
P1835	Kickdown Circuit Malfunction	YES
P1860	See DTC P0743	YES
P1875	Four Wheel Drive Low Switch Circuit Fault	NO
P1891	Throttle Position Sensor PWM Signal Input Low	NO
P1892	Throttle Position Sensor PWM Signal Input High	NO
P2637	Torque Management Feedback Signal-(SEM) Shift Energy Management -ECM Fault	YES
P2641	Torque Management Feedback Signal-(LRTP) Lower Range Torque Protection-ECM Fault	YES
P2670	Actuator Supply Voltage 2 (HSD2) High Side Driver Low	YES
P2671	Actuator Supply Voltage 2 (HSD2) High Side Driver High	YES
P2723	Pressure Control Solenoid 1 (PSC1) Stuck Off	YES
P2724	Pressure Control Solenoid 1 (PSC1) Stuck On	YES
P2727	Pressure Control Solenoid 1 (PSC1) Stuck Open	YES
P2729	Pressure Control Solenoid 1 (PSC1) Stuck Low	YES
P2730	Pressure Control Solenoid 1 (PSC1) Stuck High	YES
P2761	Torque Converter Clutch Control Circuit Open	YES
P2763	Torque Converter Clutch Control Circuit High	YES
P2764	Torque Converter Clutch Control Circuit Low	YES
P2771	See DTCs P0836 or P1875	NO
P2773	Torque Signal Request Sent By TCM Ignored By ECM	YES
P2810	Solenoid “G” Electrical Circuit Fault	YES
U0010	CAN 1 Bus Reset Counter Overrun-No Communication	YES
U0031	J1850 (Class 2) Serial Data Communication Link Low	NO
U0032	J1850 (Class 2) Serial Data Communication Link High	NO
U0073	CAN 2 Bus Reset Counter Overrun-No Communication	YES

**\*The MIL Lamp may not illuminate on vehicles that are not OBD-II compliant**



## Technical Service Information

### ***DIAGNOSTIC TROUBLE CODES FOR THE ALLISON 1000***

DTC	DESCRIPTION	"CHECK TRANS" LAMP ON*
U0100	Lost Communication With ECM/PCM (CAN 1)	YES (2004 ONLY)
U0115	Lost Communication With ECM/PCM (CAN 2)	NO
U1000	Class 2 Loss of Serial Data Communication	NO
U1016	Class 2 PCM State of Health Failure	NO
U1041	Class 2 Anti-Lock Brake Controller (ABS) State of Health Failure	NO
U1064	J1850 (Class 2) Truck Body Controller (TBC) State of Health Failure	NO
U1096	Class 2 Instrument Panel Controller (IPC) State of Health Failure	NO
U1300	See DTC U0031	NO
U1301	See DTC U0032	NO
U2104	See DTC U0073	NO
U2105	See DTC U0100	NO
U2106	Lost Communications with Transmission Control Systems	

**\*The MIL Lamp may not illuminate on vehicles that are not OBD-II compliant**