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2009 FORD Explorer Sport Trac OEM Service and Repair Workshop Manual

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No	The fault is not present at this time and may be intermittent.

PINPOINT TEST AG : P2700, P2701, P2702, P2703, P2704, 2705

Normal Operation and Fault Conditions

The PCM (powertrain control module) monitors clutch applications. It sets a DTC (diagnostic trouble code) if it detects a non-electrical fault that causes a clutch to fail to apply and/or release properly.

DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
PCM (powertrain control module) P2700:00	Transmission Friction Element 'A' Apply Time Range/Performance: No Sub Type Information	This DTC (diagnostic trouble code) illuminates the wrench light in conjunction with either P0751 or P0752. Resolve the more specific DTC (diagnostic trouble code) first.
PCM (powertrain control module) P2701:00	Transmission Friction Element 'B' Apply Time Range/Performance: No Sub Type Information	This DTC (diagnostic trouble code) illuminates the wrench light in conjunction with either P0756 or P0757. Resolve the more specific DTC (diagnostic trouble code) first.
PCM (powertrain control module) P2702:00	Transmission Friction Element 'C' Apply Time Range/Performance: No Sub Type Information	This DTC (diagnostic trouble code) illuminates the wrench light in conjunction with either P0761 or P0762. Resolve the more specific DTC (diagnostic trouble code) first.
PCM (powertrain control module) P2703:00	Transmission Friction Element 'D' Apply Time Range/Performance: No Sub Type Information	This DTC (diagnostic trouble code) illuminates the wrench light in conjunction with either P0766 or P0767. Resolve the more specific DTC (diagnostic trouble code) first.
PCM (powertrain control module) P2704:00	Transmission Friction Element 'E' Apply Time Range/Performance: No Sub Type Information	This DTC (diagnostic trouble code) illuminates the wrench light in conjunction with either P0771 or P0772. Resolve the more specific DTC (diagnostic trouble code) first.

	P0766 or P0767 are set, resolve those first. Otherwise, check the D clutch for a slipping or a harsh apply condition. REFER to: D Clutch (307-01A Automatic Transmission - 10-Speed Automatic Transmission – 10R80, Diagnosis and Testing). For P2704, if either DTC (diagnostic trouble code) P0771 or P0772 are set, resolve those first. Otherwise, check the E clutch for a slipping or a harsh apply condition. REFER to: E Clutch (307-01A Automatic Transmission - 10-Speed Automatic Transmission – 10R80, Diagnosis and Testing). For P2705, if either DTC (diagnostic trouble code) P2707 or P2708 are set, resolve those first. Otherwise, check the F clutch for a slipping or a harsh apply condition. REFER to: F Clutch (307-01A Automatic Transmission - 10-Speed Automatic Transmission – 10R80, Diagnosis and Testing).

No	The fault is not present at this time and may be intermittent.

PINPOINT TEST AH : P27B2, P27B3, P27B4, P27B5, P27B6

Normal Operation and Fault Conditions

The PCM (powertrain control module) monitors the TSS (turbine shaft speed) , OSS (output shaft speed) , ISSA and ISSB sensors to verify the achieved gear matches the selected gear. If the PCM (powertrain control module) detects a reverse gear when a forward gear is selected, a forward gear when reverse is selected, an incorrect gear ratio or a mismatch between speed sensors, it will set a DTC (diagnostic trouble code) .

DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
PCM (powertrain control module) P27B2:00	Internal Control Module Transmission Range Control Performance: No Sub Type Information	This DTC (diagnostic trouble code) indicates a mismatch between the commanded gear range and the achieved gear range while entering or exiting park.

	(307-05B Automatic Transmission External Controls - 10-Speed Automatic Transmission – 10R80, Diagnosis and Testing).

No	GO to AH2

AH2 CHECK THE PCM (POWERTRAIN CONTROL MODULE) FOR DIAGNOSTIC TROUBLE CODES (DTCS)

- Ignition ON.
- Using a diagnostic scan tool, clear all diagnostic trouble codes (DTCs) from the PCM (powertrain control module) .
- Road test the vehicle.
- In a parking lot, shift the vehicle between Park, Drive and Reverse, allowing the vehicle to move in both directions.
- Using a diagnostic scan tool, carry out the KOEO (key on, engine off) and KOER (key on, engine running) PCM (powertrain control module) self-tests.

Is DTC (diagnostic trouble code) P27B2, P27B3, P27B4, P27B5 and/or P27B6 present in the PCM (powertrain control module) ?

Yes	GO to AH3

No	The fault is not present at this time. If any observable symptoms are present, REFER to: Diagnosis By Symptom (307-01A Automatic Transmission - 10-Speed Automatic Transmission – 10R80, Diagnosis and Testing).

AH3 RETRIEVE ALL DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE PCM (POWERTRAIN CONTROL MODULE) SELF-TEST

- Ignition ON.
- Using a diagnostic scan tool, retrieve all diagnostic trouble codes (DTCs) from the PCM (powertrain control module) self-test.

Are any shift solenoid, speed sensor, TR (transmission range) sensor, clutch engagement or module communication diagnostic trouble codes (DTCs) present?

Yes	RESOLVE any shift solenoid, speed sensor, TR (transmission range) sensor, clutch engagement, or module communication diagnostic trouble codes (DTCs) first. REFER to the DTC (diagnostic

	(307-01A Automatic Transmission - 10-Speed Automatic Transmission – 10R80, General Procedures).

No	The concern is not present at this time. It might have been caused by a corrupted calibration.

PCM (powertrain control module)	P0706:00	Transmission Range Sensor "A" Circuit Range/Performance: No Sub Type Information	GO to Pinpoint Test C
PCM (powertrain control module)	P0707:00	Transmission Range Sensor "A" Circuit Low: No Sub Type Information	GO to Pinpoint Test C
PCM (powertrain control module)	P0708:00	Transmission Range Sensor "A" Circuit High: No Sub Type Information	GO to Pinpoint Test C
PCM (powertrain control module)	P0709:00	Transmission Range Sensor "A" Circuit Intermittent: No Sub Type Information	GO to Pinpoint Test C
PCM (powertrain control module)	P0710:00	Transmission Fluid Temperature Sensor "A" Circuit: No Sub Type Information	GO to Pinpoint Test B
PCM (powertrain control module)	P0711:00	Transmission Fluid Temperature Sensor "A" Circuit Range/Performance: No Sub Type Information	GO to Pinpoint Test B
PCM (powertrain control module)	P0712:00	Transmission Fluid Temperature Sensor "A" Circuit Low: No Sub Type Information	GO to Pinpoint Test B
PCM (powertrain control module)	P0713:00	Transmission Fluid Temperature Sensor "A" Circuit High: No Sub Type Information	GO to Pinpoint Test B
PCM (powertrain control module)	P0715:00	Input/Turbine Shaft Speed Sensor "A" Circuit: No Sub Type Information	GO to Pinpoint Test D
PCM (powertrain control module)	P0716:00	Input/Turbine Shaft Speed Sensor "A" Circuit Range/Performance: No Sub Type Information	GO to Pinpoint Test I
PCM (powertrain control module)	P0717:00	Input/Turbine Shaft Speed Sensor "A" Circuit No Signal: No Sub Type Information	GO to Pinpoint Test D

PCM (powertrain control module)	P0736:00	Reverse Incorrect Ratio: No Sub Type Information	GO to Pinpoint Test R
PCM (powertrain control module)	P0740:00	Torque Converter Clutch Solenoid Circuit/Open: No Sub Type Information	GO to Pinpoint Test G
PCM (powertrain control module)	P0741:00	Torque Converter Clutch Solenoid Circuit Performance Stuck Off: No Sub Type Information	GO to Pinpoint Test S
PCM (powertrain control module)	P0743:00	Torque Converter Clutch Solenoid Circuit Electrical: No Sub Type Information	GO to Pinpoint Test G
PCM (powertrain control module)	P0748:00	Pressure Control Solenoid "A" Electrical: No Sub Type Information	GO to Pinpoint Test G
PCM (powertrain control module)	P0751:00	Shift Solenoid "A" Performance/Stuck Off: No Sub Type Information	GO to Pinpoint Test S
PCM (powertrain control module)	P0752:00	Shift Solenoid "A" Stuck On: No Sub Type Information	GO to Pinpoint Test T
PCM (powertrain control module)	P0753:00	Shift Solenoid "A" electrical: No Sub Type Information	GO to Pinpoint Test A
PCM (powertrain control module)	P0754:00	Shift Solenoid "A" Intermittent: No Sub Type Information	GO to Pinpoint Test A
PCM (powertrain control module)	P0756:00	Shift Solenoid "B" Performance/Stuck Off: No Sub Type Information	GO to Pinpoint Test S
PCM (powertrain control module)	P0757:00	Shift Solenoid "B" Stuck On: No Sub Type Information	GO to Pinpoint Test T

PCM (powertrain control module)	P0771:00	Shift Solenoid "E" Performance/Stuck Off: No Sub Type Information	GO to Pinpoint Test S
PCM (powertrain control module)	P0772:00	Shift Solenoid "E" Stuck On: No Sub Type Information	GO to Pinpoint Test T
PCM (powertrain control module)	P0773:00	Shift Solenoid "E" electrical: No Sub Type Information	GO to Pinpoint Test A
PCM (powertrain control module)	P0774:00	Shift Solenoid "E" Intermittent: No Sub Type Information	GO to Pinpoint Test A
PCM (powertrain control module)	P077D:00	Output Shaft Speed Sensor Circuit High: No Sub Type Information	GO to Pinpoint Test D
PCM (powertrain control module)	P0791:00	Intermediate Shaft Speed Sensor "A" Circuit: No Sub Type Information	GO to Pinpoint Test D
PCM (powertrain control module)	P0792:00	Intermediate Shaft Speed Sensor "A" Circuit Range/Performance: No Sub Type Information	GO to Pinpoint Test I
PCM (powertrain control module)	P0793:00	Intermediate Shaft Speed Sensor "A" Circuit No Signal: No Sub Type Information	GO to Pinpoint Test D
PCM (powertrain control module)	P0794:00	Intermediate Shaft Speed Sensor "A" Circuit Intermittent: No Sub Type Information	GO to Pinpoint Test D
PCM (powertrain control module)	P07BF:00	Input/Turbine Shaft Speed Sensor "A" Circuit Low: No Sub Type Information	GO to Pinpoint Test D
PCM (powertrain control module)	P07C0:00	Input/Turbine Shaft Speed Sensor "A" Circuit High: No Sub Type Information	GO to Pinpoint Test D

PCM (powertrain control module)	P0883:00	TCM Power Input Signal High: No Sub Type Information	GO to Pinpoint Test K
PCM (powertrain control module)	P0884:00	TCM Power Input Signal Intermittent: No Sub Type Information	GO to Pinpoint Test K
PCM (powertrain control module)	P0960:00	Pressure Control Solenoid "A" Control Circuit/Open: No Sub Type Information	GO to Pinpoint Test G
PCM (powertrain control module)	P0961:00	Pressure Control Solenoid "A" Control Circuit Range/Performance: No Sub Type Information	GO to Pinpoint Test G
PCM (powertrain control module)	P0962:00	Pressure Control Solenoid "A" Control Circuit Low: No Sub Type Information	GO to Pinpoint Test G
PCM (powertrain control module)	P0963:00	Pressure Control Solenoid "A" Control Circuit High: No Sub Type Information	GO to Pinpoint Test G
PCM (powertrain control module)	P0973:00	Shift solenoid "A" Control Circuit Low: No Sub Type Information	GO to Pinpoint Test A
PCM (powertrain control module)	P0974:00	Shift solenoid "A" Control Circuit High: No Sub Type Information	GO to Pinpoint Test A
PCM (powertrain control module)	P0976:00	Shift solenoid "B" Control Circuit Low: No Sub Type Information	GO to Pinpoint Test A
PCM (powertrain control module)	P0977:00	Shift solenoid "B" Control Circuit High: No Sub Type Information	GO to Pinpoint Test A
PCM (powertrain control module)	P0979:00	Shift solenoid "C" Control Circuit Low: No Sub Type Information	GO to Pinpoint Test A

PCM (powertrain control module)	P0998:00	Shift solenoid "F" Control Circuit Low: No Sub Type Information	GO to Pinpoint Test A
PCM (powertrain control module)	P0999:00	Shift solenoid "F" Control Circuit High: No Sub Type Information	GO to Pinpoint Test A
PCM (powertrain control module)	P0B0D:00	Electric/Auxiliary Transmission Fluid Pump Motor Control Module: No Sub Type Information	GO to Pinpoint Test F
PCM (powertrain control module)	P0C27:00	Electric/Auxiliary Transmission Fluid Pump "A" Motor Current Low: No Sub Type Information	GO to Pinpoint Test F
PCM (powertrain control module)	P0C28:00	Electric/Auxiliary Transmission Fluid Pump "A" Motor Current High: No Sub Type Information	GO to Pinpoint Test E
PCM (powertrain control module)	P0C29:00	Electric/Auxiliary Transmission Fluid Pump "A" Driver Circuit Performance: No Sub Type Information	GO to Pinpoint Test E
PCM (powertrain control module)	P0C2A:00	Electric/Auxiliary Transmission Fluid Pump "A" Motor Stalled: No Sub Type Information	GO to Pinpoint Test E
PCM (powertrain control module)	P0C2C:00	Electric Transmission Fluid Pump Control Module Feedback Signal Range/Performance: No Sub Type Information	GO to Pinpoint Test E
PCM (powertrain control module)	P0C2D:00	Electric Transmission Fluid Pump Control Module Feedback Signal Low: No Sub Type Information	GO to Pinpoint Test E
PCM (powertrain control module)	P0C2E:00	Electric Transmission Fluid Pump Control Module Feedback Signal High: No Sub Type Information	GO to Pinpoint Test E
PCM (powertrain control module)	P1636:00	Inductive Signature Chip Communication Error: No Sub Type Information	GO to Pinpoint Test Z