

307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80  
*Diagnosis and Testing*

2019 Ranger  
*Procedure revision date: 11/1/2018*

### Parameter Identification (PID) Chart

#### Diagnostic PID Chart

PID Acronym	PID Name	Description
APP	<u>APP</u> sensor	<u>APP</u>
APP1	<u>APP</u> sensor 1	<u>APP</u> 1
AST	Time Since Start	Time (in seconds) since the vehicle was started
CLRDIST	Distance since <u>DTC</u> cleared	Distance driven since <u>PCM DTCs</u> were cleared
ECT TCM	<u>ECT TCM</u>	Engine coolant temperature data provided to the <u>TCM</u>
ENGLOAD	Engine Load	Engine load calculated by <u>PCM</u>
ETC_ACT	Electronic Throttle Control Actual	Electronic Throttle Control Actual calculated by <u>PCM</u>
FOOT_BRAKE	Foot Brake - Foot brake state used by strategy	Foot brake state used by strategy calculated by <u>PCM</u>
GEAR_CMD	Gear Commanded by Module	<u>PCM</u> commanded transmission gear
GEAR_ENGAGED	Transmission Gear Engaged	Transmission Gear Engaged
GEAR_OSC#	Gear Commanded by Output State Control	Output state control commanded gear
ISS_A_QF	Transmission Input Shaft Speed Sensor -A- Quality Factor	Transmission Input Shaft Speed Sensor -A- Quality Factor
ISS_A_RAW	Intermediate Speed -A- Raw	Intermediate Speed -A- Raw
ISS_B_RAW	Intermediate Shaft Speed -B- Raw	Intermediate Shaft Speed -B- Raw
ISS_B_QF	Transmission Input Shaft Speed Sensor -B- Quality Factor	Transmission Input Shaft Speed Sensor -B- Quality Factor
LINEDSD#	Line Pressure Control Desired	Commanded line pressure
MIL_DIS	The distance travelled since the (MIL) was activated	The distance travelled since the <u>MIL</u> was activated
OSS_QF	Transmission Output Shaft Speed Sensor Quality Factor	Fault status for the <u>OSS</u> sensor
OSS_RAW	Output Shaft Speed - Raw	Actual speed of the <u>OSS</u> sensor (rpm)
PCA	Pressure Control Solenoid A	<u>LPC</u>
PCA AMP#	Pressure Control Solenoid A	<u>LPC</u>
PCA_F	Pressure Control Solenoid A Status	<u>LPC</u>
PWRT_FUNCMON_A	Powertrain Secondary Monitor/Performance Fault A	Powertrain Secondary Monitor/Performance Fault A

PWRT_FUNCMON_B	Powertrain Secondary Monitor/Performance Fault A	Powertrain Secondary Monitor/Performance Fault A
REALTIME	Total time (ECU) has been active	ECU Time running
RPM_TCM	Engine Revolutions Per Minute	Engine rpm input to <u>TCM</u>
SHFT_DROP	Shift RPM Drop in Input Shaft Speed Below Expected	Shift rpm drop in input shaft speed below expected
SHFT_FLRE	Shift RPM Rise in Input Shaft Speed Above Expected	Shift rpm rise in input shaft speed above expected
SHFT_ID	Shift Identification of Shift (PID)s Lag, Time, Flare and Drop	Shift identification of shift <u>PIDs</u> lag, time, flare and drop
SHFT_LAG	Shift Time Elapsed From 10% to 90% of Complete	Actual time during shift between 10% and 90% complete
SHFT_TIME	Shift Time Elapsed From Commanded to 10% Complete	Shift time 0% to 10% complete
SNOWPLW_CFG	Snowplow as configured in the (PCM).	Snowplow as configured in the (PCM).
SS_ABS_TC_IN	(Stop-Start) Antilock Brake And Traction Control Summary	(Stop-Start) Antilock Brake And Traction Control Summary
SS_CONTROL_STATE	(Stop-Start) Main Control State Machine	(Stop-Start) Main Control State Machine
SS_CTRL_CRANK_CMD	(Stop-Start) Main Control Crank Command And Hardware Feedback	(Stop-Start) Main Control Crank Command And Hardware Feedback
SS_HUMAN_INPUT	(Stop-Start) Monitor Human Input Summary Including Accelerator, Brake, Clutch, Shift Input, Or Cruise Control	(Stop-Start) Monitor Human Input Summary Including Accelerator, Brake, Clutch, Shift Input, Or Cruise Control
SS_MON_STATE_TIMER	(Stop-Start) Monitor State Machine Transition Timer	(Stop-Start) Monitor State Machine Transition Timer
SS_MONITOR_STATE	(Stop-Start) Monitor State Machine	(Stop-Start) Monitor State Machine
SS_SHIFTER_IN	(Stop-Start) Shift Lever Position Input	(Stop-Start) Vehicle Speed and Powertrain Shaft Speeds Summary
SS_SPEED_INPUT	(Stop-Start) Vehicle Speed and Powertrain Shaft Speeds Summary	(Stop-Start) Vehicle Speed and Powertrain Shaft Speeds Summary
SS_STRTR_HEAT	(Start-Stop) Starter Motor Heat State	(Start-Stop) Starter Motor Heat State
SSPCA	Shift Solenoid Pressure Control A	Commanded pressure for the Shift Solenoid Pressure Control A (SSPCA)/CB1234
SSA_AMP #	Shift Solenoid Pressure Control A	Commanded current for the Shift Solenoid Pressure Control A (SSPCA)/CB1234
SSPCA_F	(SSPCA) Status	Fault status for the Shift Solenoid Pressure Control A (SSPCA)/CB1234
SSPCB	Shift Solenoid Pressure Control B	Commanded pressure for the Shift Solenoid Pressure Control B (SSPCB)/C35R
SSB_AMP	Shift Solenoid Pressure Control B	Commanded current for the Shift Solenoid Pressure Control B

		(SSPCB)/C35R
SSPCB_F	(SSPCB) Status	Fault status for the Shift Solenoid Pressure Control B (SSPCB)/C35R
SSPCC	Shift Solenoid Pressure Control C	Commanded pressure for the Shift Solenoid Pressure Control C (SSPCC)/CB26
SSC_AMP	Shift Solenoid Pressure Control C	Commanded current for the Shift Solenoid Pressure Control C (SSPCC)/CB26
SSPCC_F	(SSPCC) Status	Fault status for the Shift Solenoid Pressure Control C (SSPCC)/CB26
SSPCD	Shift Solenoid Pressure Control D	Commanded pressure for the Shift Solenoid Pressure Control D (SSPCD)/CBLR, C456
SSD_AMP	Shift Solenoid Pressure Control D	Commanded current for the Shift Solenoid Pressure Control D (SSPCD)/CBLR, C456
SSPCD_F	(SSPCD) Status	Fault status for the Shift Solenoid Pressure Control D (SSPCD)/CBLR, C456
SSPCE	Shift Solenoid Pressure Control E	Commanded pressure for the Shift Solenoid Pressure Control E (SSPCE)/CBLR, C456
SSE_AMP	Shift Solenoid Pressure Control E	Commanded current for the Shift Solenoid Pressure Control E (SSPCE)/CBLR, C456
SSPCE_F	(SSPCE) Status	Fault status for the Shift Solenoid Pressure Control E (SSPCE)/CBLR, C456
SST_D	SelectShift™ Transmission - Down Switch Input	SelectShift™ transmission-down switch input
SST_U	SelectShift™ Transmission - Up Switch Input	SelectShift™ transmission-up switch input
TCC AMP	Converter Pressure Control	Commanded current for the <u>TCC</u>
TC_SLIPACT	Torque Converter Slip Actual	Actual difference between engine speed and turbine speed, measured in rpm
TC_SLIPDSD	Torque Converter Slip Desired	<u>PCM</u> commanded difference between engine speed and turbine speed, measured in rpm
TCC	Torque Converter Clutch Solenoid	Commanded pressure for the <u>TCC</u>
TCC_F	Torque Converter Clutch Pressure Control Fault	Fault status for the <u>TCC</u>
TCC_OSC	Output State Control of Torque Converter	Output state control commanded pressure to the <u>TCC</u>
TCC_RAT	Torque Slip Ratio	Actual speed ratio of torque converter (1.0 = fully engaged)

TCS_DEPRES	Transmission Control Switch Pressed	<u>TCS</u> status
TCS_STATE	Transmission Control Switch Requested State	<u>TCS</u> status
TFT	Transmission Fluid Temperature	<u>TFT</u>
TFT_F	Transmission Fluid Temperature Status	Fault status for <u>TFT</u> sensor
TFTV	Transmission Fluid Temperature	<u>TFT</u> voltage
TR	Transmission Range	<u>TR</u>
TR_CRANK	Transmission Range Input Allowing Engine Start	<u>TR</u>
TR_F	Transmission Range Status	Fault status for <u>TR</u> sensor
TRAN_RAT	Gear Ratio Measured	Actual transmission gear ratio
TRANS_VOLT_A	Transmission Supply Voltage Control State	Transmission supply voltage
TRO_N_F	Neutral Output Status	Transmission neutral output status
TRO_P_F	Park Output Status	Transmission park output status
TSS_F	Turbine Shaft Speed Reliable	Fault status of the <u>TSS</u> sensor (rpm)
TSS_RAW	Unfiltered Turbine Shaft Speed	Actual speed of the <u>TSS</u> sensor (rpm)
VPWR_PCM	Module supply voltage	<u>PCM</u> supply voltage
VSS	Vehicle Speed	Vehicle Speed
VSS_HR	Vehicle Speed High Resolution	Vehicle Speed High Resolution
WARMUPS	Number Of Warm-ups Since (DTCs) Cleared	Number Of Warm-ups Since (DTCs) Cleared counter

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