



Preliminary Information

PIP4578B SES Light, Idle Surge, and/or Reduced Engine Power Mode with DTCs P0068, P0121, P0506, P0507, P1516, P2101, P2119, and/or P2176 - Clean Throttle Body and Perform Idle Learn Reset

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Buick	Rainer	2007	All	All	V8 All	All
Cadillac	CTS V	2007 - 2018	All	All	V8 All	All
Cadillac	Escalade	2007 - 2018	All	All	V8 All	All
Chevrolet	Avalanche	2006 - 2014	All	All	V8 All	All
Chevrolet	Camaro	2010 - 2018	All	All	V8 All	All
Chevrolet	Corvette	2006 - 2018	All	All	V8 All	All
Chevrolet	Colorado	2008 - 2009	All	All	V8 All	All
Chevrolet	Express	2006 - 2017	All	All	V8 All	All
Chevrolet	Impala	2006 - 2009	All	All	V8 All	All
Chevrolet	Monte Carlo	2006 - 2009	All	All	V8 All	All
Chevrolet	Silverado	2006 - 2018	All	All	V8 All	All
Chevrolet	Suburban	2006 - 2018	All	All	V8 All	All
Chevrolet	Tahoe	2006 - 2018	All	All	V8 All	All
Chevrolet	Trail Blazer	2006 - 2009	All	All	V8 All	All
GMC	Canyon	2008 - 2009	All	All	V8 All	All
GMC	Envoy	2006 - 2009	All	All	V8 All	All
GMC	Savana	2006 - 2017	All	All	V8 All	All
GMC	Sierrs	2006 - 2018	All	All	V8 All	All
GMC	Yukon	2006 - 2018	All	All	V8 All	All
Hummer	H2	2007 - 2008	All	All	V8 All	All
Hummer	H3	2008 - 2009	All	All	V8 All	All
Pontiac	Grand Prix	2007 - 2008	All	All	V8 All	All
Pontiac	G8	2008 - 2009	All	All	V8 All	All
Saab	97X	2006 - 2009	All	All	V8 All	All

Supersession Statement

This PI was superseded to update model years and add information concerning idle surge, reduced engine power mode, and/or DTCs P0068, P0121, P1516, P2101, P2119, and/or P2176 that may be experienced on high mileage vehicles. Please discard PIP4578.

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

Condition / Concern

As carbon builds up in the throttle body of a high mileage vehicle, the ECM/PCM learns to compensate by increasing the throttle plate angle.

If enough carbon builds up, an idle surge, deceleration surge, tip-in hesitation, reduced engine power mode, and/or DTCs P0068, P0121, P1516, P2101, P2119, and/or P2176 may be experienced on high mileage vehicles.

If the throttle body is cleaned without performing an 3idle learn reset/reset idle learn3 with the Tech 2, the ECM/PCM may continue to compensate for previous carbon build up, causing it to return with a similar concern as well as DTCs P0121, P0506, and/or P0507.

In a similar fashion, if the ECM/PCM of a high mileage vehicle is replaced and/or reprogrammed without performing the Throttle/Idle Learn outlined in SI, the ECM/PCM may no longer compensate for existing carbon build up in the throttle body, causing it to return with a similar concern as well as DTCs P0121,

P0506, and/or P0507.

Recommendations / Instructions

If SI diagnosis does not isolate the cause of this concern, inspect the throttle body bore and plate for obvious carbon build up.
If carbon is present, follow the Throttle Body Cleaning Procedure in SI to clean the throttle body.

After ensuring that the throttle body bore and plate are clean, perform an 3idle learn reset/reset idle learn3 with the Tech 2/GDS and re-evaluate the concern.

Notice: Depending on the vehicle you are working on, the 3idle learn reset/reset idle learn3 is normally found on the Tech 2 ECM menu for Module Set Up or Special Functions/TAC System.
Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.



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