



Service Bulletin

Bulletin No.: 20-NA-038

Date: March, 2020

INFORMATION

Subject: Information on Active Fuel Management (AFM) and Dynamic Fuel Management (DFM) Usage

This bulletin replaces PIP5663. Please discard PIP5663.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Cadillac	CTS	2016	2019			6.2 (LT4)	
	CT6	2016	2020			6.2 (LTA)	
	Escalade	2015	2020			5.3 (L83) 6.2 (L86)	
Chevrolet	3500/4500 Medium Duty (LCF)	2020	2020			6.6 (L8T)	
	Camaro	2016	2020			6.2 (LT1, LT4)	
	Corvette	2014	2019			6.2 (LT1, LT4, LT5)	
		2020	2020			6.2 (LT2)	
	Express	2018	2020			4.3 (LV1)	
	Silverado	2014	2018			4.3 (LV1, LV3) 5.3 (L83) 6.2 (L86)	
	Silverado 1500 (New Model)	2019	2019			4.3 (LV3) 5.3 (L82, L84) 6.2 (L87)	
	Silverado LD	2019	2019			5.3 (L83)	
	Silverado 1500	2020	2020			4.3 (LV3) 5.3 (L82, L84) 6.2 (L87)	
	Silverado 2500/3500	2020	2020			6.6 (L8T)	
	Suburban	2015	2020			5.3 (L83) 6.2 (L86)	
Tahoe	2015	2020			5.3 (L83) 6.2 (L86)		
GMC	Savana	2018	2020			4.3 (LV1)	
	Sierra	2014	2018			4.3 (LV1, LV3) 5.3 (L83) 6.2 (L86)	
	Sierra 1500 (New Model)	2019	2019			4.3 (LV3)	

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
						5.3 (L82, L84) 6.2 (L87)	
	Sierra Limited	2019	2019			4.3 (LV3) 5.3 (L83) 6.2 (L86)	
	Sierra 1500	2020	2020			4.3 (LV3) 5.3 (L82, L84) 6.2 (L87)	
	Sierra 2500/3500	2020	2020			6.6 (L8T)	
	Yukon Models	2015	2020			5.3 (L83) 6.2 (L86)	

Involved Region or Country	North America, Europe, Uzbekistan, Russia, Middle East, Iraq, Israel, Palestine, Argentina, Brazil, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela, Japan, Cadillac Korea (South Korea), GM Korea Company, China, Taiwan, Thailand, Singapore, Philippines, Egypt, Other Africa, South Africa
Information	<p>AFM (Active Fuel Management)</p> <p>To provide maximum fuel economy under light load driving conditions, the engine control module (ECM) will command the cylinder deactivation system ON to deactivate engine cylinders 1, 7, 6, and 4, switching to a V4 mode. The engine will operate on 8 cylinders, or V8 mode, during engine starting, engine idling, and medium to heavy throttle applications.</p> <p>AFM – active fuel management strategy which deactivates the lifters on specific cylinders. On V8 engines, it deactivates half of the cylinders (1,7,6 and 4) and on V6 engines, it deactivates only 2 of the cylinders (3 and 6). For LTA and LT2 engines, the deactivation occurs on cylinders 2, 3, 5 and 8.</p> <p>LOMA – lifter oil manifold assembly is only used on legacy AFM applications</p> <p>DFM (Dynamic Fuel Management)</p> <p>Dynamic Fuel Management (DFM) is recognized as active fuel management technology with the additional ability to deactivate any combination of cylinder valves for an internal combustion engine. This technology combines millisecond-accurate torque control with cylinder deactivation to optimize fuel consumption of spark ignited engines. The control of every cylinder event optimizes engine operation such that peak efficiency is obtained throughout the range of engine operation. DFM extends cylinder deactivation to all cylinders, which allows for a large variety of firing sequences. DFM can have rotating cylinder deactivation patterns as well as fixed patterns. For rotating patterns, which cylinders are being deactivated can change with each subsequent engine cycle. Transitions between firing sequences is done in a continuous fashion, making the transitions seamless and transparent to the vehicle operator.</p> <p>DFM – dynamic fuel management which can deactivate the lifter on any cylinder at any time. Unlike AFM, this can result any many different types of firing patterns, some of which are fixed patterns (like 1/4, 1/2, 3/4) and others which are rotating (like 1/5, 1/3, 2/5, 2/3). This is only available on small block engines (L84 and L87).</p> <p>OCV – oil controlled valve is only used on small block engines. These provide faster response times than LOMA and are required for DFM (on L84 and L87). OCVs are also used on L82 for AFM.</p> <p>Refer to the AFM/DFM Usage Chart below.</p>

AFM/DFM Usage Chart

Vehicles	AFM VL0M	4 Cylinder Deactivation	DFM. OCV's	FDFM	None	Notes
CTS LT4	Yes	Yes	No	No		Always active
CT6 LTA	No	Yes	No	No		
Camaro LT1	Yes	Yes	No	No		Automatic only. AFM not active with Manual trans
Camaro LT4	Yes	No	No	No		Has the hardware, Not active
Corvette LT1	Yes	Yes	No	No		Auto Trans active, Manual Trans active in ECO only
Corvette LT2	No	Yes	No	No		
Corvette LT4	Yes	Yes	No	No		Auto Trans active, Manual Trans active in ECO only
Corvette LT5	No	No	No	No	Yes	No hardware on LT5
Escalade L83, L86	Yes	Yes	No	No		
Express/Savana LV1	No	No	No	No		No hardware on LV1
Silverado/Sierra L83, L86	Yes	Yes	No	No		
Suburban/Tahoe/Yukon L83, L86	Yes	Yes	No	No		
Silverado/Sierra L82	No	Yes	Yes	No		
Silverado/Sierra L84	No	No	Yes	Yes		
Silverado/Sierra L87	No	No	Yes	Yes		
Silverado/Sierra HD L8T	No	No	No	No		No hardware on L8T
Silverado/Sierra LV1	No	No	No	No		
Silverado/Sierra LV3	Yes	Yes	No	No		
3500/4500 Medium Duty (LCF)	No	No	No	No		No hardware on L8T

Parts Information

No parts are required for this repair.

Version	1
Modified	Released February 26, 2020

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