California Environmental Protection Agency

@ Air Resources Board

CUMMINS ENGINE CO., INC. Executive Order: A-021-0627

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 1 of 4

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: The following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

**				TEST G	ROUP IN	FORM	MATION					
MODEL YEAR	TEST	ROU	P VE	VEHICLE CLASS(ES)			FUEL C	ATEG	FUEL TYPE			
2016	GCEXD(6.78	rv	MDV5	DEDICATED SINGLE FUEL VEHICLE				DIESEL			
US	EFUL LIFE	(mile	s)	VEHICLE EM	ATEG	ORY	INT	ERMEDIATE IN-USE STD				
EXH/O	RVR	EV	AP	FTP			SFTP		FTP		SFTP	
1500	00		LE	V3 ULEV570	EV 570 *				*			
SPECI	AL FEATU		EXHAUST EMIS	SSION CONT	ROL		OBD S1	TATU	s	ENGINE	DISPLACEMENT (L)	
1	C, CAC,		EGR, EGRC, O	ERC,		FULL +						
*			*			PARTIAL *			*	6.7		
*			*				TIAL WITH	ALL MODELS				
			EVAPORATIV	E & REFUELI	NG (EVA	P/OR	/R) FAMILY	INFO	ORMATION			
EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR							Y EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
	*			•			•			*		
				EMISSION	CREDIT	INFO	RMATION					
ALLOWANCE FOR TEST GROUP							NMOG CREDIT FOR NMOG CR				ISTO FOR WOR	
BASEL	NE PZEV		AT PZEV				ION-PZEV ZERO-EVAP			TRUCKS		
	*		*	*		N			N		N	
			NA	OG AND FL	EET AVE	RAGE	INFORMAT	TION				
NMOG RAF CH4 RAF FTI		FTP NMOG/NM RATIO	TP NMOG/NMHC RATIO HCHO/NMH			RATIO NMOG+NOX PC+LDT (0- (g/s		50 LVW)	NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)			
*	* *			* *:			•			*		

See the Attachment for Vehicle Models, Evaporative Family, Engine Displacement, Emission Control Systems, Phase-In Standards, OBD Compliance, Emission Standards and Certification Levels, and Abbreviations.

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⊘ Air Resources Board

CUMMINS ENGINE CO.,

Executive Order: A-021-0627

New Passenger Cars, Light-Duty Trucks and

Medium-Duty Vehicles

Page 2 of 4

BE IT FURTHER RESOLVED:

The exhaust and evaporative emission standards and the certification emission levels for the listed vehicles are as listed on the Attachment. Compliance with the 50° Fahrenheit testing requirement may have been met based on the manufacturer's submitted compliance plan in lieu of testing. Any debit in the manufacturer's NMOG+NOx and greenhouse gas Fleet Average (PC or LDT or MDPV) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

BE IT FURTHER RESOLVED:

For the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.2 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures for PC, LDT and MDV).

BE IT FURTHER RESOLVED:

The listed vehicle models are conditionally certified in accordance with 13 CCR Section 1968.2(k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because, as described in ARB approval letter (Reference No. E-15-105) dated May 8, 2015, the on-board diagnostic II (OBD) system of the listed vehicle models has been determined to have eleven to twelve deficiencies for vehicles equipped with automatic transmissions, and ten deficiencies for vehicles equipped with manual transmissions.

The listed vehicle models are approved subject to the manufacturer paying a fine of \$400 per vehicle for the third through twelfth deficiencies for vehicles equipped with 68RFE automatic transmissions, \$350 per vehicle for the third through eleventh deficiencies for vehicles equipped with Aisin automatic transmissions, and \$300 per vehicle for the third through tenth deficiencies for vehicles equipped with manual transmissions in the listed test group that is produced and delivered for sale in California.

On a quarterly basis, the manufacturer shall submit to the Air Resources Board reports of the number of vehicles produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this conditional certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2016 model-year production period. Failure to pay the quarterly fine, in full, in the time provided, may be cause for the Executive Officer to rescind this conditional certification, effective from the start of the quarter in question, in which case all vehicles covered under this conditional certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to \$5000 per vehicle pursuant to HSC Section 43154.

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this day of May 2015.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

CUMMINS ENGINE CO., INC.

Executive Order: A-021-0627 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 3 of 4

Air Resources Board

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	EXH	AUST	Γ AND	EVAF	PORA	TIVE	EMIS	SION S	STAN	DARD	S AND	CERTI	FICATI	ON	LEVELS		
		EXH	AUST E	MISSI	ON STA	ANDA	RDS AN	ID CER	TIFICA	TION L	EVELS	(FTP, HW	FET, 50°	F, 20°	°F)		
FUI				onoxide djustme RVR [g	e; NOx ent facto HC/ga	oxide or; 2D illon d	es of nitr HS/3DH lispense	ogen; H S [g HC d]: on-bo	CHO: (/test]: (formalde 2/3 days fueling v	ehyde; P s diumal vapor rec	M: particu	iate matte ; RL [g He gram; mg	er; R/ C/mi]: g: mill	C; CO: ca AF: reactive running le igram; mi:	rity oss;	
				NMHC+NOx (g/mi)		C	CO (g/mi)			NOx (g/mi)			HCHO mg/mi)		PM (g/mi)		
				CERT	STD		CERT	ST	0	CERT	STD	CER	TST	D	CERT	STD	
FTP@5	OK	*		*	1		*	*		*	*	*	*		*	*	
FTP@L	IL DIE	DIESEL-EPA		0.178	0.570	70	0.14	7.:	3	*	*	*	6		0.0002	0.06	
50°F @	4K	*		*			*	*		*	*	*	*				
	-				FUEL	TVD	-			N	HC+NC	Ox (g/mi)			CO (g/mi)		
-315	11/10				FUEL	ITP	-			CE	RT	STD		CERT		STD	
HWFET	r @ 50K			*						*		*	100			Service of the service of	
HWFE	T@UL			DIESEL-EPA						0.104 0		0.570	570		The state of the s		
20°F @ 50K *									5 7 7 7	The second of th		5. 50	*		*		
			S	FTP EX	HAUS	TEM	ISSION	STAND	ARDS	AND CI	ERTIFIC	ATION LE	EVELS				
		US06								SC03 COMPOSITE							
	FUEL '	UEL TYPE		NMHC+NOx (g/mi)		CO PM (g/mi) (mg/m			NMHC+NOx i) (g/mi)		CO (g/mi)	NMHC+NO (g/mi)		CO (g/ml)	PM (mg/mi)		
		* CEI * ST CEI * ST BI				*			*		*			190 48			
@ 4K	*				*		*			*		*	a prime				
					*		* *			*		*	*		*	. *	
@ UL	*				*		*	* *		,		*	*		*	*	
					. "								*				
		WH	OLE V	EHICLE	EVAP	ORA	TIVE EN	ISSION	STAN	DARD	S AND C	ERTIFIC	ATION LI	VEL	S		
						W	HOLE VE	EHICLE	EVAP	ORATI	/E TEST	ING					
EVAPORATIVE FAMILY			UEL T	/PE	3DI	HS (g	/test) @ UL			2DHS	(g/test)	@ UL	@ UL		RL (g/mi) @ UL		
					CERT S		STD FEL		CEI	RT STD		FEL		CERT		STD	
*			*			* *		*	* *				*				
- (DRVR/I	FUEL	ONLY/	CANIS	TER B	LEED	EVAPO	RATIVE	EMIS	SION S	TANDA	RDS AND	CERTIF	ICAT	ION LEVE	ELS	
			001/5			.,						P & CAN					
EVAPORATIVE FAMILY		E	ORVR (g/gailon) @ UL				FUEL TYPE			DHS RIG TEST (g/test) @ UL			RIG TES st) @ UL				
		FL	JEL TY	TYPE CERT STD						ERT STD			CERT STD		CERT	STD	
*			*		*	*		*	1		*	*	*		*	*	

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RAM

RAM 3500 4X4

MDV5

CUMMINS ENGINE CO., INC. Executive Order: A-021-0627

New Passenger Cars, Light-Duty Trucks and

Medium-Duty Vehicles

Page 4 of 4

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*: not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: LDT<6000#GVWR,3751-5750#LVW; LDT3: LDT 6001-8500#GVWR,3751-5750#ALVW; LDT4: LDT 6001-8500#GVWR,5751-8500#ALVW; MDV: medium-duty vehicle; MDV4: MDV 8501-10000#GVWR; MDV5: MDV 10001-14000#GVWR; MDPV: medium-duty passenger vehicle; ECS: emission control system; CERT: certification; STD: standard; FEL: family emission limit; GVWR: gross vehicle weight rating; LVW: loaded vehicle weight; ALVW: adjusted LVW; LEV: low emission vehicle; ULEV: ultra LEV; SULEV: super ULEV; ZEV: zero-emission vehicle; PZEV: partial ZEV; AT PZEV: advanced technology PZEV; TZEV: transitional ZEV; TWC/OC: 3-way/oxidizing catalyst; ADSTWC: adsorbing TWC; HAC: HC adsorbing catalyst; WU: warm-up catalyst; NAC: NOx adsorption catalyst; SCR-U or SCRC/SCR-N or SCRC-NH3: selective catalytic reduction-urea/ammonia; NH3OC: ammonia oxidation catalyst; CTOX/PTOX: continuous/periodic trap oxidizer; DPF: diesel particulate filter (active); GPF: PM filter for sparkignited engine; HO2S/O2S: heated/oxygen sensor; WR-HO2S or AFS: wide range/linear/heated air-fuel ratio sensor; NOXS: NOX sensor; PMS: PM sensor; RDQS: reductant quality sensor; NH3S: ammonia sensor; EGR: exhaust gas recirculation; EGRC: EGR cooler; AIR/AIRE: secondary air injection (belt driven)/(electric driven); PAIR: pulsed AIR; SFI/MFI: sequential/multiport fuel injection;

DFI/IFI: direct/indirect fuel injection; TC/SC: turbo/super charger; CAC: charge air cooler; F/P/\$: full/partial/partial with fines on-board diagnostic; DOR: direct ozone reducing; HCT: hydrocarbon trap; BCAN: bleed carbon canister; prefix 2: parallel; (2) suffix: series; CNG/LNG: compressed/liquefied natural gas; LPG: liquefied petroleum gas; E85: "85%" ethanol ("15%"gasoline) fuel; E10: "10%" ethanol ("90%"gasoline) fuel; A: automatic (with lockup); M: manual transmission; SA: semi-automatic transmission; CV:

continuously variable transmission: SCV; selectable continuously variable transmission; AM: automated manual transmission; AMS:

automated manual-selectable transmission; OT: other transmission 2016 MODEL YEAR: VEHICLE MODELS INFORMATION **ENGINE EVAPORATIVE EXH PZEV TYPE VEH CLASS** TRANS TYPE OBD MAKE MODEL **FAMILY ECS** (L) 1 6.7 \$ RAM 3500 4X2 MDV5 A6 RAM MDV5 6.7 M6 1 \$ RAM RAM 3500 4X2 RAM RAM 3500 4X4 MDV5 6.7 A6 1 \$ *

M6

6.7