

Pursuant to the authority vested in California 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: That 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 GRO	UP IN	FORM	ATION			3		
MODE	- I TE	ST GROUP		VEHICI	E CLASS(E	S)		FUEL CATEGORY			FUEL TYPE		
2019	KR	IID06.87CV			MDV5				SINGLE FUE HICLE	ELI	LIQUEFIED PETROLEUM GAS		
	USEFUL	LIFE (miles)		VEH	ICLE EMISS	ION C	ATEG	ORY	INTERIM /	INTE	RMEDIATE IN-USE STD		
EXH	I/ORVR	EVAP			FTP		SFI	P	FTP		SFTP		
12	20000	150000)	LEV:	2 ULEV		*		*		*		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS						L		OBD S	TATUS		ENGINE DISPLACEMENT		
1	1 2TWC, 2WR-H02S, 2H02S, SFI							FULL	*	-			
*	*						P	ARTIAL	ALL MODEL	s	6.8		
*	* *							TIAL WITH	*				
		E	VAPO	RATIVE &	REFUELING	(EVA	P/OR	VR) FAMIL	Y INFORMATI	ION			
EVA	EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR					GORY	,	EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
1	KRIIF02	65LP2		L	LEV 2			MDV5			*		
					EMISSION C	REDIT	INFC	RMATION					
	NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY						ZEV	NMOG CREDIT FOR DOR			OPTIONAL EXH. STD FOR WORK TRUCKS		
		N			N			N N			N		
				NMOG	AND FLEE	T AVE	RAGE	INFORMA	TION				
NMOG RAF	CH4 RAF	FTP NMOG/NMHO RATIO		HO/NMHC RATIO	10/1414ITIC DT /3751 V/W-850			T STD NMOG+NOX FLEET S 0 GVW) MDV (8501-10000 GVW) (g/mi)					
*	*	1.0		*		*			*		*		

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. (As applicable, heavy-duty vehicles (HDV) over 14,000 pounds in GVWR listed in this Executive Order are certified to the requirements in 13 CCR Section 1961.2 applicable to MDV pursuant to 13 CCR Section 1956.8(c)(3) or 13 CCR Section 1956.8(h)(5), as applicable.)



ROUSH INDUSTRIES INC.

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 fleet average compliance requirement for NMOG+NOx or Vehicle Equivalent Credit (13 CCR Sections 1961.2(b)(1), 1961.2(b)(3), or 1961.2(c)(3), and the incorporated test procedures, as applicable), or Greenhouse Gas Emissions (13 CCR Section 1961.3, or 17 CCR Section 95663, and the incorporated test procedures, as applicable), for PC, LDT, MDPV or MDV 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 and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for PC, LDT and MDV).

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 December 2018.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division



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ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FTP, HWFET, 50°F, 20°F)

CH4: methane; NMOG: non-CH4 organic gas; HC: hydrocarbon; NMHC: non-CH4 HC; CO: carbon monoxide; NOx: oxides of nitrogen; HCHO: formaldehyde; PM: particulate matter; RAF: reactivity adjustment factor; 2DHS/3DHS [g HC/test]: 2/3 days diurnal+hot-soak; RL [g HC/mi]: running loss; ORVR [g HC/gallon dispensed]: on-board refueling vapor recovery; g: gram; mg: milligram; mi: mile; K: 1000 miles; F: degrees Fahrenheit; FTP: federal test procedure; SFTP: supplemental FTP

FUEL TYPE

		10000000	NMOG (g/mi)		CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CER	T STD
	*	*	*	*	*	*	*	*	*	*	*
LPG	-CARB	0.0537	0.167	2.31	7.3	0.08	0.4	*	21	*	0.06
LPG	-CARB	0.0324	0.334	2.69	7.3	0.01	0.4	*	42		
				с.			NOx (g/	mi)		CO (g	/mi)
1.1		-	FUEL ITP	C		· CE	RT	STD	CEF	RT	STD
50K			*	*		*			(Mpile		
UL	LPG-CARB						0.04		. 8		alena 1912 - Salo
iok	*								*		*
	LPG 50K) UL	LPG-CARB LPG-CARB 50K	(g/r CERT * * LPG-CARB 0.0537 LPG-CARB 0.0324 50K UL	(g/mi) CERT STD * * * LPG-CARB 0.0537 0.167 LPG-CARB 0.0324 0.334 FUEL TYP 50K * QUL LPG-CARB LPG-CARB	(g/mi) (g/mi) CERT STD CERT * * * * LPG-CARB 0.0537 0.167 2.31 LPG-CARB 0.0324 0.334 2.69 FUEL TYPE SOK * * 20L LPG-CARB LPG-CARB *	(g/mi) (g/mi) CERT STD CERT STD * * * * * LPG-CARB 0.0537 0.167 2.31 7.3 LPG-CARB 0.0324 0.334 2.69 7.3 SOK * * * * 9.UL LPG-CARB LPG-CARB LPG-CARB *	(g/mi) (g/mi) (g/mi) CERT STD CERT STD CERT *	(g/mi) (g/mi) (g/mi) CERT STD CERT STD CERT STD * * * * * * * * LPG-CARB 0.0537 0.167 2.31 7.3 0.08 0.4 LPG-CARB 0.0324 0.334 2.69 7.3 0.01 0.4 FUEL TYPE NOx (g/ 50K * * * * QUL LPG-CARB 0.04 0.04	(g/mi) (g/mi) (g/mi) (mg CERT STD CERT STD CERT STD CERT *	(g/mi) (g/mi) (g/mi) (mg/mi) CERT STD * <td< td=""><td>(g/mi) (g/mi) (g/mi) (mg/mi) CERT STD CERT T * <th< td=""></th<></td></td<>	(g/mi) (g/mi) (g/mi) (mg/mi) CERT STD CERT T * <th< td=""></th<>

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03	3	CON	POSITE	
	FUEL TYPE		NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMHC+NOx (g/mi)	CO (g/mi)	NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)
@ 4K	*	CERT	*	*		*	*			
U		* STD * * * *	*							
		CERT	*	*	*	*	*	*	*	*
@ UL	*	STD	*	*	*	*	*	*	*	*
		BIN	and the second of the	- 844 14, 170	1000		4	*	pet to Autor	1.1

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

	WHOLE VER	HICLE EV	APORA	TIVE E	MISSION	STANDAR	DS AND CI	ERTIFICAT	ION LEVE	ELS	
			Wł	IOLE V		RL (g/mi) @ UL					
EVAPORATIVE FAMILY	FUEL TYF	PE 3	3DHS (g/test) @						2DI	2DHS (g/test) @ UL	
		CER	RT S	STD	FEL	CERT	STD	FEL	CE	RT	STD
KRIIF0265LP2	LPG-CAR	в 0.7	6 1	.00	*	*	1.25	*	,	*	0.05
ORVR / FU	EL ONLY / C	ANISTER	BLEED	EVAP	ORATIVE	EMISSION	STANDAR	RDS AND	ERTIFIC	TION LEV	ELS
			FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	ORVR (g	DUL	FUEL TYPE		3DHS RIG TEST (g/test) @ UL		2DHS RIG TEST (g/test) @ UL		BLEED CANISTER TEST (g/test) @ 4K		
	FUEL TYPE	E CERT	STD			CERT	STD	CERT	STD	CERT	STD
*	*	*	*		*	*	*	*	*	*	*
	EFFECTIVE	LEAK D	IAMET	ER ST	ANDAR	D AND C	RTIFICA	TION LEV	EL (INCH	IES)	

EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD
*	*	*	*

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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: mediumduty passenger vehicle; HDV: heavy-duty 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; 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 spark-ignited 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 guality 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; FFH: fuel fired heater; 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; AER: all-electric range; EAER: equivalent AER; PHEV: plug-in hybrid electric vehicle; NMOG + NOx Fleet Ave. Credit for Extended Warranty: N = no credits, Y = credits, S = credits for some/select models

2019 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	
FORD (ROUSH)	E350	MDV5	6.8	A6	KRIIF0265LP2	1	P	