CALIFORNIA AIR RESOURCES BOARD

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

IT IS ORDERED AND RESOLVED: The engine and emission control systems produced by the manufacturer are certified as described below for use in on-road motor vehicles with a manufacturer's GVWR over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

YEAR	AR ENGINE FAMILY ENGINE		FUEL TYPE 1	STANDARDS & TEST	INTENDED	ECS & SPECIAL FEATURES 3	DIAGNOSTIC 6				
	KRIIE06.8BW2	SIZES (L)		PROCEDURE	SERVICE CLASS		OBD(F)				
2019 K		6.8	LPG	Otto	HDO	TWC, HO2S, SFI, 2WR-HO2S					
	GINE'S IDLE EMIS	SIONS CON	NTROL 5		ADDITIONAL	IDLE EMISSIONS CONTROL					
	N/A					N/A					
NGINE (L)	(L) ENGINE MODELS / CODES (rated power, in hp)										
6.8		See Attachment									

¹ ECS=emission control system; TWC/OC=three-way/oxidizing catalyst; NAC=NOx adsorption catalyst; SCR-U / SCR-N=selective catalytic reduction – urea / – ammonia; WU (prefix) =warm-up catalyst; DPF=dised particulate filter; PTOX=periodic trap oxidizer; HO25/O2S=heated/oxygen sensor; HAFS/AFS=heated/air-fuel-ratio sensor (a.k.a., universal or linear oxygen sensor); WR-HO2S=wide range oxygen sensor; TEI=throttle body fuel injection; SF/IMFI=sequential/multi port fuel injection; DGI=direct gasoline injection; GCARB=gaseous carburetor; IDI/DDI=indirect/direct diesel injection; TC/SC=turbo/ super charger; CAC=charge air cooler; EGR / EGR-C=exhaust gas recirculation / cooled EGR; PAIR/AIR=pulsed/secondary air injection; SPL=smoke puff limiter; ECM/PCM=engine/powertrain control module; EM=engine modification; 20 (prefix)=parallel; (2) (suffix)=in senes;

ESS=engine shutdown system (per 13 CCR 1956.8(a)(6)(A)(1); 30g=30 g/hr NOx (per 13 CCR 1956.8(a)(6)(C). PSS=internal combustion auxiliary power system; ALT=atternative method (per 13 CCR 1956.8(a)(6)(D); Exempt=exempted per 13 CCR 1956.8(a)(6)(B) or for CNG/LNG fuel systems; N/A=not applicable (e.g., Otto engines and vehicles);

EMD=engine manufacturer diagnostic system (13 CCR 1971); OBD(F) / (P) / (\$)=full / partial / partial with a fine / on-board diagnostic;);

Following are: 1) the FTP exhaust emission standards, or family emission limit(s) as applicable, under 13 CCR 1956.8; 2) the SET and NTE limits under the applicable California exhaust emission standards and test procedures for heavy-duty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, for this engine family. "Diesel" CO, SET and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test Procedures in lieu of testing. (For flexible- and dual-fueled engines, the CERT values in brackets [] are those when tested on conventional test fuel. For multi-fueled engines, the STD and CERT values for default operation permitted in 13 CCR 1956.8 are in parentheses.). 4

	NMHC		NOx		NMHC+NOx		co		PM ·		НСНО	
	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET
STD	0.14	+	0.02	*	*	*	14.4	*	0.01	*	0.01	*
CERT	0.04	*	0.01	*	*	*	5.0	*	0.002	*	0.000	*
NTE	1	*				*		R				

FEL=family emission limit; CERT=certification level; NMHC/HC=non-methane/hydrocarbon; NOx=oxides of nitrogen; CO=carbon monoxide; PM=particulate matter; HCHO=formaldehyde;

BE IT FURTHER RESOLVED: That the listed engine family is certified to the Optional Low NOx Emission Standards as specified in 13 CCR 1956.8(c)(1)(B) and section 10. B. 1 of the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles" adopted December 27, 2000, as last amended September 1, 2017.

BE IT FURTHER RESOLVED: The manufacturer has demonstrated compliance with the Greenhouse Gas Emission Standards as specified in Title 13 CCR 1956.8 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy Duty Otto Cycle Engines and Vehicles" (HDOE Test Procedures) adopted December 27, 2000, as last amended September 1, 2017 using the 2014 model year National Heavy-Duty Engine and Vehicle Greenhouse Gas Program as specified in Section 1036.108 of the HDOE Test Procedures. The manufacturer has submitted the required information and therefore has met the criteria necessary to receive a California Executive Order based on the Environmental Protection Agency's Certificate of Conformity for the above listed engine family.

CALIFORNIA AIR RESOURCES BOARD

ROUSH INDUSTRIES, INC.

	EPA CERTIFICAT	E OF CONFORMITY	PRIMARY INTENDED SERVICE CLASS				
In	KRIIE06.	8BW2-002	Vocational				
	(:Oz	CH4	N ₂ O			
g/bhp-hr	FTP	SET	GRé	NgO			
STD	627		0.10	0.10			
FCL	627		• • • • • • • • • • • • • • • • • • •				
FEL	646	*	0.10	0.10			
CERT	613	•	0.03	0.02			

gronp-nr=grams per brake norsepower-nour, FIF=Pederal fest Procedure, SET=Supplemental emission testing, STD = standard of emission test cap, FEE-family emission testing, FCE-family certification level; CERT=certification level; CO2=carbon dioxide; CH4=methane; N2O=nitrous oxide; VOCATIONAL=vocational engine; TRACTOR=tractor engine

BE IT FURTHER RESOLVED: For the listed engine models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1971.1 (on-board diagnostic, full or partial compliance) and 13 CCR 2035 et seq. (emission control warranty).

Engines certified under this Executive Order must 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 November 2018.

Annette Hebert, Chief Emissions Compliance, Automotive Regulations and Science Division

ATTACHMENT 1 OF 1

Engine Model Summary Template

A-344-0096 08/28/18

Engine Family .	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (Ibs/hr)@peak torqu	9.Emission Control PDevice Per SAE J1930
KRIIE06.8BW2	KKFB18BR5	Blue Bird Vision School Bus	320@3900	NA	ŇA	407@3150	103.4	109.3	TWC/H028/SF1/2WR- H02S
KRIIE06.8BW2	KKFB18FR5	Blue Bird Vision School Bus	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKN410TR5	Step-Van	SAME			SAME	SAME	SAME	SAME -
KRIIE06.8BW2	KKN417TR5	Step-Van	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKN4178R5	Step-Van	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKN41ATR5	Step-Van	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKN416TR5	Step-Van	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKN4168R5	Step-Van	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKNC10KR5	F-650/750 Chassis Cab	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKNC10RR5	F-650/750 Chassis Cab	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKNC10PR5	F-650/750 Chassis Cab	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKNC178R5	F-650/750 Chassis Cab	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKNA10CR5	F-450/550 Chassis Ca	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKNA17CR5	F-450/550 Chassis Cab	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKNA178R5	F-450/550 Chassis Cab	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKN510TR5	Motor Home	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKN517TR5	Motor Home	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKN5178R5	Motor Home	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKN51ATR5	Motor Home	SAME		ayundalar y nasaradan yalahan yalahan ayundan	SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKN516TR5	Motor Home	SAME			SAME	SAME	SAME	SAME
KRIIE06.8BW2	KKN5168R5	Motor Home	SAME			SAME	SAME	SAME	SAME