California Environmental Protection Agency Air Resources Board

SIMPSON AND COMPANY LIMITED

EXECUTIVE ORDER U-R-064-0004 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
2017	HSCLL02.6C74	2.6	Diesel	8000		
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION			
Electronic Gas Rec	Electronic Control M Direct Injection, Smoke irculation, Turbocharger, Diesel Oxidation Ca	Puff Limiter, Exhaust Charge Air Cooler.	Tractor			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER	EMISSION STANDARD		EXHAUST (g/kw-hr)						OPACITY (%)		
CLASS	CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK	
19≤ kW < 56	Tier 4 Final	OPTIONAL STD	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A	
		CERT			4.3	0.1	0.03			M 80	

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has complied with the more stringent set of standards from the various power categories in conformance with Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for New 2011 and Later Tier 4 Off-Road Compression Ignition Engines, Part I-D" adopted October 20, 2005 and last amended October 25, 2012.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this

day of December 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Fo#: U-R-064-0004

4/17/2017

A Haehment: Page 10f1

Engine Model Summary Template

	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; (lbs/hr)@peak torquel	9.Emission Control Device Per SAE J1930
Ī	HSCLL02.6C74	SJV326	7085	73@2000	77 @ 2000	25.88 @ 2000	230,1@1500	88,5 @ 1500	22.33 @ 1500	ECM,DOC,DDI,EGR,TC,CAC
	HSCLL02.6C74	SJV326	7129	64@2000	68@ 2000 -	22.86 @ 2000	199.1@1500	75.5 @ 1500	19.06 @ 1500	ECM,DOC,DDI,EGR,TC,CAC
	HSCLL02.6C74	SJV326	7131	54@2000	59 @ 2000	19.81 @ 2000	168.1@1500	64,5 @ 1500	16.22 @ 1500	ECM,DOC,DDI,EGR,TC,CAC
	HSCLL02.6C74	SJV326	7116	73@2000	77 @ 2000	25.88@ 2000	230.1@1500	88.5 @ 1500	22.33 @ 1500	ECM,DOC,DDI,EGR,TC,CAC
	HSCLL02,6C74	SJV326	7147	73@2000	77 @ 2000	25,88@ 2000	230,1@1500	88,5 @ 1500	22.33 @ 1500	ECM,DOC,DDI,EGR,TC,CAC
	HSCLL02.6C74	SJV326	7130	64@2000	68 @ 2000	22.86 @ 2000	199.1@1500	75.5 @ 1500	19.06 @ 1500	ECM,DOC,DDI,EGR,TC,CAC
	HSCLL02,6C74	SJV326	7132	54@2000	59 @ 2000	19.81 @ 2000	168.1@1500	64.5 @ 1500	16,22 @ 1500	ECM,DOC,DDI,EGR,TC,CAC
	HSCLL02.6C74	SJV326	7187	44@2000	49 @ 2000	16.45 @ 2000	136.4@1500	55.5 @ 1500	14.01 @ 1500	ECM,DOC,DDI,EGR,TC,CAC
	HSCLL02.6C74	SJV326	7188	44@2000	49 @ 2000	16,45 @ 2000	136,4@1500	55,5 @ 1500	14.01 @ 1500	ECM,DOC,DDI,EGR,TC,CAC
ξ.	HSCLL02.6C74	SJV326	7198	73@2000	77 @ 2000	25.88 @ 2000	230.1@1500	88.5 @ 1500	22.33 @ 1500	ECM,DOC,DDI,EGR,TC,CAC
*	HSCLL02,6C74	SJ327	7183	60@2000	65 @ 2000	21.85 @ 2000	169.6@1500	68 @1500	22,86 @1500	ECM,DOC,DDI,EGR,TC,CAC
ζ	HSCLL02,6C74	SJ327	7184	55@2000	60 @ 2000	20.17 @ 2000	158,6@1500	64 @1500	21.51 @1500	ECM,DOC,DDI,EGR,TC,CAC
•	HSCLL02,6C74	SJ327	7215	50@2000	55 @ 2000	18.49 @ 2000	147.5@1500	60 @1500	20.17 @1500	ECM,DOC,DDI,EGR,TC,CAC
ધ	HSCLL02.6C74	SJ327	7216	45@2000	50 @2000	16.81 @ 2000	114.3@1500	47 @1500	15.80 @1500	ECM,DOC,DDI,EGR,TC,CAC
ŧ	HSCLL02.6C74	SJ327	7220	40@2000	46 @ 2000	15,46 @ 2000	112.9@1500	45 @1500	15.12 @1500	ECM,DOC,DDI,EGR,TC,CAC
<u>ن</u>	HSCLL02.6C74	SJ436	7203	73@2000	63 @2000	21.17 @ 2000	230,1@1500	69 @1500	23.19 @1500	ECM,DOC,DDI,EGR,TC,CAC
K	HSCLL02,6C74	SJ436	7217	65@2000	55 @ 2000	18,49 @ 2000	202,8@1500	61 @1500	20.50 @1500	ECM,DOC,DDI,EGR,TC,CAC

* New ratings added for Vunning change