

HYUNDAI DOOSAN INFRACORE CO. LTD.

EXECUTIVE ORDER U-R-019-0201 New Off-Road

Compression-Ignition Engines
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Pursuant to the authority vested in California 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-19-095;

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)					
2023	PDICL01.8LEA	1.794	Diesel	5000					
SPECIAL	. FEATURES & EMISSION C	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
Ca	ust Gas Recirculation, E talyst, Electronic Direct rger, Charge Air Cooler Module	ion Injection,	Loader, Tractor, Compressor, Genera Power Unit, Excavator, Forklift, Utility						

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), 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	EMISSION				EXHAUST (g/kw-l		OF	6)		
POWER CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
19 ≤ kW < 37	Tier 4 Final	STD	N/A	N/A	4.7	5.5	0.03	N/A	N/A	N/A
		CERT			3.8	0.2	0.02			

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 on this __/st_ day of November 2022.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-019-0201

Family: PDICL01.8LEA

Attachment Last Revised: 10/24/2022

Model Cod				Displacement	Displacement - Units	Peak Power	Peak Power - Units	Peak Power - Speed (rpm)	Peak Power - Fueling	Peak Power - Fuel		Peak Torque -	Peak Torque -	Peak Torque - Fuel					
	Code	Trim	Config							Units	Units Peak Torque	Units	Speed (rpm)	Peak Torque - Fue	el Units	OBD	GHG	Special	Notes
DL01- LEL00	D18NAP	N/A	13	1.794	Liters	36.4	kilowatt	2800	45.7	mm3/stroke	165	N-m	1800	54	mm3/stroke	N/A	N/A	N/A	EGR, DOC, DI TC, CAC ECM
DL01- LEE00	D18NAP	N/A	13	1.794	Liters	24.6	kilowatt	2400	36.9	mm3/stroke	110	N-m	1600	36.6	mm3/stroke	N/A	N/A	N/A	EGR, DOC, DI TC, CAC ECM
DL01- .EG00	D18PP	N/A	13	1.794	Liters	29	kilowatt	1800	48.3	mm3/stroke	156	N-m	1800	48.3	mm3/stroke	N/A	N/A	N/A	EGR, DOC, DI TC, CAC ECM
DL01- LEG00	D18PP	N/A	13	1.794	Liters	26	kilowatt	1500	51.3	mm3/stroke	166	N-m	1500	51.3	mm3/stroke	N/A	N/A	N/A	EGR, DOC, DI TC, CAC ECM
DL01- _EG01	D18PP	N/A	13	1.794	Liters	29	kilowatt	1800	48.3	mm3/stroke	156	N-m	1800	48.3	mm3/stroke	N/A	N/A	N/A	EGR, DOC, DI TC, CAC ECM
DL01- LEG01	D18PP	N/A	13	1.794	Liters	26	kilowatt	1500	51.3	mm3/stroke	166	N-m	1500	51.3	mm3/stroke	N/A	N/A	N/A	EGR, DOC, D TC, CAC ECM
DL01- ER00	D18NAP	N/A	13	1.794	Liters	36.4	kilowatt	2800	45.7	mm3/stroke	165	N-m	1800	54.0	mm3/stroke	N/A	N/A	N/A	EGR, DOC, D TC, CAC
DL01- LER01	D18NAP	N/A	13	1.794	Liters	24.6	kilowatt	2400	36.9	mm3/stroke	110	N-m	1600	36.6	mm3/stroke	N/A	N/A	N/A	EGR, DOC, D TC, CAC ECM
DL01- LER02	D18NAP	N/A	13	1.794	Liters	36.2	kilowatt	2600	45.2	mm3/stroke	165	N-m	1800	54.0	mm3/stroke	N/A	N/A	N/A	EGR, DOC, D TC, CAC ECM
DL01- LER03	D18NAP	N/A	13	1.794	Liters	36.4	kilowatt	2600	45.5	mm3/stroke	165	N-m	1800	53.5	mm3/stroke	N/A	N/A	N/A	EGR, DOC, D TC, CAC