

	HYUNDAI DOOSAN INFRACORE CO. LTD.	EXECUTIVE ORDER U-R-019-0194 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)
2022	NDICL03.4LEA	3.4	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Exhaust Gas Recirculation, Diesel Oxidation Catalyst, Selective Catalyst Reduction-Urea, Electronic Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, DEF Quality Sensor			Loader, Tractor, Pump, Compressor, Generator Set, Excavator, Forklift	

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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
56 ≤ kW < 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.02	0.27	--	0.1	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).

BE IT FURTHER RESOLVED: That for the listed engine models which include engines from different power categories in the same engine family, the manufacturer is complying with the more stringent set of standards from the 56 ≤ kW < 130 power categories in conformance with the incorporated 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 1-D" adopted October 20, 2005 and last amended October 25, 2012.

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 19th day of December 2021.


 Allen Lyons, Chief
 Emissions Certification and Compliance Division

Model	Code	Trim	Config	Displacement	Displacement - Units	Peak Power	Peak Power - Units	Peak Power - Speed (rpm)	Peak Power - Fueling	Peak Power - Fuel Units	Peak Torque	Peak Torque - Units	Peak Torque - Speed (rpm)	Peak Torque - Fuel Units	OBD	GHG	Special	Notes	
D34P	DL03-LEL00	N/A	I4	3.4	Liters	82	kilowatt	2400	83.1	mm3/stroke	430	N-m	1400	102.4	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEL01	N/A	I4	3.4	Liters	74.6	kilowatt	2400	74.9	mm3/stroke	375	N-m	1600	86.8	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEL02	N/A	I4	3.4	Liters	68.6	kilowatt	2400	69	mm3/stroke	350	N-m	1600	81.2	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEL03	N/A	I4	3.4	Liters	63.4	kilowatt	2400	64.3	mm3/stroke	325	N-m	1600	75.9	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEF05	N/A	I4	3.4	Liters	80.4	kilowatt	2300	83.4	mm3/stroke	375	N-m	1600	86.8	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEA00	N/A	I4	3.4	Liters	82	kilowatt	2200	85.6	mm3/stroke	430	N-m	1400	100	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEA01	N/A	I4	3.4	Liters	74.6	kilowatt	2200	78	mm3/stroke	410	N-m	1400	95.6	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEA02	N/A	I4	3.4	Liters	67.1	kilowatt	2200	70.4	mm3/stroke	390	N-m	1400	89.7	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEA03	N/A	I4	3.4	Liters	59.7	kilowatt	2200	63.2	mm3/stroke	370	N-m	1400	85.9	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEA04	N/A	I4	3.4	Liters	78.3	kilowatt	2300	79.9	mm3/stroke	430	N-m	1400	100	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS

Attachment: Engine Models

EO #: U-R-019-0194

Family: NDICL03.4LEA

Attachment Last Revised: 11/29/2021

Model	Code	Trim	Config	Displacement	Displacement - Units	Peak Power	Peak Power - Units	Peak Power - Speed (rpm)	Peak Power - Fueling	Peak Power - Fuel Units	Peak Torque	Peak Torque - Units	Peak Torque - Speed (rpm)	Peak Torque - Fuel Units	OBD	GHG	Special	Notes	
D34P	DL03-LEA05	N/A	I4	3.4	Liters	70.8	kilowatt	2300	72.3	mm3/stroke	400	lb-ft	1400	93.3	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEA06	N/A	I4	3.4	Liters	63.4	kilowatt	2300	65.2	mm3/stroke	370	N-m	1400	85.9	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEA07	N/A	I4	3.4	Liters	82	kilowatt	2200	85.2	mm3/stroke	430	N-m	1400	100	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEA08	N/A	I4	3.4	Liters	76.8	kilowatt	2200	79.7	mm3/stroke	430	N-m	1400	100	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEA09	N/A	I4	3.4	Liters	69.3	kilowatt	2200	71.5	mm3/stroke	390	N-m	1400	89.7	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEA10	N/A	I4	3.4	Liters	61.9	kilowatt	2200	64.5	mm3/stroke	380	N-m	1400	87	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEV01	N/A	I4	3.4	Liters	74.6	kilowatt	2400	74.9	mm3/stroke	430	N-m	1400	102.4	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34PP	DL03-LEG00	N/A	I4	3.4	Liters	72.6	kilowatt	1800	91.6	mm3/stroke	385	N-m	1800	91.6	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34PP	DL03-LEG00	N/A	I4	3.4	Liters	66	kilowatt	1500	102.3	mm3/stroke	420	N-m	1500	102.3	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34PP	DL03-LEG01	N/A	I4	3.4	Liters	72.6	kilowatt	1800	91.6	mm3/stroke	385	N-m	1800	91.6	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS

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EO #: U-R-019-0194

Family: NDICL03.4LEA

Attachment Last Revised: 11/29/2021

Model	Code	Trim	Config	Displacement	Displacement - Units	Peak Power	Peak Power - Units	Peak Power - Speed (rpm)	Peak Power - Fueling	Peak Power - Fuel Units	Peak Torque	Peak Torque - Units	Peak Torque - Speed (rpm)	Peak Torque - Fuel Units	OBD	GHG	Special	Notes	
D34PP	DL03-LEG01	N/A	I4	3.4	Liters	66	kilowatt	1500	102.3	mm3/stroke	420	N-m	1500	102.3	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LER01	N/A	I4	3.4	Liters	81.9	kilowatt	2400	83.1	mm3/stroke	430	N-m	1400	102.4	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LER02	N/A	I4	3.4	Liters	74.6	kilowatt	2400	74.9	mm3/stroke	375	N-m	1600	86.8	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LER03	N/A	I4	3.4	Liters	68.6	kilowatt	2400	69	mm3/stroke	350	N-m	1600	81.2	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LER04	N/A	I4	3.4	Liters	63.4	kilowatt	2400	63.4	mm3/stroke	325	N-m	1800	75.9	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEA18	N/A	I4	3.4	Liters	67.1	kilowatt	2300	69	mm3/stroke	390	N-m	1400	90.5	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEA19	N/A	I4	3.4	Liters	74.6	kilowatt	2300	76.1	mm3/stroke	410	N-m	1400	95.7	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEA20	N/A	I4	3.4	Liters	82	kilowatt	2300	83.7	mm3/stroke	430	N-m	1400	100	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS
D34P	DL03-LEF12	N/A	I4	3.4	Liters	82	kilowatt	2400	83.1	mm3/stroke	430	N-m	1400	102.4	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR-U, DFI, TC, CAC, ECM, DQS