California Environmental Protection Agency AIR RESOURCES BOARD	HINO MOTORS LIMITED	EXECUTIVE ORDER U-R-020-0018-01 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-45-9;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engine and emission control system 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)
2002	2HMXL06.7HTD	6.7	Diesel	8,000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Turbocharger	Crane, Compressor, Other Industrial Equipment

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 CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW < 225	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	20	15	50
		CERT	0.5	8.4	--	0.9	0.31	15	4	41

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.

This Executive Order hereby supersedes Executive Order U-R-020-0018 dated November 1, 2001.

Executed at El Monte, California on this 28th day of November 2001.

R. B. Summerfield, Chief
Mobile Source Operations Division

U-R-020-0018-01

ATTACHMENT

Engine Model Summary Form

filing

Manufacturer: **Hino Motors, Ltd.**

Engine category: **Nonroad CI**

EPA Engine Family: **2HMXL06.7HTD**

Mfr Family Name:

Process Code: ~~**New Submission**~~ Carry Over

1.Engine Code	2.Engine Model	RW	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 torque	9.Emission Control Device Per SAE J1930
AA-H07C-TD	AA-H07C-TD	133	178@2100	93	64.8	494@1600	102	54.2	TC, EM, DDI
AB-H07C-TD	AB-H07C-TD	141	189@2150	98	69.9	508@1600	106	56.3	TC, EM, DDI
AC-H07C-TD	AC-H07C-TD	139	186@2000	100	66.3	508@1600	106	56.3	TC, EM, DDI
AD-H07C-TD	AD-H07C-TD	138	185@2200	90	65.6	488@1600	101	53.6	TC, EM, DDI
AE-H07C-TD	AE-H07C-TD	137	184@2100	95	66.1	496@1600	102.5	54.4	TC, EM, DDI
AF-H07C-TE	AF-H07C-TE	151	202@2500	92.5	76.6	499@1600	104	55.1	TC, EM, DDI
AG-H07C-TE	AG-H07C-TE	152	204@2600	91	78.4	499@1600	104	55.1	TC, EM, DDI