State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-31-31

Relating to Certification of New Heavy-Duty Motor Vehicle Engines HINO MOTORS, LTD.

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 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 1996 model-year Hino Motors, Ltd., diesel-cycle engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Diesel

Engine Family	Engine <u>Liters</u>	Displacement (Cubic Inches)	Exhaust Emission Control Systems and Special Features
THM6.5D7DARW	6.5	(396)	Turbocharger Charge Air Cooler Engine Control Module

Engine models and codes are listed on attachments.

The following are the certification exhaust emission standards for this engine family in grams per brake horsepower-hour:

<u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	<u>Particulates</u>
1.3	15.5	5.0	0.10

The following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour:

Engine <u>Family</u>	Hydrocarbons	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	<u>Particulates</u>
THM6.5D7DARW	0.7	2.5	4.8	0.10

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

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 order and attachments.

Executed at El Monte, California this 10 day of January 1996.

Assistant Division Chief Mobile Source Division

Page 1

E.O.# A-31-31

199_6 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer:	HINO MOTORS, I	LTD.	Engine Far	nily: THM6	5D7DARW	
Displacement:	6.485 /	Li	ters3	96 /	Cı	ubic Inches
All Eng Codes in	Eng Family:	CA 49S	_50S <u>v</u> Stro	okes/Cycle:_	Valves/C	/linder: <u>2</u>
Ignition: Compre	ssion <u>x</u>	Comp	ression with	Glow Plug	_	Spark
Fuel Type(s): De	dicated <u>≭</u> F	lex-Fuel	Dual-Fuel	Bi-Fuel	Diesel	x CNG
LN	GLPG	M85	M100 Otl	her (specify)	
Diesel Cert Fuel:	13 CCR 2282	40	CFR 86.1313	-90	40 CFR 86.13	313-94 <u>x</u>
Maximum Rated Pow	er: <u>225</u>	НР @	<u>2,500 </u>	PM Engi	ne Configura	ation: <u>I-6</u>
Exhaust ECS (e.g.	, OC, EGR, PT	OX, IFI, TC,	CAC): TC. (Use at	CAC, ECM obreviations	per SAE J19	930 SEP91)
	ated HP 🏻 🥹	uel Rate 3 ^{Rated} HP 3 / stroke (1bs/hr)	Fuel Pump & Injector Part No.	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
H06C-TV 225	@ 2,500	105 (85.7)	Fuel Pump; Zexel Corp. Mech T/M: 712 (22000-8521) Auto T/M: 713 (22000-8531) Injector: Zexel Corp. Nozzle & t: 6V (23600-2681) Nozzle holde - (23620-2331) Nozzle assy: 999 (23640-2261)	T :		

):Hino Inventory No.

Date Issued:

Revisions:

17.00.00.00 Sheets added by requirement of Mail-Out #92-19 & Other information

E.	٥.	#	A	_	3	1-3	1
----	----	---	---	---	---	-----	---

01.00.00 199 6 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET Page 1 HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer:	HINO MOTO	RS, LTD.	Engine Fam	nily: <u>тнм6</u>	D7DARW	
Displacement:	6.485 /	'Li	ters	96 /	Cu	bic Inches
All Eng Codes	in Eng Family	: CA 49S	_ 50S <u>_x</u>	kes/Cycle:	_Valves/Cy	/linder:
Ignition: Com	noression v	Comp	ression with	Glow Plug		Spark
Fuel Type(s):	Dedicated×	Flex-Fuel	Dual-Fuel	Bi-Fuel	Diesei_X	CNG
	1 NG 1 PG	M85	M100 _ Oth	er (specify)_		
Diesel Cert Fu	uel: 13 CCR 2	228240	CFR 86.1313	-90 40) CFR 86.13	313-94 <u>x</u>
Maximum Rated	Power:	<u>o </u>	2,500R	PM Engine	e Configura	ation: <u>I-6</u>
Exhaust ECS (e.g., OC, EGR,	, PTOX, IFI, TC	CAC): TC, (Use at	CAC, ECM obreviations	oer SAE J19	930 SEP91)
Engine Model (Eng Code)	Rated HP @ RPM	Fuel Rate @gRated HP mm ³ / stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.
HO6C-TU	200 @ 2,500	94.0 (76.7)	Fuel Pump; Zexel Corp. Mech T/M: 708 (22000-8481) Auto T/M: 709 (22000-8491) Injector: Zexel Corp. Nozzle & et: 6V (23600-2681) Nozzle hold - (23620-2331) Nozzle assy 999 (23640-2261	der:		

Date Issued:

Revisions:

Page 1

E.O.# A-31-31

01.00.00 199 6 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer: HINO MOTORS, LTD. Engine Family: THM6.5D7DARW Displacement: 6.485 / Liters 396 /	ubic Inches
All Eng Codes in Eng Family: CA 49S 50S X Strokes/Cycle: 4 Valves/	
Ignition: Compression X Compression with Glow Plug	Spark
Ignition: Compression x Compression Fuel Type(s): Dedicated Flex-Fuel Dual-Fuel Bi-Fuel Diesel	x_ CNG
war Widd Athaw (chacity)	
LNG LPG M85 M100 Other (spectry)	1313-94 X
Diesel Cert Fuel: 13 CCR 2282 40 CFR 60:1313 30 Maximum Rated Power: 180 HP @ 2,500 RPM Engine Configu	ration: I-6
Maximum Rated Power: To GAC). TC, CAC, ECM	
Exhaust ECS (e.g., OC, EGR, PTOX, IFI, TC, CAC): TC, CAC, ECM (Use abbreviations per SAE J	1930 SEP91)
	PTOX /
France Model Dated HP & Injector ECM/PCM Valve	Catalytic
(Fing Code) @ RPM mm3 / stroke Part No. Part No. Part No.	. Converter
(lbs/hr)	
HO6C-TT 180 @ 2,500 87.0 Fuel Pump; ECM;	
(71.0) Zexel Corp. Injection pump control computer assy:	
704 89560-2681 (22000-8441)	
Auto T/M: 705	
(22000-8451)	
Injector:	
Zexel Corp.	
Nozzle & holder set:	
6T (23600-2691)	
Nozzle holder:	
Nozzie norder:	
(23620-2341)	
Nozzle assy	
(23640-2271)	

); Hino Inventory No.

Date Issued:

Revisions: