

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)
2001	1DWXL05.8AOA	5.8	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler (Models DB58TI OEB, DB58TI OEA DB58TI OEC only)			Loader, Compressor, Generator Set, Other OEM Equipment	
ENGINE MODELS (rated power in kilowatts, kw)	See Attachment			

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
75 ≤ KW < 130	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	--	7.6	--	--	--	9	4	23

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 17th day of September 2001.

R. B. Summerfield
 R. B. Summerfield, Chief
 Mobile Source Operations Division

Engine Model Summary Form

U-1 2-40

Manufacturer: **Daewoo Heavy Industries & Machinery Ltd.**
 Engine category: **Nonroad CI**
 EPA Engine Family: **1DWXL05.8AOA**
 Mfr Family Name: **DB58TI & DB58T**
 Process Code: **New Submission**

Attachment

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 torque	9.Emission Control Device Per SAE J1930
	DB58TI OEB	158 @ 2200	119	80	435 @ 1600	86	45.6	DDI TC & CAC
	DB58TI OEA	148 @ 2000	111	78	435 @ 1600	86	45.6	DDI TC & CAC
	DB58T TED	115 @ 1950	86	64	326 @ 1700	64	36.0	DDI TC
	DB58T TEE	134 @ 2200	101	72	343 @ 1600	74	39.2	DDI TC
	DB58T TEF	112 @ 1850	84	66	314 @ 1600	67	35.5	DDI TC
	DB58T TLB	134 @ 2200	101	72	343 @ 1600	74	39.2	DDI TC
	DB58TI OEC	153 @ 2100	115	79	435 @ 1600	86	45.6	DDI TC & CAC
	DB58T TEG	121 @ 2050	91	67	333 @ 1600	72	38.1	DDI TC
	DB58T TLA	140 @ 2300	105	72	333 @ 1600	72	38.1	DDI TC
	DB58T TEA	134 @ 2200	101	67	333 @ 1600	70	37.1	DDI TC
	DB58T TEC	114 @ 1850	86	68	326 @ 1700	64	36.0	DDI TC
	DB58T TDA	99 @ 2200	74	51	292 @ 1600	57.8	30.6	DDI TC

EPA cert No: PNX-NRS-01-03