California Environmenial Protection Agency

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-02-003;

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)					
2010	ACEXL023.AAA	23.2	Diesel	8000					
SPECIAL	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION						
Mechanic	al Diesel Injection, Turbo Cooler, Engine Contro	ocharger, Charge Air I Module	Generator Set and Other Industrial Equipment						

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, 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	EMISSION			E	EXHAUST (g/kw-l	OPACITY (%)					
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK	
kW > 560	Tier 2	Tier 2 STD N/A		N/A	6.4	3.5	0.20	20	15	50	
		FEL	N/A	N/A	9.5	N/A	N/A	N/A	N/A	N/A	
		CERT			7.7	1.1	0.11	16	3	31	

**BE IT FURTHER RESOLVED:** That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

**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 \_\_\_\_\_

day of January 2010.

mut Hehert

Annette Hebert, Chief Mobile Source Operations Division

			THE CONTRACTOR			Pro- I also a standard spinistration	t-Metropolitikali Ad				
	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torqueDevice Per SAE J1930		TC, EM, ECM, DFI	TC,EM, PCM, DFI	TC,EN,ECM,DFI	TC, M, ECM, DFI	TC,EM,ECM,DFI	TC, CALC, MDI, ECM			
W-12-UVE- W-1- Attachmun I Page 1/1 12/21/2009	8.Fuel Rate: (lbs/hr)@peak torquel	248	198	235 /	226	219	223	LC'A			
	7.Fue! Rate: mm/stroke@peak torque	528	454	501	484	469	494				
emplate	6.Torque @ RPM (SEA Gross)	2897@1400	2404@1300	2700@1400	2600@1400	2440@1400	2564@1350				
ummary Te	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	330	256	310	296	283	257				
<u>Engine Model Summary Template</u>	4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP(lbs/hr) @ peak HP (for diesel only) (for diesels only)	469	363	442	423	404	468				
Eng	3.BHP@RPM (SAE Gross)	950@2100	760@2100	900@2100	860@2100	800@2100	760@1650				
	2.Engine Model	QSK23-C	QSK23-C	QSK23-C	QSK23-C	QSK23-C	QSK23-C				
	1.Engine Code	CPL8353FR50003	CPL8353FR50001	CPL8353FR50019	CPL8353FR50021	CPL8353FR50023	CPL8353FR50033				
	Jine Family	XL023.AAA	XL023.AAA	XL023.AAA	XL023.AAA	XL023.AAA	XL023.AAA				