

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: The engine and emission control systems produced by the manufacturer are certified as described below for use in on-road motor vehicles with a manufacturer's GVWR over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY		ENGINE SIZES (L)	FUEL TYPE 1	STANDARDS & TEST	INTENDED SERVICE	ECS & SPECIAL FEATURES 3	DIAGNOSTIC 6			
	0.00424103	177147	, ,	Discol	PROCEDURE	CLASS	ECM, EGR, PTOX, OC, TC,CAC, DDI	EMD			
2009	9HMXH07.7	9HMXH07.7JTW 7.7		Diesel	Dieset	HHDD	DDI				
	'ENGINE'S IDLE NS CONTROL		ADDITIONAL IDLE EMISSIONS CONTROL 5								
	30g N/A										
ENGINE (L) ENGINE MODELS / CODES (rated power, in hp)											
7.7		J08E-TW / J08E-TW (260)									
L=liter; hp CNG/L L/M/H I CS=e up catalyst TBI=throttl super char control mo ESS=e Iper 13 CC	=horsepower. kw=k McCompressed/liqu HDD=light/medium/h mission control syste; ; DPF=diesel partice e body fuel injection; ger; CAC=charge aidule; EM=engine mi ngine shutdown syst R 1956.8(a)(G)(D).	ilowatt; hi lefied natu eavy heav em, TWC/ ulate filter: SFI/MFI= r cooler; E odification; em (per 13 Exempt=e	r=hour, iralgas; LPG=liquef y-duly diesel; UB=u DC=fhree-way/oxidiz PTOX=periodic frap; sequential/multi port EGR / EGR-C=exhat 2 (prefix)=parailel; 3 CCR 1956.8(a)(6)(,) exempted per 13 CGI,	ted petroleum gas; E85=85% ethir rban bus, HDO=heavy duty Otto; ing catalyst; NAC=NOx adsorption oxidizer; HO2S/O2S=neated/oxy, fuel injection; DGI=direct gasolin st gas recirculation / cooled EGR (2) (suffix)=n senes; (4)(1), 30g=30 g/hr NOx (per 13 C	anol fuel: MF=multion catalyst; SCR-t. ygen sensor; HAF- te injection; GCAR : PAIR/AIR=pulser tCR 1956 8(a)(6)(C) fuel systems; N/A	i fuel a.k.a. BF  // SCR-N=sele  S/AFS=healed/ B=gaseous car  d/secondary air  APS =intern  =not applicable	R 86.abc=Title 40. Code of Federal Regulations Febi fuel DF=dual fuel FF=fiexible fuel; clive catalytic reduction – urea I – ammonia, Wair-fuel-raibo sensor (a.k.a., universal or linear o fourefor; ID/DDI=indirect/direct developed injection; injection: SPL=smoke puff limiter; ECM/PCM= tal combustion auxiliary power system; ALT=alte e (e.g., Otto engines and vehicles);	/U (prefix) =warm- xygen senso*): : TC/SC=turbo/ -engine/powertrain			

Following are: 1) the FTP exhaust emission standards, or family emission limit(s) as applicable, under 13 CCR 1956.8; 2) the EURO and NTE limits under the applicable California exhaust emission standards and test procedures for heavy-duty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, for this engine family. "Diesel" CO, EURO and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test Procedures in lieu of testing. (For flexible- and dual-fueled engines, the CERT values in brackets [] are those when tested on conventional test fuel. For multi-fueled engines, the STD and CERT values for default operation permitted in 13 CCR 1956.8 are in parentheses.).

in g/bhp-hr	NMHC		NOx		NMHC+NOx		со		PM		нсно	
	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO
STD	0.14	0.14	*	,	*	*	15.5	15.5	0.01	0.01	*	*
FEL	¥	*	1.20	1.20	1.2	1.2	*	*	•	*	*	•
CERT	0.01	0.02	1.16	1.11	1.2	1.1	0.2	0.01	0.01	0.01	*	,
NTE	0.21		1.80		1.8		19.4		0.02			

g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; EURO=Euro III European Steady-State Cycle, including RMCSET=ram mode cycle subplemental emissions testing; NTE=Not-to-Exceed; STD=standard or emission test cap; FEL=family emission limit; CERT=certification level: NMHC/HC=non-methane/hydrocarbon; NOx=oxides of nitrogen; CO=carbon monoxide; PM=particulate matter; HCHO=formatdehyde; {Rev.: 2007-02-26}

**BE IT FURTHER RESOLVED:** Certification to the FEL(s) listed above, as applicable, is subject to the following terms, limitations and conditions. The FEL(s) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

**BE IT FURTHER RESOLVED**: Except in vehicle applications exempted per 13 CCR 1956.8(a)(6)(B), engines in this engine family certified under 13 CCR 1956.8(a)(6)(C) [30 g/hr NOx] and section 35.B.4 of the incorporated "California Exhaust Emissions Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles" adopted Dec. 12, 2002, as last amended Sep. 1, 2006, shall be provided with an approved "Certified Clean Idle" label that shall be affixed to the vehicle into which the engine is installed.

**BE IT FURTHER RESOLVED:** The listed engine models have been certified to the split engine family standards under 13 CCR 1956.8(b) [diesel engines] or 13 CCR 1956.8(d) [Otto engines] and the incorporated 40 CFR 86.007-15(m)(9).

**BE IT FURTHER RESOLVED:** For the listed engine models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels) and 13 CCR 2035 et seq. (emission control warranty).

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 Executive Order.

Executed at El Monte, California on this day of December 2008.

Annette Hebert, Chief

Mobile Source Operations Division