

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-14-012;

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)
2017	HSIDL16.8H6C	16.8	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Diesel Injection, Turbocharger, Charge Air Cooler, Engine Control Module, Smoke Puff Limiter, Diesel Oxidation Catalyst, Ammonia Oxidation Catalyst, Selective Catalyst Reduction-Urea, Exhaust Gas Recirculation			Tractor	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), 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):

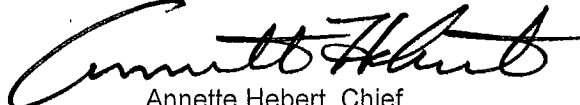
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.03	0.34	--	0.1	0.01	--	--	--

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 7 day of December 2016.


 Annette Hebert, Chief
 Emissions Compliance, Automotive Regulations and Science Division

Attachment 1 of 1

Engine Model Summary Template

U-R-050-0065

12/6/16

Engine Family	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 (SAE Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
HSIDL16.8H6C		168AWF.1022	590@2100	139	194.6	2253@1500	191	191.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1016	590@2100	140	196.0	2184@1500	190	190.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1051	450@2100	110	154.0	1673@1500	140	140.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1052	489@2100	117	163.8	1815@1500	154	154.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1053	540@2100	129	180.6	1999@1500	171	171.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1054	489@2100	117	163.8	1815@1500	154	154.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1055	540@2100	129	180.6	1999@1500	171	171.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1056	590@2100	140	196.0	2841@1500	190	190.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1314	590@2100	140	196.0	2184@1500	190	190.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1315	540@2100	129	180.6	1999@1500	171	171.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1316	489@2100	117	163.8	1815@1500	154	154.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1317	450@2100	110	154.0	1673@1500	140	140.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1318	590@2100	140	196.0	2841@1500	190	190.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1319	540@2100	129	180.6	1999@1500	171	171.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC
HSIDL16.8H6C		168AWF.1320	489@2100	117	163.8	1815@1500	154	154.0	ECM,DDI,TC,CAC,SPL,SCRC,EGR, AMOX, DOC