



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	1DZXL06.1010	3.07, 4.09, 6.13	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection			Pump, Other Industrial Equipment	
ENGINE MODELS (rated power in kilowatts, kw)	See Attachment (2 pages)			

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):

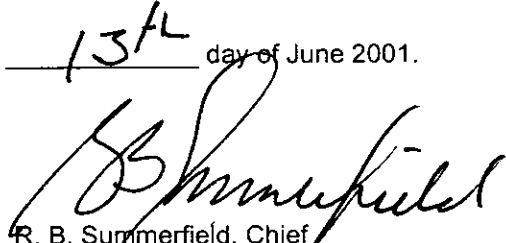
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
37≤KW<130	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	--	9.2	--	--	--	8	6	12

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 13th day of June 2001.


R. B. Summerfield, Chief
Mobile Source Operations Division

Engine type	Displacement	Engine code	Nominal Power ± 5%	Nominal Power ± 5%	Nominal speed ± 50 rpm	Mean effective pressure	Injection rate at nom. speed, ±4mm³	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Mean effective pressure at peak torque	Injection rate at peak torque ±4mm³	Torque at 1000 rpm	Mean effective pressure at 1000 rpm	Injection rate at 1000 rpm	Low idle (+ 400rpm, dep. on engine applic.)	High idle (+300 rpm, dep. on engine applic.)	Fuel injection pump	Fuel injection nozzle	Camshaft	Injection timing (-1°)	Speed governor
	cm³		HP	kW	rpm	bar	mm³/ stroke	Nm	rpm	bar	mm³/ stroke	Nm	bar	mm³/ stroke	rpm	rpm	description	description	draw. number	°btdc	description
F3L913	3064	C44	59	44.0	2500	6.89	61.5	201	1500	8.25	65.5			650	2600	PES3A95D410/3RS2939	DLLA147P875	02100079UA	14	RSV325-1250A5C858L/860L/861L	
F3L913	3064	C42	56	42.0	2500	6.58	55.5	191	1500	7.84	60			650	2600	PES3A95D410/3RS2939	DLLA147P875	02100079UA	14	RSV325-1250A5C858L/860L/861L	
F3L913	3064	C44/1	59	44.0	2400	7.18	62	201	1500	8.25	65.5			650	2500	PES3A95D410/3RS2905	DLLA147P875	02100079UA	14	RSV325-1250A5C858L/860L/861L	
F3L913	3064	C41	55	41.0	2300	6.98	59	190	1500	7.79	59.5			650	2400	PES3A95D410/3RS2939	DLLA147P875	02100079UA	13	RSV325-1250A5C858L/860L/861L	
F3L913	3064	C39	52	39.0	2300	6.64	55	180	1500	7.38	56.5			650	2400	PES3A95D410/3RS2939	DLLA147P875	02100079UA	13	RSV325-1250A5C858L/860L/861L	
F3L913	3064	C39/1	52	39.0	2150	7.10	58	187	1500	7.67	58			650	2240	PES3A95D410/3RS2939	DLLA147P875	02100079UA	13	RSV325-1250A5C858L/860L/861L	
F3L913	3064	C37	50	37.0	2150	6.74	55	177	1500	7.26	55			650	2240	PES3A95D410/3RS2939	DLLA147P875	02100079UA	13	RSV325-1250A5C858L/860L/861L	
F3L913	3064	C37/1	50	37.0	2000	7.24	61	184	1500	7.55	59			650	2080	PES3A95D410/3RS2939	DLLA147P875	02100079UA	12	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C59	79	59.0	2500	6.93	62.5	278	1500	8.55	68.5			650	2600	PES4A95D410/3RS2934	DLLA147P875	02100079UA	14	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C59/1	79	59.0	2400	7.22	62.5	278	1500	8.55	68.5			650	2600	PES4A95D410/3RS2789	DLLA147P875	02100079UA	14	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C55/1	74	55.0	2400	6.73	59.5	260	1500	8.00	63			650	2600	PES4A95D410/3RS2789	DLLA147P875	02100079UA	14	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C57	76	57.0	2500	6.70	60.5	268	1500	8.25	65			650	2600	PES4A95D410/3RS2789	DLLA147P875	02100079UA	14	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C56	75	56.0	2500	6.58	58.5	264	1500	8.12	64			650	2600	PES4A95D410/3RS2934	DLLA147P875	02100079UA	14	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C56/1	75	56.0	2350	7.00	61	268	1500	8.25	65.5			650	2450	PES4A95D410/3RS2789	DLLA147P875	02100079UA	14	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C56,5	76	56.5	2300	7.22	64	271	1500	8.34	66.5			650	2400	PES4A95D410/3RS2789	DLLA147P875	02100079UA	14	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C56/2	75	56.0	2300	7.15	62	270	1500	8.31	66			650	2400	PES4A95D410/3RS2934	DLLA147P875	02100079UA	13	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C55	74	55.0	2300	7.02	61	266	1500	8.18	65			650	2400	PES4A95D410/3RS2934	DLLA147P875	02100079UA	13	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C53	71	53.0	2300	6.77	58	257	1500	7.91	60			650	2400	PES4A95D410/3RS2934	DLLA147P875	02100079UA	13	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C51,5	69	51.5	2300	6.58	56	250	1500	7.69	58			650	2400	PES4A95D410/3RS2789	DLLA147P875	02100079UA	14	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C53/1	71	53.0	2150	7.24	62	265	1500	8.15	64			650	2240	PES4A95D410/3RS2934	DLLA147P875	02100079UA	13	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C50/1	67	50.0	2150	6.83	57	253	1500	7.78	59			650	2240	PES4A95D410/3RS2934	DLLA147P875	02100079UA	13	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C50/2	67	50.0	2000	7.34	63.5	262	1500	8.06	64			650	2080	PES4A95D410/3RS2934	DLLA147P875	02100079UA	12	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C48/1	64	48.0	2000	7.05	60	252	1500	7.75	60			650	2080	PES4A95D410/3RS2934	DLLA147P875	02100079UA	12	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C45	60	45.0	1900	6.96	59	252	1500	7.75	60			650	1980	PES4A95D410/3RS2934	DLLA147P875	02100079UA	12	RSV325-1250A5C858L/860L/861L	
F4L913	4086	C46	62	46.0	1800	7.51	64	262	1500	8.06	64			650	1880	PES4A95D410/3RS2934	DLLA147P875	02100079UA	12	RSV325-1250A5C858L/860L/861L	
F4L913	4086	D47,5	64	47.5	1800	7.75	66	n. a.	n. a.	n. a.	n. a.			n. a.	n. a.	PES4A95D410/3RS2933	DLLA147P854	02100079UA	11	RSV550-900A1C953L	
F4L913	4086	D46,5	62	46.5	1800	7.59	65	n. a.	n. a.	n. a.	n. a.			n. a.	n. a.	PES4A95D410/3RS2933	DLLA147P854	02100079UA	11	RSV550-900A1C953L	
F4L913	4086	D44	59	44.0	1800	7.18	61	n. a.	n. a.	n. a.	n. a.			n. a.	n. a.	PES4A95D410/3RS2933	DLLA147P854	02100079UA	11	RSV550-900A1C953L	
F4L913	4086	D42	56	42.0	1800	6.85	57	n. a.	n. a.	n. a.	n. a.			n. a.	n. a.	PES4A95D410/3RS2933	DLLA147P854	02100079UA	11	RSV550-900A1C953L	
F 6L913	6128	C89	119	89.0	2500	6.97	61.5	411	1500	8.43	66.5			650	2600	PES6A95D410/3RS2938	DLLA147P875	02100079UA	16	RSV325-1250A5C874L/950L	
F 6L913	6128	C85	114	85.0	2500	6.66	58	392	1500	8.04	62			650	2600	PES6A95D410/3RS2938	DLLA147P875	02100079UA	16	RSV325-1250A5C874L/950L	
F 6L913	6128	C85/1	114	85.0	2400	6.93	60	399	1500	8.18	63.5			650	2500	PES6A95D410/3RS2938	DLLA147P875	02100079UA	16	RSV325-1250A5C874L/950L	
F 6L913	6128	C84	113	84.0	2300	7.15	60.5	403	1500	8.27	64.5			650	2400	PES6A95D410/3RS2938	DLLA147P875	02100079UA	15	RSV325-1250A5C874L/950L	
F 6L913	6128	C79	106	79.0	2300	6.73	56	380	1500	7.79	59			650	2400	PES6A95D410/3RS2938	DLLA147P875	02100079UA	15	RSV325-1250A5C874L/950L	
F 6L913	6128	C78	105	78.0	2300	6.64	56	380	1500	7.79	59			650	2400	PES6A95D410/3RS2938	DLLA147P875	02100079UA	15	RSV325-1250A5C874L/950L	
F 6L913	6128	C76/2	102	76.0	2300	6.47	54	380	1500	7.79	59			650	2400	PES6A95D410/3RS2938	DLLA147P875	02100079UA	15	RSV325-1250A5C874L/950L	
F 6L913	6128	C79/1	106	79.0	2150	7.19	59	394	1500	8.08	62			650	2240	PES6A95D410/3RS2938	DLLA147P875	02100079UA	15	RSV325-1250A5C874L/950L	

Engine type	Displacement	Engine code	Nominal Power ± 5%	Nominal Power ± 5%	Nominal speed ± 50 rpm	Mean effective pressure	Injection rate at nom. speed, ±4mm³	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Mean effective pressure at peak torque	Injection rate at peak torque ±4mm³	Torque at 1000 rpm	Mean effective pressure at 1000 rpm	Injection rate at 1000 rpm	Low idle (+ 400rpm, dep. on engine applic.)	High idle (+300 rpm, dep. on engine applic.)	Fuel injection pump	Fuel injection nozzle	Camshaft	Injection timing (-1°)	Speed governor
	cm³		HP	kW	rpm	bar	mm³/stroke	Nm	rpm	bar	mm³/stroke	Nm	bar	mm³/stroke	rpm	rpm	description	description	draw. number	°btdc	description
F 6L913	6128	C76	102	76.0	2150	6.92	56	379	1500	7.77	59			650	2240		PES6A95D410/3RS2938	DLLA147P875	02100079UA	15	RSV325-1250A5C874L/950L
F 6L913	6128	C76/1	102	76.0	2000	7.44	60	394	1500	8.08	62			650	2080		PES6A95D410/3RS2938	DLLA147P875	02100079UA	14	RSV325-1250A5C874L/950L
F 6L913	6128	C74	99	74.0	2000	7.24	58	374	1500	7.67	57.5			650	2080		PES6A95D410/3RS2938	DLLA147P875	02100079UA	14	RSV325-1250A5C874L/950L
F 6L913	6128	C72	96	72.0	2000	7.05	56	374	1500	7.67	57.5			650	2080		PES6A95D410/3RS2938	DLLA147P875	02100079UA	14	RSV325-1250A5C874L/950L
F 6L913	6128	C69	92	69.0	1800	7.51	59	370	1500	7.59	57.5			650	2080		PES6A95D410/3RS2938	DLLA147P875	02100079UA	14	RSV325-1250A5C874L/950L
F 6L913	6128	D70,5	94	70.5	1800	7.67	60	n. a.	n. a.	n. a.	n. a.			n. a.	n. a.		PES6A95D410/3RS2937	DLLA147P854	02100079UA	13	RSV550-900A1C953L
F 6L913	6128	D67	90	67.0	1800	7.29	56	n. a.	n. a.	n. a.	n. a.			n. a.	n. a.		PES6A95D410/3RS2937	DLLA147P854	02100079UA	13	RSV550-900A1C953L
F 6L913	6128	D64	86	64.0	1800	6.96	54	n. a.	n. a.	n. a.	n. a.			n. a.	n. a.		PES6A95D410/3RS2937	DLLA147P854	02100079UA	13	RSV550-900A1C953L