



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	1DZXLO4.8007	3.19, 4.79	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Smoke Puff Limiter			Pump, Generator Set, Other Industrial Equipment	
ENGINE MODELS (rated power in kilowatts, kw)	See Attachment (4 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	--	8.8	--	--	--	3	3	3

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 31ST day of May 2001.


R. B. Summerfield, Chief
Mobile Source Operations Division

Model Attachment (Page 1 of 4)

List of emission related components

D# U-R-B-36

1DZ .8007

Engine type	Displacement	Engine code	Nominal Power ± 5%		Nominal speed ± 50 rpm	Mean effective pressure	Injection rate at nom. speed, ±4mm ³ /stroke	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Mean effective pressure at peak torque	Injection rate at peak torque ±4mm ³ /stroke	Torque at 1000 rpm		Mean effective pressure at 1000 rpm	Injection rate at 1000 rpm	Low idle (+ 800rpm, dep. on engine applic.)	High idle (+300 rpm, dep. on engine applic.)	Fuel injection pump	Fuel injection nozzle	Camshaft	Injection timing (±1°)	Speed governor	Speed governor, optionally	Smoke limiter, part of speed governor, - 5mm ³ /stroke - rpm	Turbocharger
			Nm	bar								mm ³ /stroke	rpm												
BF6M1012	4788	C98	131	98	2500	9.82	63	447	1500	11.73	68				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S2A150E	
BF6M1012	4788	C93	125	93	2500	9.32	60	424	1500	11.13	64				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S2A150E	
BF6M1012	4788	C88	118	88	2500	8.82	57	402	1500	10.55	60				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S2A150E	
BF6M1012	4788	C83	111	83	2500	8.32	54	379	1500	9.95	57				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S2A150E	
BF6M1012	4788	C95/1	127	95	2400	9.92	62	447	1500	11.73	68				650	2500	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S2A150E	
BF6M1012	4788	C92	123	92	2300	10.02	63	447	1500	11.73	68				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012	4788	C87	117	87	2300	9.48	60	424	1500	11.13	64				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012	4788	C83/1	111	83	2300	9.04	57	402	1500	10.55	60				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012	4788	C78	105	78	2300	8.50	54	379	1500	9.95	57				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012	4788	C89	119	89	2200	10.14	63	447	1500	11.73	68				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012	4788	C84	113	84	2200	9.57	59	424	1500	11.13	64				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012	4788	C80	107	80	2200	9.11	56	402	1500	10.55	60				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012	4788	C76	102	76	2200	8.66	53	379	1500	9.95	57				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012	4788	C85	114	85	2100	10.14	61	447	1500	11.73	68				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012	4788	C82	110	82	2100	9.79	58	424	1500	11.13	64				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012	4788	C78/1	105	78	2100	9.31	56	402	1500	10.55	60				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012	4788	C74	99	74	2100	8.83	53	379	1500	9.95	57				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012	4788	C82/1	110	82	2000	10.27	60	447	1500	11.73	68				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012	4788	C79	106	79	2000	9.90	59	424	1500	11.13	64				650	2080	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150C	
BF6M1012	4788	C75	101	75	2000	9.40	56	402	1500	10.55	60				650	2080	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150C	
BF6M1012	4788	C71	95	71	2000	8.90	53	379	1500	9.95	57				650	2080	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150C	
BF6M1012	4788	D95	127	95	2400	9.92	62	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	7	02111252UA		n. a.	S2A150C	
BF6M1012	4788	D86	115	86	2400	8.98	56	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	7	02111252UA		n. a.	S2A150E	
BF6M1012	4788	D88	118	88	2000	11.03	65	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	7	02111252UA		n. a.	S2A150E	
BF6M1012	4788	D80	107	80	2000	10.02	59	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA		n. a.	S2A150C	
BF6M1012	4788	D83	111	83	1846	11.27	65	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA		n. a.	S2A150C	
BF6M1012	4788	D75	101	75	1846	10.18	59	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA		n. a.	S2A150C	
BF6M1012	4788	D78	105	78	1800	10.86	63	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126846KZ	04195607UA	6	02111252UA		n. a.	S2A150C	
BF6M1012	4788	D76	102	76	1800	10.58	61	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126846KZ	04195607UA	6	02111252UA		n. a.	S2A157B	
BF6M1012	4788	D72/1	96	72	1800	10.02	58	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126846KZ	04195607UA	6	02111252UA		n. a.	S2A157B	
BF4M1012	3192	C65	87	65	2500	9.77	64	298	1500	11.73	70				650	2600	02111636KZ	02126846KZ	04195607UA	6	02111252UA		n. a.	S2A157B	
BF4M1012	3192	C62	83	62	2500	9.32	61	284	1500	11.18	66				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C58/2	78	58	2500	8.72	57	266	1500	10.47	61				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C55	74	55	2500	8.27	54	252	1500	9.92	58				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C63/1	84	63	2400	9.87	64	298	1500	11.73	70				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C61	82	61	2300	9.97	62	298	1500	11.73	70				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C58/1	78	58	2300	9.48	59	284	1500	11.18	66				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C55/1	74	55	2300	8.99	56	266	1500	10.47	61				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C52	70	52	2300	8.50	53	252	1500	9.92	58				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F	

2/21/01

Models Appendix (pg 2 of 4)

List of emission related components

ED# U-R-13-36

107 8007

Engine type	Displacement	Engine code	Nominal Power ± 5%	Nominal Power ± 5%	Nominal speed ± 50 rpm	Mean effective pressure	Injection rate at nom. speed, ±4mm ³	Peak torque ± 5%	Speed at peak torque ± 100 rpm	Mean effective pressure at peak torque	Injection rate at peak torque ±4mm ³	Torque at 1000 rpm		Mean effective pressure at 1000 rpm	Injection rate at 1000 rpm	Low idle (+ 800rpm, dep. on engine applic.)	High idle (+300 rpm, dep. on engine applic.)	Fuel injection pump	Fuel injection nozzle	Camshaft	Injection timing (±1°)	Speed governor	Speed governor, optionally	Smoke limiter, part of speed governor, - 5mm ³	Turbocharger
												Nm	bar												
BF4M1012	3192	C59	79	59	2200	10.08	62	298	1500	11.73	70				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C56	75	56	2200	9.57	58	284	1500	11.18	66				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C53	71	53	2200	9.06	55	266	1500	10.47	61				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C51	68	51	2200	8.71	53	252	1500	9.92	58				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C57	76	57	2100	10.20	62	298	1500	11.73	70				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C54	72	54	2100	9.67	58	284	1500	11.18	66				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C52/1	70	52	2100	9.31	56	266	1500	10.47	61				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C49	66	49	2100	8.77	53	252	1500	9.92	58				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C46	62	46	2100	8.23	53	252	1500	9.92	58				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C55/2	74	55	2000	10.34	62	298	1500	11.73	70				650	2080	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F	
BF4M1012	3192	C52/2	70	52	2000	9.77	59	284	1500	11.18	66				650	2080	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010D	
BF4M1012	3192	C50	67	50	2000	9.40	57	266	1500	10.47	61				650	2080	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010D	
BF4M1012	3192	C47	63	47	2000	8.83	54	252	1500	9.92	58				650	2080	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010D	
BF4M1012	3192	D63	84	63	2400	9.87	66	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA		58-800	S1BS010D	
BF4M1012	3192	D57	76	57	2400	8.93	60	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	7	02111252UA		n. a.	S1BS010F	
BF4M1012	3192	D58	78	58	2000	10.90	65	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	7	02111252UA		n. a.	S1BS010F	
BF4M1012	3192	D53	71	53	2000	9.96	60	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA		n. a.	S1BS010D	
BF4M1012	3192	D55	74	55	1846	11.20	67	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA		n. a.	S1BS010D	
BF4M1012	3192	D50	67	50	1846	10.18	61	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA		n. a.	S1BS010D	
BF4M1012	3192	D52	70	52	1800	10.86	65	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA		n. a.	S1BS010D	
BF4M1012	3192	D49	66	49	1800	10.23	61	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126846KZ	04195607UA	7	02111252UA		n. a.	S1BS010D	
BF4M1012	3192	D47	63	47	1800	9.82	59	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126846KZ	04195607UA	7	02111252UA		n. a.	S1BS010D	
BF6M1012E	4788	C100	134	100	2500	10.02	63	450	1500	11.81	68				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		n. a.	S1BS010D	
BF6M1012E	4788	C95	127	95	2500	9.52	60	427	1500	11.21	64				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S2A150E	
BF6M1012E	4788	C90	121	90	2500	9.02	57	405	1500	10.63	60				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S2A150E	
BF6M1012E	4788	C85/1	114	85	2500	8.52	54	382	1500	10.03	57				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S2A150E	
BF6M1012E	4788	C92/1	123	92	2400	9.61	60	427	1500	11.21	64				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S2A150E	
BF6M1012E	4788	C94	126	94	2300	10.24	63	450	1500	11.81	68				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012E	4788	C89/1	119	89	2300	9.70	60	427	1500	11.21	64				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012E	4788	C85/2	114	85	2300	9.26	57	439	1500	11.52	60				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012E	4788	C80/1	107	80	2300	8.72	54	382	1500	10.03	57				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012E	4788	C74/1	99	74	2300	8.06	50	400	1600	10.50	60				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012E	4788	C90/1	121	90	2200	10.25	63	450	1500	11.81	68				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150C	
BF6M1012E	4788	C85/3	114	85	2200	9.68	59	427	1500	11.21	64				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012E	4788	C85/4	114	85	2200	9.68	59	430	1300	11.29	65				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012E	4788	C81	109	81	2200	9.23	56	405	1500	10.63	60				650	2290	02111246KZ	02126842KZ	04195607UA	6	02111252UA		58-800	S2A159B	
BF6M1012E	4788	C77/1	103	77	2200	8.77	53	382	1500	10.03	57				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012E	4788	C86	115	86	2100	10.26	61	450	1500	11.81	68				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	
BF6M1012E	4788	C83/2	111	83	2100	9.90	58	427	1500	11.21	64				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E	

Models Attachment (pg 3 of 4)

List of emission components

ED# 4-R-13-310

1D7 1.8007

Engine type	Displacement cm ³	Engine code	Nominal Power ± 5% HP	Nominal Power ± 5% kW	Nominal speed ± 50 rpm rpm	Mean effective pressure bar	Injection rate at nom. speed, ±4mm ³ mm ³ /stroke	Peak torque ± 5% Nm	Speed at peak torque ± 100 rpm rpm	Mean effective pressure at peak torque bar	Injection rate at peak torque ±4mm ³ mm ³ /stroke	Torque at 1000 rpm	Mean effective pressure at 1000 rpm	Injection rate at 1000 rpm	Low idle (+ 800rpm, dep. on engine applic.) rpm	High idle (+300 rpm, dep. on engine applic.) rpm	Fuel injection pump part number	Fuel injection nozzle description	Camshaft draw. numb.	Injection timing (±1°) °btdc	Speed governor description	Speed governor, optionally	Smoke limiter, part of speed governor, - 5mm ³ mm ³ /stroke - rpm	Turbocharger description
												Nm	bar	mm ³ /stroke	rpm	rpm	part number	description	draw. numb.	°btdc	description		mm ³ /stroke - rpm	description
BF6M1012E	4788	C79/1	106	79	2100	9.43	56	405	1500	10.63	60				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E
BF6M1012E	4788	C75/1	101	75	2100	8.95	53	382	1500	10.03	57				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150E
BF6M1012E	4788	C80/2	107	80	2000	10.02	59	427	1500	11.21	64				650	2080	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150C
BF6M1012E	4788	C76/1	102	76	2000	9.52	56	405	1500	10.63	60				650	2080	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150C
BF6M1012E	4788	C72	96	72	2000	9.02	53	382	1500	10.03	57				650	2080	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S2A150C
BF6M1012E	4788	D97/1	130	97	2400	10.13	63	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA		58-800	S2A150C
BF6M1012E	4788	D88/1	118	88	2400	9.19	57	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	7	02111252UA		n. a.	S2A150E
BF6M1012E	4788	D89	119	89	2000	11.15	66	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	7	02111252UA		n. a.	S2A150E
BF6M1012E	4788	D81	109	81	2000	10.15	60	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA		n. a.	S2A150C
BF6M1012E	4788	D84	113	84	1846	11.40	66	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA		n. a.	S2A150C
BF6M1012E	4788	D76/1	102	76	1846	10.32	60	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA		n. a.	S2A150C
BF6M1012E	4788	D79	106	79	1800	11.00	64	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126846KZ	04195607UA	6	02111252UA		n. a.	S2A150C
BF6M1012E	4788	D76/2	102	76	1800	10.58	61	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126846KZ	04195607UA	7	02111252UA		n. a.	S2A157B
BF6M1012E	4788	D72	96	72	1800	10.02	58	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126846KZ	04195607UA	7	02111252UA		n. a.	S2A157B
BF4M1012E	3192	C66	88	66	2500	9.92	64	300	1500-1700	11.81	70				n. a.	n. a.	02111636KZ	02126846KZ	04195607UA	7	02111252UA		n. a.	S2A157B
BF4M1012E	3192	C63	84	63	2500	9.47	61	286	1500	11.26	66				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C59/1	79	59	2500	8.87	57	268	1500	10.55	61				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C56/1	75	56	2500	8.42	54	254	1600	10.00	58				650	2600	02111636KZ	02126844KZ	04195607UA	7	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C62/2	83	62	2300	10.13	62	324	1500	11.81	75				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010D
BF4M1012E	3192	C62/1	83	62	2300	10.13	62	300	1500	11.81	70				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010D
BF4M1012E	3192	C59,5	80	59.5	2300	9.72	62	286	1500	11.26	66				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C59/2	79	59	2300	9.64	59	286	1500	11.26	66				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		56-800	S1BS010F
BF4M1012E	3192	C58/3	78	58	2300	9.48	58	286	1500	11.26	66				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C56/2	75	56	2300	9.15	56	268	1500	10.55	61				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C55/6	74	55	2300	8.99	55	292	1600	11.50	66				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C60/1	80	60	2200	10.25	62	300	1500	11.81	70				650	2400	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010D
BF4M1012E	3192	C60	80	60	2200	10.25	62	300	1500	11.81	70				650	2290	02111246KZ	02126846KZ	04195607UA	10	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C60/2	80	60	2200	10.25	62	300	1500	11.81	70				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C57/1	76	57	2200	9.74	58	286	1500	11.26	66				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010D
BF4M1012E	3192	C54/1	72	54	2200	9.23	55	268	1500	10.55	61				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C53/5	71	53	2200	9.06	55	241	1500	9.49	56				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C53/4	71	53	2200	9.06	55	268	1500	10.55	61				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010D
BF4M1012E	3192	C52/3	70	52	2200	8.89	53	254	1500	10.00	58				650	2290	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C58	78	58	2100	10.38	62	300	1500	11.81	70				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C55/5	74	55	2100	9.85	58	286	1500	11.26	66				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C53/2	71	53	2100	9.49	56	286	1500	11.26	61				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C50/1	67	50	2100	8.95	53	268	1500	10.55	58				650	2190	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C53/3	71	53	2000	9.96	59	286	1500	11.26	66				650	2080	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010F
BF4M1012E	3192	C51/1	68	51	2000	9.59	57	268	1500	10.55	61				650	2080	02111636KZ	02126846KZ	04195607UA	6	02111252UA		58-800	S1BS010D

Engine type	Displacement	Engine code	Nominal Power ± 5% HP	Nominal Power ± 5% kW	Nominal speed ± 50 rpm rpm	Mean effective pressure bar	Injection rate at nom. speed, ±4mm³ mm³/stroke	Peak torque ± 5% Nm	Speed at peak torque ± 100 rpm rpm	Mean effective pressure at peak torque bar	Injection rate at peak torque ±4mm³ mm³/stroke	Torque at 1000 rpm Nm	Mean effective pressure at 1000 rpm bar	Injection rate at 1000 rpm mm³/stroke	Low idle (+800rpm, dep. on engine, applic.) rpm	High idle (+300 rpm, dep. on engine, applic.) rpm	Fuel injection pump part number	Fuel injection nozzle description	Camshaft draw. numb.	Injection timing (±1°) °btcd	Speed governor description	Speed governor, optionally mm³/stroke - rpm	Smoke limiter, part of speed governor, - 5mm³ description	Turbocharger description
BF4M1012E	3192	C48	64	48	2000	9.02	54	254	1500	10.00	58				650	2080	02111636KZ	02126846KZ	04195607UA	6	02111252UA	58-800	S1BS010D	
BF4M1012E	3192	D64	86	64	2400	10.02	67	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	7	02111252UA	n. a.	S1BS010F	
BF4M1012E	3192	D58/1	78	58	2400	9.08	61	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	7	02111252UA	n. a.	S1BS010F	
BF4M1012E	3192	D59/1	79	59	2000	11.09	67	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA	n. a.	S1BS010D	
BF4M1012E	3192	D54/1	72	54	2000	10.15	61	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA	n. a.	S1BS010D	
BF4M1012E	3192	D56/1	75	56	1846	11.40	68	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA	n. a.	S1BS010D	
BF4M1012E	3192	D51	68	51	1846	10.39	62	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA	n. a.	S1BS010D	
BF4M1012E	3192	D61	82	61	1800	12.74	76	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA	n. a.	S1BS010D	
BF4M1012E	3192	D59/2	79	59	1800	12.32	74	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA	n. a.	S1B012C	
BF4M1012E	3192	D59/3	79	59	1800	12.32	74	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA	n. a.	S1B012C	
BF4M1012E	3192	D56/2	75	56	1800	11.69	70	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	EMR	n. a.	S1B012C	
BF4M1012E	3192	D54/2	72	54	1800	11.28	68	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA	n. a.	S1B012C	
BF4M1012E	3192	D53/2	71	53	1800	11.07	66	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126844KZ	04195607UA	6	02111252UA	n. a.	S1B012C	
BF4M1012E	3192	D50/2	67	50	1800	10.44	63	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126846KZ	04195607UA	7	02111252UA	n. a.	S1BS010D	
BF4M1012E	3192	D48/1	64	48	1800	10.02	60	n. a.	n. a.	n. a.	n. a.				n. a.	n. a.	02111636KZ	02126846KZ	04195607UA	7	02111252UA	n. a.	S1BS010D	