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Systems Solutions for More Performance

North American Availability & Specifications 37-1120 kW (50-1500 hp)

Piston Systems



Cylinder Components



Valve Train Systems



Air Management Systems



Liquid Management Systems



Powertrain



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Brand	Engine Family	Engine Model	Displacement (L)	Production Location	2008 Production Volume*	Cylinders	Cylinder Head VPC	Power, kW (hp) @ rpm	Torque, N-m (lb-ft) @ rpm	Bore x Stroke, mm (in)	SFC, g/kWh (lb/hp-hr)	Compression Ratio	Block Material	Dry Mass, kg (lb)	Application
AM General															
General Engine Products	Optimotor		6.5	Franklin, OH	28,000	V8	DI, 2	119-187 (162-250) @ 1,300-2,000	303-146 (230-105) @ 1,700-2,000	103 x 97 (4.06 x 3.82)	NA	20:21	Cast iron	354 (783)	AG, M, MB, TB
Caterpillar															
Caterpillar	C	C12.2	2.2	UK, Griffin, GA	6,900	4 inline	DI	31-49.2 (41.6-66) @ 2200-3000	130-208 (95.9-153.4) @ 1800	84 x 100 (3.3 x 3.9)	NA	23:31	Cast iron	186-191 (405-427.7)	AG, IS, OH
Caterpillar	C	C14	3.4	Japan	7,500	4 inline	DI	47-62 (63-83) @ 2000	200-265 (147.5-195.5) @ 1800	94 x 120 (3.7 x 4.7)	NA	18.5:21.1	Cast iron	245-265 (540-584)	AG, IS, OH
Caterpillar	C	C14	4.4	Peterborough, UK	4,500	4 inline	DI	54-83 (72-111.3) @ 2200-2400	265-418 (195.5-308.3) @ 1400-1700	105 x 127 (4.13 x 5.0)	NA	16:21	Cast iron	291-306 (641-675.9)	AG, IS, OH
Caterpillar	C	C14 ACERT	4.4	Peterborough, UK	4,500	4 inline	DI	61.5-108 (82.5-142) @ 2200	360-500 (265.5-405.7) @ 1400	105 x 127 (4.13 x 5.0)	NA	16:21	Cast iron	360 (793.7)	AG, IS, OH
Caterpillar	C	C16 ACERT	6.6	Peterborough, UK	2,200	6 inline	DI	89-205 (119.8-278.8) @ 1800-2000	400-718 (293.918-518.248)	126 x 127 (4.96 x 5.0)	NA	16:21	Cast iron	500 (1115)	AG, IS, OH
Caterpillar	C	C7 ACERT	7.2	Gennevilliers, St. Gilles, Belgium	19,000	6 inline	DI	169-224 (225-300) @ 1800-2000	1028-1274 (758-943) @ 1400	110 x 127 (4.33 x 5.0)	216 (3.35)	16:51	Gray iron	586-576 (1296-1271)	AG, IS, OH
Caterpillar	C	C9 ACERT	8.8	Gennevilliers, St. Gilles, Belgium	14,000	6 inline	DI	205-280 (275-375) @ 1800-2000	904-1230 (655-888) @ 1400	112 x 149 (4.4 x 5.87)	213 (3.31)	17:01	Gray iron	664 (1469)	AG, IS, OH
Caterpillar	C	C11 ACERT	11.1	Massville, IL	3,500	6 inline	DI	242-338 (325-450) @ 1800-2100	1097-1516 (807-2056) @ 1400	130 x 146 (5.12 x 5.75)	207 (3.38)	17:21-17:81	Gray iron	930 (2059)	AG, IS, OH
Caterpillar	C	C13 ACERT	12.5	Massville, IL	20,000	6 inline	DI	287-388 (385-505) @ 1800-2100	1298-1634 (950-2216) @ 1400	130 x 157 (5.12 x 6.2)	205 (3.38)	17:31	Gray iron	1149 (2533)	AG, IS, OH
Caterpillar	C	C15 ACERT	15.2	Massville, IL	16,500	6 inline	DI	328-444 (440-595) @ 1800-2100	1484-2004 (1072-2171) @ 1400	137 x 171 (5.4 x 6.73)	209 (3.43)	18:1	Gray iron	1469-1565 (3232-3450)	AG, IS, OH
Caterpillar	C	C18 ACERT	18.1	Massville, IL	4,000	6 inline	DI	429-597 (575-800) @ 1800-2100	1939-2697 (2717-3666) @ 1400	145 x 183 (5.71 x 7.2)	198 (3.35)	16:31	Gray iron	1550-1673 (3420-3698)	AG, IS, OH
Caterpillar	C	C27 ACERT	27.1	Griffin, GA	1,800	V12	DI	597-856 (800-1150) @ 1800-2100	3657-5256 (2697-3876) @ 1400	137.7 x 152.4 (5.42 x 5.99)	202 (3.31)	16:51	Gray iron	2946 (6495)	AG, IS, OH
Caterpillar	C	C32 ACERT	32.0	Griffin, GA	3,700	V12	DI	708-1007 (950-1350) @ 1800-2100	2438-4548 (3305-6166) @ 1400	145 x 162 (5.71 x 6.38)	NA	16:51	Gray iron	4094 (9090)	AG, IS, OH
Caterpillar	C	C36	34.5	Lafayette, IN	100	V8	DI	507-746 (680-1260) @ 1200-1800	NA	170 x 190 (6.7 x 7.5)	NA	13:01	Gray iron	4000 (8900)	AG, IS, OH
Caterpillar	C	3608B	36.0	Lafayette, IN	3000	V8	DI	748-820 (1000-1300) @ 1800	NA	170 x 190 (6.7 x 7.5)	NA	14:01	Gray iron	6078 (13400)	AG, IS, OH
Caterpillar	C	3616	36.0	Lafayette, IN	300	V12	DI	761-1119 (1000-1500) @ 1200-1800	NA	170 x 190 (6.7 x 7.5)	NA	13:01	Gray iron	6078 (13400)	AG, IS, OH
Caterpillar	C	3512B	51.8	Lafayette, IN	3,000	V12	DI	1119-1508 (1500-1600) @ 1800	6319 (8507) @ 1400	170 x 190 (6.7 x 7.5)	NA	14:01	Gray iron	7678 (17000)	AG, IS, OH
Caterpillar	C	690	69.0	Lafayette, IN	5,500	V16	DI	1011-1450 (1350-2000) @ 1200-1800	NA	170 x 190 (6.7 x 7.5)	NA	13:01	Gray iron	1484 (16,499)	AG, IS, OH
Perkins		4040-22T	2.2	UK, Griffin, GA	14,000	4 inline	DI	31-38 (41-45.5) @ 2200-3000	130-143 (95.9-105.5) @ 1800	84 x 100 (3.3 x 3.9)	NA	23:31	Cast iron	184 (408)	AG, IS, OH
Perkins		4040-22T	2.2	UK, Griffin, GA	14,000	4 inline	DI	40-45.5 (53.3-61.0) @ 2000-3000	185-190 (136.4-140) @ 1800	84 x 100 (3.3 x 3.9)	NA	23:31	Cast iron	194 (428)	AG, IS, OH
Perkins		4040-33	3.3	Japan	18,000	4 inline	DI	47.0 (53.0) @ 2500	201 (147.5) @ 1800	84 x 120 (3.3 x 4.7)	220 (3.38)	22:0	Cast iron	245 (540)	AG, IS, OH
Perkins		4040-33T	3.3	Japan	9,000	4 inline	DI	55-62 (72.0-90.0) @ 2000	245-265 (180.7-195.4) @ 1800	84 x 120 (3.3 x 4.7)	220 (3.38)	22:0	Cast iron	266 (584)	AG, IS, OH
Perkins		1100	4.4	Peterborough, UK	4,500	4 inline	DI	54-59 (62.0-72.0) @ 2200	201 (147.5) @ 1800	100 x 127 (4.13 x 5.0)	NA	18:1	Cast iron	291 (641)	AG, IS, OH
Perkins		1100-44T	4.4	Peterborough, UK	4,500	4 inline	DI	65-74 (74.0-89.0) @ 2200-2400	307-392 (226-288) @ 1400	100 x 127 (4.13 x 5.0)	NA	18:21	Cast iron	372 (820)	AG, IS, OH
Perkins		1100-44T	4.4	Peterborough, UK	4,500	4 inline	DI	69-83 (80.0-91.0) @ 2200-2400	360-410 (265.5-293.8) @ 1400	100 x 127 (4.13 x 5.0)	NA	18:21	Cast iron	338 (747)	AG, IS, OH
Perkins		1100-66AT	6.6	Peterborough, UK	3,900	6 inline	DI	81.5-145 (92.5-99.0) @ 2200	360-410 (265.5-293.8) @ 1400	105 x 127 (4.13 x 5.0)	NA	18:21	Cast iron	360 (794)	AG, IS, OH
Perkins		1100-66AT	6.6	Peterborough, UK	4,800	4 inline	DI	74.5-108 (89-142.0) @ 2200	420-550 (300-408) @ 1400	105 x 127 (4.13 x 5.0)	NA	16:21	Cast iron	360 (794)	AG, IS, OH
Perkins		1100-66AT	6.6	Peterborough, UK	4,800	4 inline	DI	89-205 (119.8-278.8) @ 1800-2000	543-1050 (400-774) @ 1400-1500	105 x 127 (4.13 x 5.0)	NA	16:21	Cast iron	500 (1116)	AG, IS, OH
Cummins															
Cummins	A	A230	2.3	Nema	5,000	4 inline	DI, 2	31-45 (41-45) @ 2200-2600	146-183 (108-136) @ 1800	84 x 96 (3.3 x 3.8)	NA	NA	Cast iron	205-220 (452-481)	AG, IS, OH
Cummins	B	B3.3	3.3	Japan	4,000	4 inline	DI, 2	45-63 (60-80) @ 2200-2600	214-304 (155-224) @ 1800	95 x 115 (3.74 x 4.53)	NA	NA	Cast iron	241 (531-606)	AG, IS, OH
Cummins	B	B4.3	4.3	U.S., UK, Brazil, Japan	3,500	4 inline	DI, 2	60-74 (80-98) @ 2200-2600	294-414 (217-300) @ 1300-1500	102 x 138 (4.0 x 5.4)	NA	NA	Cast iron	337 (740-749)	AG, IS, OH
Cummins	B	Q253	3.3	4,000	4 inline	DI, 2	40-45.5 (53.3-61.0) @ 2200-2600	214-304 (155-224) @ 1800	95 x 115 (3.74 x 4.53)	NA	NA	Cast iron	241 (531-606)	AG, IS, OH	
Cummins	B	Q28	4.5	11,000	4 inline	DI, 2	80-205 (110-275) @ 2200-2600	470-860 (347-730) @ 1300-1800	107 x 124 (4.21 x 4.88)	NA	NA	Cast iron	371-485 (819-1068)	AG, IS, OH	
Cummins	B	B3.9	3.9	Columbus, IN, Rocky Mount, NC, UK, Brazil, Japan, India, China	12,000	4 inline	DI, 2	82-93 (110-125) @ 2200-2600	469-508 (346-373) @ 1300-1500	102 x 120 (4.0 x 4.7)	NA	NA	Cast iron	338 (747)	AG, IS, OH
Cummins	B	B5.9	5.9	Columbus, IN, Rocky Mount, NC, UK, Brazil, Japan, India, China	35,000	6 inline	DI, 2	112-129 (150-173) @ 2200-2600	633-719 (467-530) @ 1300-1500	102 x 120 (4.0 x 4.7)	NA	NA	Cast iron	423 (929)	AG, IS, OH
Cummins	B	B6	6.7	Columbus, IN, Rocky Mount, NC, UK, Brazil, Japan, India, China	13,000	6 inline	DI, 4	149-243 (203-325) @ 2000	705-1017 (520-753) @ 1800	107 x 124 (4.21 x 4.88)	NA	NA	Cast iron	522 (1150)	AG, IS, OH
Cummins	C	C8.3	8.3	Columbus, IN, Rocky Mount, NC, UK, Brazil, Japan, India, China	18,000	6 inline	DI, 2	138-194 (185-260) @ 2000-2200	854-1205 (600-889) @ 1500	114 x 135 (4.5 x 5.3)	NA	NA	Cast iron	617 (1360)	AG, IS, OH
Cummins	C	QSC	8.3	Rocky Mount, NC	7,600	6 inline	DI, 4	153-254 (205-340) @ 1800-2200	1010-1424 (745-1050) @ 1400-1500	114 x 135 (4.5 x 5.3)	NA	NA	Cast iron	722 (1594)	AG, IS, OH
Cummins	C	ISC	8.3	Rocky Mount, NC	27,000	6 inline	DI, 4	179-288 (240-360) @ 1800-2200	1065-1418 (780-1040) @ 1400-1500	114 x 135 (4.5 x 5.3)	NA	NA	Cast iron	754 (1662)	AG, IS, OH
Cummins	L	QSL	8.9	Jamison, NY, Rocky Mount, NC	4,000	6 inline	DI, 4	186-272 (250-360) @ 1800-2100	1288-1919 (969-1408) @ 1400-1500	114 x 145 (4.5 x 5.7)	NA	NA	Cast iron	798 (1767)	AG, IS, OH
Cummins	L	QSL	8.9	Jamison, NY	22,000	6 inline	DI, 4	229-373 (300-400) @ 1800-2100	1254-2102 (900-1500) @ 1200	125 x 147 (4.92 x 5.78)	NA	NA	Cast iron	1021 (2215)	AG, IS, OH
Cummins	M	QSM	10.8	Jamison, NY	7,000	6 inline	DI, 4	186-288 (250-400) @ 1800-2100	1146-1888 (845-1400) @ 1300-1400	125 x 147 (4.92 x 5.78)	NA	NA	Cast iron	984 (2170)	AG, IS, OH
Cummins	X	QX	15.0	Jamison, NY	2,800	6 inline	DI, 4	261-406 (350-600) @ 1800-2100	1603-2542 (1182-1879) @ 1400	137 x 169 (5.39 x 6.65)	NA	NA	Cast iron	1461 (3200)	AG, IS, OH
Cummins	X	QX	15.0	Jamison, NY	5,200	6 inline	DI, 4	265-405 (360-600) @ 1800-2100	1696-2776 (1240-2000) @ 1200	137 x 169 (5.39 x 6.65)	NA	NA	Cast iron	1565 (3438)	AG, IS, OH
Cummins	K	Q2919	19.0	Seymour, IN	5,600	6 inline	DI, 4	336-587 (450-800) @ 1800-2100	2237-3884 (1600-2750) @ 1300-1500	159 x 159 (6.25 x 6.25)	NA	NA	Cast iron	1890-2605 (4170-5760)	AG, IS, OH
Cummins	K	Q2923	23.0	Dawley, England, Brazil	900	6 inline	DI, 4	547-706 (760-950) @ 1800-2100	3287-3886 (2424-2919) @ 1300-1400	170 x 170 (6.69 x 6.69)	NA	NA	Cast iron	2722 (6000)	AG, IS, OH
Cummins	T	Q570	30.0	Seymour, IN	1,900	V12	DI, 4	567-1119 (760-1500) @ 1800-2100	3349-6012 (2470-4877) @ 1100-1400	140 x 165 (5.5 x 6.5)	NA	NA	Cast iron	3328 (7327)	AG, IS, OH
Cummins	T	Q570	30.0	Dawley, England	580	V12	DI, 4	689-1020 (920-1380) @ 1800-2100	3988-6500 (2900-4600) @ 1100-1400	159 x 188 (6.25 x 7.42)	NA	NA	Cast iron	4182 (9200)	AG, IS, OH
Cummins	K	Q545	45.0	Dawley, England	1,500	V12	DI, 4	895-1678 (1200-2250) @ 1800-1900	5988-8540 (4424-6298) @ 1300-1500	159 x 190 (6.25 x 7.48)	NA	NA	Cast iron	5867 (13,000)	AG, IS, OH
Cummins	K	Q550	50.0	Dawley, England	2,200	V16	DI, 4	1045-1600 (2000-3000) @ 1800-1900	6382-8629 (4707-6512) @ 1300-1500	158.75 x 158.75 (6.25 x 6.25)	NA	NA	Cast iron	5700 (12,566)	AG, IS, OH
Daimler															
Daimler Diesel	MEE 900		4.												

Brand (Maker)	Engine Family	Engine Model	Displacement (L)	Production Location	2008 Production Volume ¹	Cylinders	Cylinder Head, VPC	Power, kW (hp) @ rpm	Torque, N•m (lb•ft) @ rpm	Bore x Stroke, mm (in)	SFC, g/ kW•h (lb/ hp•h)	Compression Ratio	Block Material	Dry Mass, kg (lb)	Application
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AM General

General Engine Products	Optimizer		6.5	Franklin, OH	28,000	V8	IDI, 2	119-187 (160-250) @ 3,000 to 3,400	393 - 746 (290 - 550) @ 1,700 - 2,000	103 x 97 (4.06 x 3.82)	NA	20.2:1	Cast iron	354 (780)	GS, M, MI, TB
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Caterpillar

Caterpillar	C	C2.2	2.2	UK; Griffin, GA	6,900	4, inline	IDI	31-49.2 (41.6-66) @ 2200-3000	130-208 (95.9-153.4) @ 1800	84 x 100 (3.3 x 3.9)	NA	23.3:1	Cast iron	184-194 (406-427.7)	AG, IS, OH
Caterpillar	C	C3.4	3.3	Japan	7,500	4, inline	IDI/DI	47-62 (63-83) @ 2500	200-265 (147.5-195.5) @ 1600	94 x 120 (3.7 x 4.72)	NA	19.5:1-22.0:1	Cast iron	245-265 (540-584)	AG, IS, OH
Caterpillar	C	C4.4	4.4	Peterborough, UK	4,500	4, inline	DI	54-83 (72-111.3) @ 2200-2400	265-418 (195.5-308.3) @ 1400-1700	105 x 127 (4.13 x 5.0)	NA	16.2:1	Cast iron	291-306 (641.5-675)	AG, IS, OH
Caterpillar	C	C4.4 ACERT	4.4	Peterborough, UK	4,500	4, inline	DI	61.5-106 (82.5-142) @ 2200	360-550 (265.5-405.7) @ 1400	105 x 127 (4.13 x 5.0)	NA	16.2:1	Cast iron	360 (793.7)	AG, IS, OH
Caterpillar	C	C6.6 ACERT	6.6	Peterborough, UK	2,200	6, inline	DI	89-205 (119.4-274.9) @ 1800-2500	400-774 (693-916) @ 1400	105 x 127 (4.13 x 5.0)	NA	16.2:1	Cast iron	506 (1115)	AG, IS, OH
Caterpillar	C	C7 ACERT	7.2	Greenville, SC; Gossillies, Belgium	19,000	6, inline	DI	168-224 (225-300) @ 1800-2200	1028-1274 (758-940) @ 1400	110 x 127 (4.33 x 5.0)	216 (0.355) @ 1800	16.5:1	Gray iron	588-776 (1296-1711)	AG, IS, OH
Caterpillar	C	C9 ACERT	8.8	Greenville, SC; Gossillies, Belgium	14,000	6, inline	DI	205-280 (275-375) @ 1800-2200	904-1230 (1225-1668) @ 1400	112 x 149 (4.41 x 5.87)	213 (0.351) @ 1800	17.0:1	Gray iron	864 (1905)	GS, TB
Caterpillar	C	C11 ACERT	11.1	Mossville, IL	3,500	6, inline	DI	242-336 (325-450) @ 1800-2100	1097-1516 (1487-2056) @ 1400	130 x 140 (5.12 x 5.51)	207 (0.340) @ 2100	17.2:1-17.8:1	Gray iron	930 (2050)	GS, TB
Caterpillar	C	C13 ACERT	12.5	Mossville, IL	20,000	6, inline	DI	287-388 (385-520) @ 1800-2100	1298-1634 (1760-2216) @ 1400	130 x 157 (5.12 x 6.2)	205 (0.338) @ 2100	17.3:1	Gray iron	1149 (2533)	GS, TB
Caterpillar	C	C15 ACERT	15.2	Mossville, IL	16,500	6, inline	DI	328-444 (440-595) @ 1800-2100	1484-2004 (2012-2717) @ 1400	137.2 x 171.4 (5.4 x 6.75)	209 (0.343) @ 2100	18:1	Gray iron	1469-1565 (3239-3450)	GS, TB
Caterpillar	C	C18 ACERT	18.1	Mossville, IL	4,000	6, inline	DI	429-597 (575-800) @ 1800-2100	1938-2697 (2717-3656) @ 1400	145 x 183 (5.71 x 7.2)	198 (0.325) @ 1800	16.3:1	Gray iron	1565-1673 (3450-3688)	GS, IS, OH
Caterpillar	C	C27 ACERT	27.0	Griffin, GA	1,800	V12	DI	597-858 (800-1150) @ 1800-2100	3657-5255 (2697-3876) @ 1400	137.7 x 152.4 (5.42 x 5.99)	202.2-207.7 (0.332-0.341) @ 1800-2100	16.5:1	Gray iron	2946 (6495)	GS, IS, OH
Caterpillar	C	C32 ACERT	32.1	Griffin, GA	3,700	V12	DI	708-1007 (950-1350) @ 1800-2100	2438-4548 (3305-6166) @ 1400	145 x 162 (5.71 x 6.38)	NA	16.5:1	Gray iron	2946 (6495)	GS, IS, OH
Caterpillar			34.5	Lafayette, IN	100	V8	DI	507-746 (680-1280) @ 1200-1800	NA	170 x 190 (6.7 x 7.5)	NA	13.0:1	Gray iron	4309 (9500)	GS, IS, OH
Caterpillar		3508B	34.5	Lafayette, IN	2000	V8	DI	746-820 (1000-1100) @ 1800	NA	170 x 190 (6.7 x 7.5)	NA	14.0:1	Gray Iron	4309 (9500)	GS, OH, IS
Caterpillar			51.8	Lafayette, IN	300	V12	DI	761-1119 (1020-1500) @ 1200-1800	NA	170 x 190 (6.7 x 7.5)	NA	13.0:1	Gray iron	6078 (13,400)	GS, OH, IS
Caterpillar		3512B	51.8	Lafayette, IN	3,000	V12	DI	1119-1231 (1500-1650) @ 1800	6319 (8567) @ 1400	170 x 190 (6.7 x 7.5)	NA	14.0:1	Gray Iron	6078 (13,400)	GS, OH, IS
Caterpillar			69.0	Lafayette, IN	5,500	V16	DI	1011-1492 (1355-2000) @ 1200-1800	NA	170 x 190 (6.7 x 7.5)	NA	13.0:1	Gray iron	7484 (16,499)	GS, OH, IS
Perkins		404D-22	2.2	UK; Griffin, GA	14,000	4, inline	IDI	31.0-38.0 (41.6-51.0) @ 2200-3000	130-143 (95.9-105.5) @ 1800	84 x 100 (3.3 x 3.9)	NA	23.3:1	Cast Iron	184 (406)	AG, IS, GS, OH
Perkins		404D-22T	2.2	UK; Griffin, GA	14,000	4, inline	IDI	40-45.5 (53.3-61.0) @ 2600-3000	185-190 (136.4-140) @ 1800	84 x 100 (3.3 x 3.9)	NA	23.3:1	Cast iron	194 (428)	AG, IS, GS, OH
Perkins		404D-22TA	2.2	UK; Griffin, GA	8,000	4, inline	IDI	49.2 (66) @ 2800	208 (153) @ 1800	84 x 100 (3.3 x 3.9)	NA	23.3:1	Cast iron	194 (428)	AG, IS, GS, OH
Perkins		804D-33	3.3	Japan	18,000	4, inline	IDI	47.0 (63.0) @ 2500	200 (147.5) @ 1600	94 x 120 (3.7 x 4.7)	220 (0.36)	22.0:1	Cast Iron	245 (540)	AG, IS, GS, OH
Perkins		804D-33T	3.3	Japan	9,000	4, inline	DI	55-62 (73.7-83) @ 2500	245-265 (180.7-195.4) @ 1600	94 x 120 (3.7 x 4.7)	NA	22.0:1	Cast iron	265 (584)	AG, IS, GS, OH
Perkins		1104D	4.4	Peterborough, UK	4,500	4, inline	DI	54-55.9 (72-75) @ 2200	261-265 (192.5-195.4) @ 1700	105 x 127 (4.1 x 5.0)	NA	18.2:1	Cast iron	291 (642)	AG, IS, OH
Perkins		1104D-44T	4.4	Peterborough, UK	4,500	4, inline	DI	55.5-74.5 (74.4-99.9) @ 2200-2400	307-392 (226-289) @ 1400	105 x 127 (4.1 x 5.0)	NA	18.2:1	Cast iron	372 (820)	AG, IS, GS, OH
Perkins		1104D-44TA	4.4	Peterborough, UK	2,900	4, inline	DI	68-83 (99.2-111.3) @ 2200-2400	393-418 (290-308) @ 1400	105 x 127 (4.1 x 5.0)	NA	18.2:1	Cast iron	306 (675)	AG, IS, GS, OH
Perkins		1104D-E44T	4.4	Peterborough, UK	3,800	4, inline	DI	61.5-74.5 (82.5-99.9) @ 2200	360-420 (265.5-310) @ 1400	105 x 127 (4.1 x 5.0)	NA	16.2:1	Cast iron	360 (794)	AG, IS, GS, OH
Perkins		1104D-E44TA	4.4	Peterborough, UK	1,800	4, inline	DI	74.5-106 (99-142.0) @ 2200	420-550 (310-406) @ 1400	105 x 127 (4.1 x 5.0)	NA	16.2:1	Cast iron	360 (794)	AG, IS, GS, OH
Perkins		1106D-E66TA	6.6	Peterborough, UK	4,800	4, inline	DI	89-205 (119.4-275) @ 1800-2500	543-1050 (400-774) @ 1400-1500	105 x 127 (4.1 x 5.0)	NA	16.2:1	Cast iron	506 (1116)	AG, IS

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¹North American engine production estimates provided by Rhein Associates, Inc.

²Engine introduction Fall 2009. Specifications subject to change without notice.

³Volume includes 2008 production in Indianapolis, IN.

Brand (Maker)	Engine Family	Engine Model	Displacement (L)	Production Location	2008 Production Volume ¹	Cylinders	Cylinder Head, VPC	Power, kW (hp) @ rpm	Torque, N•m (lb•ft) @ rpm	Bore x Stroke, mm (in)	SFC, g/kWh (lb/hp•h)	Compression Ratio	Block Material	Dry Mass, kg (lb)	Application
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Cummins

Cummins	A	A2300	2.3	Korea	5,000	4, inline	IDI, 2	31-45 (41-60) @ 2400-2800	146-183 (108-135) @ 1600	88 x 94 (3.46 x 3.7)	NA	NA	Cast iron	205-209 (452-461)	AG, IS, OH
Cummins	B	B3.3	3.3	Japan	4,000	4, inline	DI, 2	45-63 (60-85) @ 2200-2600	214-304 (158-224) @ 1600	95 x 115 (3.74 x 4.53)	NA	NA	Cast iron	241-275 (531-606)	AG, IS, OH
Cummins	B	B4.5	4.5	U.S., UK, Brazil, Japan	5,500	4, inline	DI, 2	60-74 (80-99) @ 2100-2500	294-414 (217-305) @ 1300-1500	102 x 138 (4.0 x 5.4)	NA	NA	Cast iron	327-338 (721-745)	AG, IS, OH
Cummins	B	QSB3.3	3.3	Japan	4,800	4, inline	DI, 2	60-82 (80-110) @ 2200-2600	371-415 (274-306) @ 1400-1600	95 x 115 (3.74 x 4.53)	NA	NA	Cast iron	275 (606)	AG, IS, OH
Cummins	B	QSB	4.5, 6.7	Columbus, IN; Rocky Mount, NC; UK; Brazil	11,000	4 or 6, inline	DI, 4	82-205 (110-275) @ 1800-2500	470-990 (347-730) @ 1300-1800	107 x 124 (4.21 x 4.88)	NA	NA	Cast iron	371-485 (818-1069)	AG, IS, OH
Cummins	B	B3.9	3.9	Columbus, IN; Rocky Mount, NC; UK; Brazil; Japan; India; China	12,000	4, inline	DI, 2	82-93 (110-125) @ 2200-2500	469-506 (346-373) @ 1300-1500	102 x 120 (4.0 x 4.7)	NA	NA	Cast iron	338 (745)	AG, IS, OH
Cummins	B	B5.9	5.9	Columbus, IN; Rocky Mount, NC; UK; Brazil; Japan; India; China	35,000	6, inline	DI, 2	112-129 (150-173) @ 2200-2500	633-719 (467-530) @ 1300-1500	102 x 120 (4.0 x 4.7)	NA	NA	Cast iron	432 (952)	AG, IS, OH
Cummins	B	ISB	6.7	Columbus, IN; Rocky Mount, NC; UK	130,000	6, inline	DI, 4	149-243 (200-325) @ 2600	705-1017 (520-750) @ 1600	107 x 124 (4.21 x 4.88)	NA	NA	Cast iron	522 (1150)	TB
Cummins	C	C8.3	8.3	Columbus, IN; Rocky Mount, NC; UK; Brazil; Japan; China	18,000	6, inline	DI, 2	138-194 (185-260) @ 2000-2200	854-1205 (630-889) @ 1500	114 x 135 (4.5 x 5.3)	NA	NA	Cast iron	617 (1360)	AG, IS, OH
Cummins	C	QSC	8.3	Rocky Mount, NC	7,600	6, inline	DI, 4	153-254 (205-340) @ 1800-2200	1010-1424 (745-1050) @ 1400-1500	114 x 135 (4.5 x 5.3)	NA	NA	Cast iron	723 (1594)	AG, IS, OH
Cummins	C	ISC	8.3	Rocky Mount, NC	21,000	6, inline	DI, 4	179-268 (240-360) @ 2200-2400	895-1424 (660-1050) @ 1300-1400	114 x 135 (4.5 x 5.3)	NA	NA	Cast iron	754 (1662)	TB
Cummins	L	ISL	8.9	Jamestown, NY; Rocky Mount, NC	8,000	6, inline	DI, 4	186-316 (250-425) @ 2100-2200	990-1695 (730-1250) @ 1300-1400	114 x 145 (4.5 x 5.7)	NA	NA	Cast iron	761 (1678)	TB
Cummins	L	QSL	8.9	Jamestown, NY; Rocky Mount, NC	4,000	6, inline	DI, 4	186-272 (250-365) @ 1800-2100	1288-1519 (950-1120) @ 1400-1500	114 x 145 (4.5 x 5.7)	NA	NA	Cast iron	738 (1627)	AG, IS, OH
Cummins	M	ISM	10.8	Jamestown, NY	22,000	6, inline	DI, 4	209-373 (280-500) @ 1800-2100	1254-2102 (925-1550) @ 1200	125 x 147 (4.92 x 5.79)	NA	NA	Cast iron	1005 (2215)	TB
Cummins	M	QSM	10.8	Jamestown, NY	7,000	6, inline	DI, 4	186-298 (250-400) @ 1800-2100	1146-1898 (845-1400) @ 1300-1400	125 x 147 (4.92 x 5.79)	NA	NA	Cast iron	984 (2170)	AG, IS, OH
Cummins	X	QSX	15.0	Jamestown, NY	2,800	6, inline	DI, 4	261-496 (350-665) @ 1800-2100	1603-2542 (1182-1875) @ 1400	137 x 169 (5.39 x 6.65)	NA	NA	Cast iron	1451 (3200)	AG, IS, OH
Cummins	X	ISX	15.0	Jamestown, NY	5,200	6, inline	DI, 4	287-485 (385-650) @ 1800-2100	1966-2779 (1450-2050) @ 1200	137 x 169 (5.39 x 6.65)	NA	NA	Cast iron	1365 (3009)	TB
Cummins	K	QSK19	19.0	Seymour, IN	5,600	6, inline	DI, 4	336-597 (450-800) @ 1800-2100	2237-3084 (1650-2275) @ 800-1500	159 x 159 (6.25 x 6.25)	NA	NA	Cast iron	1890-2085 (4170-4600)	AG, IS, OH
Cummins	K	QSK23	23.0	Daventry, England; Brazil	900	6, inline	DI, 4	567-708 (760-950) @ 1800-2100	3287-3958 (2424-2919) @ 1300-1400	170 x 170 (6.69 x 6.69)	NA	NA	Cast iron	2722 (6000)	OH
Cummins	T	QST30	30.0	Seymour, IN	1,900	V12	DI, 4	567-1119 (760-1500) @ 1800-2100	3349-6612 (2470-4877) @ 1100-1400	140 x 165 (5.5 x 6.5)	NA	NA	Cast iron	3328 (7337)	IS, OH
Cummins	K	QSK38	38.0	Daventry, England	550	V12	DI, 4	686-940 (920-1260) @ 1200-1800	5235-6195 (3861-4569) @ 1000-1400	159 x 159 (6.25 x 6.25)	NA	NA	Cast iron	4100 (9039)	IS, OH
Cummins	K	QSK45	45.0	Daventry, England	1,500	V12	DI, 4	895-1678 (1200-2250) @ 1800-1900	5998-8540 (4424-6299) @ 1300-1500	159 x 190 (6.26 x 7.48)	NA	NA	Cast iron	5987 (13,200)	IS, OH
Cummins	K	QSK50	50.0	Daventry, England	2,200	V16	DI, 4	1044-1715 (1400-2300) @ 1800-1900	6382-8829 (4707-6512) @ 1300-1500	158.75 x 158.75 (6.25 x 6.25)	NA	NA	Cast iron	5700 (12,566)	IS, OH

Daimler

Detroit Diesel	MBE 900		4.3	Mannheim, Germany; Brazil	19,000	4, inline	DI, 3	75-130 (100-174) @ 2200	400-675 (295-498) @ 1200	106 x 136 (4.17 x 5.35)	NA	17.5:1	Cast iron	394 (869)	AG, GS, IS, OH
Detroit Diesel	MBE 900		7.2	Mannheim, Germany; Brazil	17,000	6, inline	DI, 3	142-261 (190-350) @ 2200	705-1160 (520-860) @ 1200	106 x 136 (4.17 x 5.35)	NA	18:1	Cast iron	594 (1310)	AG, GS, IS, OH, TB
Detroit Diesel	MBE 4000		12.8	Brazil	18,000	6, inline	DI, 4	260-334 (350-450) @ 2000	1831-2237 (1350-1650) @ 1100	128 x 166 (5.04 x 6.54)	NA	17.75:1	Cast iron	1030 (2270)	TB
Detroit Diesel			14.0	Detroit, MI	19,000	6, inline	DI, 4	317-384 (425-515) @ 1800	1966-2237 (1450-1650) @ 1100	106 x 168 (5.17 x 6.61)	NA	17:1	Cast iron	1273 (2557)	GS, IS, M, OH, TB
Detroit Diesel	Series HD	DD13	12.8	Detroit, MI; Mannheim, Germany	8,000	6, inline	DI, 4	260-335 (350-450) @ 1800	1830-2240 (1350-1650) @ 1200	132 x 156 (5.20 x 6.15)	NA	17.3:1	Cast iron	1152 (2540)	OH, TB
Detroit Diesel	Series HD	DD15	14.8	Detroit, MI; Mannheim, Germany	11,000	6, inline	DI, 4	340-418 (455-560) @ 1800	2100-2510 (1550-1850) @ 1100	139 x 163 (5.47 x 6.42)	NA	18.4:1	Cast iron	1350 (2970)	OH, TB

Deutz

Deutz		D910L3	2.5	Spain	100	3, inline	DI, 2	37.7 (50.6) @ 3000	150 (111) @ 2000	100 x 105 (3.94 x 4.13)	NA	17.5:1	Gray cast iron	229 (505)	IS, OH, GS
Deutz		-	3.1-6.1	Germany	50	3, 4, 6, inline	DI, 2	37-118 (50-158) @ 2300	200-550 (148-406) @ 1450/1600	102 x 125 (4.02 x 4.92)	NA	17:1-18:1	Gray cast iron	277-610 (611-1345)	M
Deutz		-	3.2-6.5	Germany	125	3, 4, 5, 6, inline	DI, 2	38.5-87.5 (51.6-117.4) @ 2500	202-550 (149-406) @ 1500/1600	102 x 132 (4.02 x 5.20)	NA	21:1	Gray cast iron	277-485 (611-1069)	IS, OH, GS
Deutz	912 W	-	3.8-5.7	Germany	300	4, 5, 6, inline	DI, 2	46-69 (64-93) @ 2500	198-298 (146-220) @ 1500	102 x 125 (4.02 x 4.92)	NA	22:1	Gray cast iron	300-410 (661-904)	AG, IS, OH, GS, TB
Deutz		-	3.8-5.7	Germany	25	4, 5, 6, inline	DI, 2	46-70 (64-94) @ 2300	247-370 (182-273) @ 1450	100 x 120 (3.94 x 4.72)	NA	18:1	Gray cast iron	351-541 (774-1193)	M
Deutz		-	3.6	Germany	150	4, inline	DI, 2	46-74.9 (62-100) @ 2800	190-350 (140-258) @ 1600/1700	96 x 125 (3.78 x 4.92)	NA	18:1-19:1	Gray cast iron	260 (573)	IS, OH, GS
Deutz		TD2009L4	2.3	Germany	150	4, inline	DI, 2	50 (67) @ 2800	190 (140) @ 1600	90 x 90 (3.54 x 3.54)	NA	18:1	Gray cast iron	210 (463)	IS, OH, GS
Deutz		TCD2912L4	4.0	Germany	2,000	4, inline	DI, 2	103 (138) @ 2400	520 (384) @ 1600	101 x 126 (3.98 x 4.96)	NA	18:1	Gray cast iron	395 (871)	AG, IS, OH, GS
Deutz		BF4M1013E/C	4.8	Germany	1,500	4, inline	DI, 2	90-115 (121-154) @ 2300	442-548 (326-404) @ 1400	108 x 130 (4.25 x 5.12)	NA	17.6:1	Gray cast iron	430-432 (948-952)	AG, IS, OH, GS
Deutz	413 W	F6L413W	6.4	Germany	600	4, inline	DI, 2	102 (137) @ 2300	500 (369) @ 1500	125 x 130 (4.92 x 5.12)	NA	19.5:1	Gray cast iron	660 (1455)	AG, IS, OH, GS, TB

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Fiat Powertrain

FPT	F series	F32	3.2	Torino, Italy	500	4, inline	DI, 2	65 (87) @ 2500	320 (236) @ 1400	99 X 104 (3.90 X 4.09)		18.1	Cast iron	340 (750)	AG, GS, IS, OH
FPT	N series	N40	3.9	Torino, Italy	4,000	4, inline	DI, 4	125-184 (170-250) @ 2800	486-693 (358-511) * 1890-2120	102x120 (4.02 x 4.72)	212 (0.349)	17.5:1	Cast iron	490 (1080)	M
FPT	N series	N45	4.5	Torino, Italy	5,000	4, inline	DI, 2	50-107 (67-143) @ 2300	320-500 (236-369) @ 1400	104 x 132 (4.09 x 5.20)	208 (0.342)	17.5:1	Cast iron	380 (838)	AG, GS, IS, M, OH
FPT	N series	N67	6.7	Torino, Italy	10,000	6, inline	DI, 2/4	81-331 (109-444) @ 2500-3000	440-1305 (325-963) @ 1400-1800	104 x 132 (4.09 x 5.20) / 102 x 120 (4.02 x 4.72)	205 (0.337)	17.5:1	Cast iron	500 (1102)	AG, GS, IS, OH, M
	C series	C8	7.8	Bourbon-Lancy, France	100	6, inline	DI, 4	294-368 (400-500)@2600	1601-1645 (1181-1215) @ 1600-1800	115X125 (4.53X4.93)	210 (0.345)	16.0:1	Cast iron	910 (2006)	M
FPT	C series	C9	8.7	Bourbon-Lancy, France	2,000	6, inline	DI, 4	200-290 (268-389) @ 2100	1324-1600 (977-1180) @ 1500-1700	117 x 135 (4.60 x 5.31)	210 (0.345)	16.0:1	Cast iron	800 (1763)	AG, GS, IS, OH
FPT	C series	C10	10.3	Bourbon-Lancy, France	150	6, inline	DI, 4	265-335 (355-449) @ 2100	1900 (1401) @ 1500	125 x 140 (4.92 x 5.51)	197 (0.324)	16.5:1	Cast iron	950 (2094)	AG, GS, IS, OH
FPT	C series	C13	12.9	Bourbon-Lancy, France	250	6, inline	DI, 4	325-607 (436-814) @ 1900-2400	2250 (1660) @ 1200	135 x 150 (5.31 x 5.91)	200 (0.329)	16.5:1	Cast iron	1040 (2293)	AG, GS, IS, M, OH
FPT	S series	S30	3.0	Torino, Italy	50	4, inline	DI, 4	85-169 (114 -227) @ 3500-4000	360-480 (266-354) @1800-2400	95.8 x 104(3.77 x 4.09)	260 (0.427)		Cast iron	330 (728)	M

General Motors

GM/Isuzu	Duramax	6.6L	6.6	Moraine, OH	150,000	V8	DI, 4	186-272 (250-365) @ 3200	624-895 (460-660) @ 1600	103 x 99 (4.0 x 3.9)	NA	16.4:1	Cast iron	424.5 (934)	TB
GM/Isuzu	Isuzu		7.8	Tochigi, Japan	75,000	6, inline	DI, 4	149-224 (200-300) @ 2200	706-1167 (520-860) @ 1450	115 x 125 (4.53 x 4.92)	NA	16.8:1	Gray iron	NA	TB

John Deere

John Deere	Interim Tier 4 and Stage III A PowerTech M	4024T	2.4	Torreón, Mexico	40,000	4, inline	DI, 2	36-37 (48-49) @ 2400-2800	129-138 (175-187) @ 1200-1500	86 x 105 (3.4 x 4.1)	NA	19.0:1	Cast iron	251 (554)	AG, GS, IS, OH
John Deere	Tier 3/Stage III A PowerTech E	4024H	2.4	Torreón, Mexico	4,000	4, inline	DI, 2	60 (80) @ 2800	209 (283) @ 2000	86 x 105 (3.4 x 4.1)	NA	18.2:1	Cast iron	251 (554)	AG, GS, IS, OH
John Deere	Interim Tier 4 and Stage III A PowerTech E	4024H	2.4	Torreón, Mexico	7,000	4, inline	DI, 2	45-49 (60-66) @ 2400-2800	167-189 (227-256) @ 1800-2000	86 x 105 (3.4 x 4.1)	NA	18.2:1	Cast iron	251 (554)	AG, GS, IS, OH
John Deere	Tier 3/Stage III A PowerTech E	5030H	3.0	Torreón, Mexico	12,000	5, inline	DI, 2	57-74 (75-99) @ 2400-2800	204-252 (276-341) @ 1800-2000	86 x 105 (3.4 x 4.1)	NA	18.2:1	Cast iron	287 (633)	AG, GS, IS, OH
John Deere	PowerTech Marine	4045DFM	4.5	Saran, France; Torreón, Mexico	100	4, inline	DI, 2	60 (80) @ 2500	293 (216) @ 1400	107 x 127 (4.2 x 5)	NA	17.6:1	Cast iron	437 (963)	M, GS
John Deere	Tier 3/Stage III A PowerTech M	4045T/H	4.5	Saran, France; Torreón, Mexico	12,000	4, inline	DI, 2	56-74 (75-99) @ 2200-2400	275-383 (203-282) @ 1600-1700	106 x 127 (4.2 x 5.0)	NA	19.0:1	Cast iron	387 (851)	AG, GS, IS, OH
John Deere	Tier 3/Stage III A PowerTech E	4045T/H	4.5	Saran, France; Torreón, Mexico	25,000	4, inline	DI, 2	63-104 (85-140) @ 2200-2400	313-525 (231-387) @ 1500-1600	106 x 127 (4.2 x 5.0)	NA	19.0:1	Cast iron	491 (1083)	AG, GS, IS, OH
John Deere	PowerTech Marine	4045TFM	4.5	Saran, France; Torreón, Mexico	500	4, inline	DI, 2	80-101 (107-135) @ 2400-2600	420-477 (310-352) @ 1600-1800	107 x 127 (4.2 x 5)	NA	17.6:1	Cast iron	462 (1019)	M, GS
John Deere	Tier 3/Stage III A PowerTech Plus	4045H	4.5	Saran, France; Torreón, Mexico	10,000	4, inline	DI, 4	111-129 (149-173) @ 2000-2400	574-645 (424-476) @ 1400	106 x 127 (4.2 x 5)	NA	17.0:1	Cast iron	517 (1140)	AG, GS, IS, OH
John Deere	Tier 3/Stage III A PowerTech E	6068H	6.8	Saran, France; Torreón, Mexico	32,000	6, inline	DI, 2	104-149 (139-200) @ 2200-2400	538-785 (397-579) @ 1500	106 x 127 (4.2 x 5.0)	NA	17.1-19:1	Cast iron	608 (1340)	AG, GS, IS, OH
John Deere	PowerTech Marine	6068TFM	6.8	Saran, France; Torreón, Mexico	2,500	6, inline	DI, 2	118-150 (158-201) @ 2400-2600	604-693 (445-511) @ 1800-2000	107x127 (4.2 x 5.0)	NA	17.0:1-17.6:1	Cast iron	730 (1609)	M, GS
John Deere	PowerTech Marine	6068SFM	6.8	Saran, France; Torreón, Mexico	1,000	6, inline	DI, 4	186-298 (249-400) @ 2400-2800	987-1232 (728-909) @ 1800-2200	106 x 127 (4.19 x 5)	NA	17.0:1	Cast iron	636 (1399)	M, GS
John Deere	PowerTech Marine	6068AFM2	6.8	Saran, France; Torreón, Mexico	1,000	6, inline	DI, 4	172-246 (230-330) @ 2300-2600	955-1106 (704-816) @ 1700-1900	106.5 x 127 (4.19 x 5.00)	NA	16.7:1	Cast iron	812 & 1790	M
John Deere	PowerTech	6081H	8.1	Waterloo, IA	2,000	6, inline	DI, 2	149-261 (200-350) @ 2200	873-1424 (644-1050) @ 1500-1600	116 x 129 (4.56 x 5.06)	NA	15.7:1-16.5:1	Cast iron	776 (1711)	AG, GS, IS, OH
John Deere	PowerTech Marine	6081AFM	8.1	Waterloo, IA	300	6, inline	DI, 2	175-280 (235-375) @ 2100-2400	1082-1332 (798-982) @ 1500-1900	116 x 129 (4.6 x 5.1)	NA	15.7:1	Cast iron	853 (1881)	M, GS
John Deere	Tier 3/Stage III A PowerTech Plus	6090H	9.0	Waterloo, IA	22,000	6, inline	DI, 4	168-298 (225-400) @ 2000-2200	984-1554 (726-1146) @ 1500	118 x 136 (4.7 x 5.4)	NA	16.0:1	Cast iron	901 (1986)	AG, GS, IS, OH
John Deere	PowerTech Marine	6090SFM ²	9.0	Waterloo, IA	2,000	6, inline	DI, 4	242-373 (325-500) @ 2100-2400	1444-1869 (1065-1379) @ 1600-1900	118.4 x 136 (4.66 x 5.35)	NA	16.0:1:1	Cast iron	1066 (2350)	M
John Deere	PowerTech Marine	6125AFM	12.5	Waterloo, IA	2,000	6, inline	DI, 4	254-392 (341-526) @ 1800-2100	1910-2202 (1409-1624) @ 1200-1700	127 x 165 (5 x 6.5)	NA	17.0:1	Cast iron	1372 (3025)	M, GS
John Deere	PowerTech Marine	6125SFM	12.5	Waterloo, IA	25	6, inline	DI, 4	283-455 (380-610) @ 1800-2100	2049-2647 (1512-1953) @ 1300-1600	127 x 165 (5 x 6.5)	NA	17.0:1	Cast Iron	1475 (3252)	M, GS
John Deere	Tier 3/Stage III A PowerTech Plus	6135H	13.5	Waterloo, IA	3,500	6, inline	DI, 4	261-448 (350-600) @ 1900-2100	1602-2550 (1182-1881) @ 1400-1600	132 x 165 (5.20 x 6.50)	NA	16.0:1	Cast iron	1493 (3292)	AG, GS, IS, OH

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Kubota															
Kubota	03M Series	V2403-M-T-E3B	2.4	Japan	4,000	4, inline	IDI	44 (59) @ 2700	165.1 (121.8) @ 1800	87 x 102.4 (3.43 x 4.03)	270 (0.798)	NA	NA	188 (415)	AG, IS, M, OH
Kubota	07 Series	V2607-DI-T-E3B	2.6	Japan	3,000	4, inline	DI	49.2 (66) @ 2700	220.3 (162.5) @ 1600	87 x 110 (3.43 x 4.33)	251 (0.412)	NA	NA	235 (518)	AG, IS, M, OH
Kubota	07 Series	V3307-DI-T-E3B	3.3	Japan	2,200	4, inline	DI	55.4 (74.3) @ 2600	265 (195.5) @ 1600	94 x 120 (3.7 x 4.72)	249 (0.736)	NA	NA	268 (591)	AG, IS, M, OH
Kubota	V3 Series	V3600-E3B	3.6	Japan	1,000	4, inline	IDI	49.8 (66.8) @ 2600	221 (163) @ 1600	98 x 120 (3.86 x 4.72)	277 (0.819)	NA	NA	264 (582)	AG, IS, M, OH
Kubota	V3 Series	V3600-T-E3B	3.6	Japan	500	4, inline	IDI	63.0 (84.5) @ 2600	296 (218.3) @ 1600	98 x 120 (3.86 x 4.72)	272 (0.804)	NA	NA	275 (606)	AG, IS, M, OH
Kubota	BG	V3600-T-E3BG	3.6	Japan	2,000	4, inline	IDI	43.1 (57.8) @ 1800	NA	98 x 120 (3.86 x 4.72)	247 (0.405)	NA	NA	284 (626)	GS, IS
Kubota	BG	V3800DI-T-E3BG	3.8	Japan	100	4, inline	DI	52.8 (70.8) @ 1800	NA	100 x 120 (3.94 x 4.72)	NA	NA	NA	280 (617)	GS, IS
Kubota	V3 Series	V3800DI-T-E3B	3.8	Japan	2,000	4, inline	DI	74.0 (99.2) @ 2600	325 (239.7) @ 1600	100 x 120 (3.94 x 4.72)	236 (0.698)	NA	NA	288 (635)	AG, IS, M, OH
MTU															
MTU	Series 900		4.2	Mannheim, Germany	2,500	I4	DI,4	75-130 (101-174) @ 2200	400-675 (295-498) @ 1200	102 x 130 (4.02 x 5.12)	192-213 (0.316-0.350)	18.0:1	Cast iron	395 (871)	AG,IS, OH
MTU	Series 900		6.4	Mannheim, Germany	20,000	I6	DI,4	130-205 (174-275) @ 2200	700-1100 (516-811) @ 1200	102 x 130 (4.02 x 5.12)	192-213 (0.316-0.350)	18.0:1	Cast iron	530 (1168)	AG,IS, OH
MTU	Series 60	Varies	14.0	Detroit, MI	700	I6	DI,4	224-615 (300-825) @ 1800-2300	1424-3017 (1050-2225) @ 1050-1350	133 x 168 (5.24 x 6.61)	216-238 (0.355-0.392)	16.0:1	Cast iron	1157 - 1633 (2551 - 3600)	M,GS,IS,M,OH
MTU	Series 2000	8V2000	15.9	Detroit, MI; Friedrichshafen, Germany	700	V8	DI, 4	485 (650) @ 1800	2815 (2076) @ 1350	130 x 150 (5.12 x 5.9)	207-224 (0.341-0.369)	16.0:1	Cast iron	1615 (3560)	GS, IS, M, OH
MTU	Series 2000	12V2000	23.9	Detroit, MI; Friedrichshafen, Germany	500	V12	DI, 4	522-749 (700-1005) @ 1800-2100	3084-4203 (2275-3100) @ 1200-1350	130 x 150 (5.12 x 5.9), 135 x 156 (5.3 x 6.1) for CR	205-236 (0.337-0.388)	16.0:1	Cast iron	2204 (4859)	GS, IS, M, OH
MTU	Series 2000	16V2000	31.9	Detroit, MI; Friedrichshafen, Germany	600	V16	DI, 4	651-1790 (874-2400) @ 1500-2450	NA	165 x 190 (6.5 x 7.5)	208-235 (0.342-0.386)	16.0:1	Cast iron	2565-3420 (5650-7535)	GS, IS, M, OH
MTU	Series 4000	8V-4000	32.5	Detroit, MI; Friedrichshafen, Germany	100	V8	DI, 4	725-1355 (1000-1820) @ 1600-2100	NA	165 x 190 (6.5 x 7.5)	NA	13.7:1	Cast iron	2950-4831 (6504-10,650)	GS, IS, M, OH
MTU	Series 4000	12V-4000	48.0	Detroit, MI; Friedrichshafen, Germany	500	V12	DI, 4	1120-1675 (1500-2250) @ 1800-1900	7610-8540 (5615-6300) @ 1500-1650	165 x 190 (6.5 x 7.5)	190-211 (0.313-0.347)	13.7:1	Cast iron	6300 (13,882)	GS, IS, M, OH
Navistar															
Navistar	MaxxForce	MaxxForce 5	4.5	Huntsville, AL	14,000	V6	DI, 4	149 (200) @ 2700	596 (440) @ 1800	95 x 105 (3.74 x 4.134)	NA	18.0:1	Cast Iron	358 (790)	TB
Navistar	MaxxForce	MaxxForce 7	6.4	Huntsville, AL ³	148,000	V8	DI, 4	149-261 (200-350) @ 2600-3000	759-881 (560-650) @ 1400-2000	98.2 x 105 (3.87 x 4.13)	NA	17.5:1	Cast Iron	526 (1160)	TB
Navistar	MaxxForce	MaxxForce DT	7.6	Melrose Park, IL	48,000	6, inline	DI, 4	157-224 (210-300) @ 2400	705-1166 (520-860) @ 2400	116.5 x 118.9 (4.59-4.68)	NA	16.1:1	Cast Iron	671 (1480)	TB
Navistar	MaxxForce	MaxxForce 9	9.3	Melrose Park, IL	1,500	6, inline	DI, 4	223-246 (300-330) @ 2200	1084-1288 (800-950) @ 1400	116.5 x 146.1 (4.59-5.75)	NA	17.5:1	Cast Iron	708 (1560)	TB
Navistar	MaxxForce	MaxxForce 10	9.3	Melrose Park, IL	4,200	6, inline	DI, 4	231-261 (310-350) @ 2100-2200	1423-1559 (1050-1150) @ 1200	116.5 x 146.1 (4.59-5.75)	NA	17.1:1	Cast Iron	708 (1560)	TB
Navistar	MaxxForce	MaxxForce 11	10.5	Huntsville, AL	100	6, inline	DI, 4	246-291 (330-390) @ 1900-2100	1693-1898 (1250-1400) @ 1000-1200	120 x 155 (4.72-6.10)	NA	17:1	Compacted-graphite iron	1018 (2244)	TB
Navistar	MaxxForce	MaxxForce 13	12.4	Huntsville, AL	2,000	6, inline	DI, 4	306-354 (410-475) @ 1900-2100	1964-2302 (1450-1700) @ 1000-1200	126 x 166 (4.96-6.54)	NA	17:1	Compacted-graphite iron	1018 (2244)	TB
Volvo															
Mack	Maxidyne	MP7	11.0	Hagerstown, MD	1,000	6, inline	DI, 4	242-302 (325-405) @ 1500-1900	1627-2007 (1200-1480) @ 1200	123 x 152 (4.84 x 5.98)	NA	16:1	Gray cast iron	1030 (2270)	TB
Mack	Econodyne	MP7	11.0	Hagerstown, MD	2,000	6, inline	DI, 4	242-302 (325-405) @ 1500-1800	1708-1979 (1260-1460) @ 1200	123 x 152 (4.84 x 5.98)	NA	16:1	Gray cast iron	1030 (2270)	TB
Mack	MaxiCruise	MP7	11.0	Hagerstown, MD	3,000	6, inline	DI, 4	257-295 (345-395) @ 1500-1700	1844-2115 (1360-1560) @ 1200	123 x 152 (4.84 x 5.98)	NA	16:1	Gray cast iron	1030 (2270)	TB
Mack	MaxiCruise	MP8	13.0	Hagerstown, MD	2,000	6, inline	DI, 4	309-362 (415-485) @ 1500-1700	2251 (1660) @ 1200	131 x 158 (5.16 x 6.22)	NA	16:1	Gray cast iron	1161 (2560)	TB
Mack	Maxidyne	MP8	13.0	Hagerstown, MD	3,000	6, inline	DI, 4	317-362 (425-485) @ 1500-1900	2088-2305 (1540-1700) @ 1200	131 x 158 (5.16 x 6.22)	NA	16:1	Gray cast iron	1161 (2560)	TB
Mack	Econodyne	MP8	13.0	Hagerstown, MD	3,000	6, inline	DI, 4	317-362 (425-485) @ 1500-1800	2115-2251 (1560-1660) @ 1200	131 x 158 (5.16 x 6.22)	NA	16:1	Gray cast iron	1161 (2560)	TB
Mack	MaxiCruise	MP10	16.0	Hagerstown, MD	1500	6, inline	DI, 4	384-451 (515-605) @ 1600-1800	1860-2060 (1372-1519) @ 1200	144 x 165 (5.67 x 6.50)	NA	16:1	Gray cast iron	1406 (3100)	TB
Volvo	D11	D11	11.0	Hagerstown, MD	3,000	6, inline	DI, 4	242-302 (325-405) @ 1500-1900	1627-2007 (1200-1480) @ 1200	123 x 152 (4.84 x 5.98)	NA	16:1	Cast gray iron	1030 (2270)	TB
Volvo	D13	D13	13.0	Hagerstown, MD	4,000	6, inline	DI, 4	250-361 (335-485) @ 1350-1550	1830-2237 (1350-1650) @ 1100	131 x 158 (5.16 x 6.22)	NA	16:1	Cast gray iron	1156 (2550)	TB
Volvo	D16	D16	16.0	Hagerstown, MD	500	6, inline	DI, 4	335-447 (450-600) @ 1350-1550	2237-2780 (1650-2050) @ 1200	144 x 165 (5.7 x 6.5)	NA	16:1	Cast gray iron	1392 (3070)	TB
Yanmar															
Yanmar	TNV	4TNV84T	2.0	Japan	9,000	4, inline	DI, 4	42.7 (57.3) @ 3000	131 (96) @ 3000	84 x 90 (3.30 x 3.54)	258 (0.424) @ 3000	18.9:1	Cast iron	170 (374.9)	AG, GS, IS, OH
Yanmar	TNV	4TNV98	3.3	Japan	4,500	4, inline	DI, 4	52.1 (69.9) @ 2500	193 (142) @ 2500	98 x 110 (3.85 x 4.33)	238 (0.391) @ 2500	18.5:1	Cast iron	235 (518.2)	AG, GS, IS, OH
Yanmar	TNV	4TNV98T	3.3	Japan	9,000	4, inline	DI, 4	64.1 (86.0) @ 2500	238 (175) @ 2500	98 x 110 (3.85 x 4.33)	245 (0.403) @ 2500	18.1:1	Cast iron	245 (540.2)	AG, GS, IS, OH

AG: Agriculture GS: Generator Set IS: Industrial/Stationary M: Marine NA: Not Available OH: Off-Highway Mobile SFC: Specific Fuel Consumption TB: Truck/Bus/Coach VPC: Valves per Cylinder www.us.mahle.com

¹North American engine production estimates provided by Rhein Associates, Inc.

²Engine introduction Fall 2009. Specifications subject to change without notice.

³Volume includes 2008 production in Indianapolis, IN.