

Table 1. Off Road Compression - Ignition Diesel Engine Standards (NMHC + Nox/CO/PM in g/bhp hr.)

hp (kw)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015+
≥ 50 (37) < 75 (55.5)				N/A ^(b) 6.9 (9.2)					5.6 (7.5) 3.7 (5.0) 0.30 (0.40)				3.5 (4.7) 3.7 (5.0) 0.22 ^(c)				3.5 3.7 0.02 ^(c)				
≥ 75 (55.5) < 100 (75)				N/A ^(b) 6.9 (9.2)					5.6 (7.5) 3.7 (5.0) 0.30 (0.40)				3.5 (4.7) 3.7 (5.0) 0.3			0.14 2.5 3.7 0.01 ^(b,d)		0.14 0.29 3.7 0.01 ^(b)			
≥ 100 (75) < 175 (130) ^(e)			N/A ^(b) 6.9 (9.2)	N/A N/A					4.9 (6.6) 3.7 (5.0) 0.22 (0.30)				3.0(4.0) 3.7 (5.0) 0.22			0.14 2.5 3.7 0.01 ^(b,d)		0.14 0.29 3.7 0.01 ^(b)			
≥ 175 (130) < 300 (225) ^(e)	1.0 (1.3) ^(b) 6.9 (9.2) 8.5 (11.4) 0.40 (0.54)								4.9 (6.6) 2.6 (3.5) 0.15 (0.20)				3.0 (4.0) 2.6 (3.5) 0.15 ^(e)			0.14 1.5 2.6 0.015 ^(b,d)		0.14 0.3 2.6 0.01 ^(b)			
≥ 300 (225) < 600 (450) ^(e)	1.0 (1.3) ^(b) 6.9 (9.2) 8.5 (11.4) 0.40 (0.54)				4.8 (6.4) 2.6 (3.5) 0.15 (0.20)								3.0 (4.0) 2.6 (3.5) 0.15 ^(e)			0.14 1.5 2.6 0.015 ^(b,d)		0.14 0.3 2.6 0.01 ^(b,d)			
≥ 600 (450) ≤ 750 (560) ^(e)	1.0 (1.3) ^(b) 6.9 (9.2) 8.5 (11.4) 0.40 (0.54)					4.8 (6.4) 2.6 (3.5) 0.15 (0.20)							3.0 (4.0) 2.6 (3.5) 0.15 ^(b)			0.14 1.5 2.6 0.015 ^(b,d)		0.14 0.3 2.6 0.01 ^(b,d)			
> 750 (560) ^(e)					1.0 (1.3) ^(b) 6.9 (9.2) 8.5 (11.4) 0.40 (0.54)								4.8 (6.4) 2.6 (3.5) 0.15 (0.20)				0.3 2.6 2.6 0.07 ^(b)		0.14 2.6 2.6 0.03 ^(b)		
> 750 ≤ 1207	Generators				1.0 (1.3) ^(b) 6.9 (9.2) 8.5 (11.4) 0.40 (0.54)								4.8 (6.4) 2.6 (3.5) 0.15 (0.20)				0.3 2.6 2.6 0.07 ^(b)		0.14 0.5 2.6 0.02 ^(b)		
> 1207	Generators				1.0 (1.3) ^(b) 6.9 (9.2) 8.5 (11.4) 0.40 (0.54)								4.8 (6.4) 2.6 (3.5) 0.15 (0.20)				0.3 0.5 2.6 0.07 ^(b)		0.14 0.5 2.6 0.02 ^(b)		

a. The PM standard for hand-start, air cooled, direct injection engines below 6 bhp may be delayed until 2010 and be set at 0.45 g/bhp-hr.

b. Standards given are NMHC/NOx/CO/PM in g/bhp-hr.

c. Engine families in the power category may alternately meet Tier 3 PM standards (0.3 g/bhp-hr) from 2008-2011 in exchange for introducing final PM standards in 2012.

d. The implementation schedule shown is the three-year alternate Nox approach. Other schedules are available.

e. Certain manufacturers have agreed to comply with these standards by 2005.

Note: This chart was converted into bhp units based on the chart at <http://www.arb.ca.gov/msprog/offroad/offroad.htm> 2/7/06.

