

List of Optional Low NOx Certified Heavy-Duty Engines

(Updated on 10/3/2023)

Low NOx Engine Executive Order	Engine Family	Displacement (Liters)	NOx ¹ Certification Standard (g/bhp-hr)	Percent NOx Reduction	Fuel ²	Intended Service Class ³
<u>Model Year 2023</u>						
A-452-0012	PAGIE06.0CNG	6.0	0.02	90%	NG	HDO
A-415-0039	PPSIE08.8LN1	8.8	0.02	90%	LPG	HDO
A-021-0757-1	PCEXH0408BDA	6.7	0.02	90%	NG	MHDD
A-021-0758-1	PCEXH0729XDA	11.9	0.02	90%	NG	HHDD-UB
A-344-0147	PRIIE07.3BL1	7.3	0.05	75%	LPG	HDO
A-344-0158	PRIIE07.3BL3	7.3	0.02	90%	LPG	HDO
A-344-0160	PRIIE07.3BL5	7.3	0.02	90%	LPG	HDO
<u>Model Year 2022</u>						
A-452-0010	NAGIE07.3CNG	7.3	0.02	90%	NG	HDO
A-452-0011	NAGIE07.3LPG	7.3	0.02	90%	NG	HDO
A-021-0740	NCEXH0408BDA	6.7	0.02	90%	NG	MHDD
A-021-0741	NCEXH0540LDA	8.9	0.02	90%	NG	MHDD
A-021-0742	NCEXH0540LDB	8.9	0.02	90%	NG	UB
A-021-0743	NCEXH0540LDC	8.9	0.02	90%	NG	HHDD
A-021-0744	NCEXH0729XDA	11.9	0.02	90%	NG	HHDD-UB
A-415-0035-1	NPSIE8.8LN1	8.8	0.02	90%	LPG	HDO
A-344-0135	NRRIE07.3BL3	7.3	0.05	75%	LPG	HDO
A-344-0137	NRRIE07.3BL1	7.3	0.05	75%	LPG	HDO
A-344-0139	NRRIE07.3BL2	7.3	0.02	90%	LPG	HDO
<u>Model Year 2021</u>						
A-452-0008	MAGIE06.0CNG	6.0	0.02	90%	NG	HDO
A-021-0732	MCEXH0408BDA	6.7	0.02	90%	NG	MHDD
A-021-0733	MCEXH0540LDA	8.9	0.02	90%	NG	MHDD
A-021-0734	MCEXH0540LDB	8.9	0.02	90%	NG	UB
A-021-0735	MCEXH0540LDC	8.9	0.02	90%	NG	HHDD
A-021-0736	MCEXH0729XDA	11.9	0.02	90%	NG	HHDD-UB
A-415-0030	MPSIE8.8LN1	8.8	0.02	90%	LPG	HDO
A-344-0126-1	MRRIE07.3BL1	7.3	0.05	75%	LPG	HDO
A-344-0128	MRRIE07.3BL3	7.3	0.05	75%	LPG	HDO

¹NOx: Oxides of Nitrogen; g/bhp-hr = grams per brake horsepower-hour

²Fuel: NG = Natural Gas; LPG = Liquefied Petroleum Gas

³Intended Service Class: MHDD = Medium Heavy-Duty Diesel ; HHDD = Heavy Heavy-Duty Diesel
HDO = Heavy-Duty Otto; and UB = Urban Bus

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<u>Model Year 2020</u>						
A-415-0026	LPSIE8.8LN1	8.8	0.02	90%	LPG	HDO
A-021-0720	LCEXH0408BBC	6.7	0.02	90%	NG	MHDD
A-021-0712	LCEXH0540LBN	8.9	0.02	90%	NG	HHDD
A-021-0713	LCEXH0540LBL	8.9	0.02	90%	NG	MHDD
A-021-0714	LCEXH0540LBM	8.9	0.02	90%	NG	UB
A-021-0711	LCEXH0729XBC	11.9	0.02	90%	NG	HHDD-UB
A-344-0110	LRIE06.8BW2	6.8	0.02	90%	LPG	HDO
A-344-0108	LRIE06.8BWL	6.8	0.05	75%	LPG	HDO
<u>Model Year 2019</u>						
A-452-0003	KAGIE06.8BW6	6.8	0.02	90%	NG	HDO
A-452-0004	KAGIE06.8BWZ	6.8	0.02	90%	NG	HDO
A-452-0002	KAGIE06.0584	6.0	0.05	75%	NG	HDO
A-021-0699	KCEXH0540LBL	8.9	0.02	90%	NG	MHDD
A-021-0703	KCEXH0729XBC	11.9	0.02	90%	NG	HHDD-UB
A-021-0698	KCEXH0408BBB	6.7	0.10	50%	NG	MHDD
A-436-0008	KEL3E06.8BWZ	6.8	0.02	90%	NG	HDO
A-436-0009	KEL3E06.8BW6	6.8	0.02	90%	NG	HDO
A-436-0007	KEL3E06.0584	6.0	0.05	75%	NG	HDO
A-344-0101	KRIIE06.8BC2	6.8	0.02	90%	NG	HDO
A-344-0100	KRIIE06.8BC1	6.8	0.10	50%	NG	HDO
A-344-0096	KRIIE06.8BW2	6.8	0.02	90%	LPG	HDO
A-344-0094	KRIIE06.8BWL	6.8	0.05	75%	LPG	HDO

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<u>Model Year 2018</u>						
A-452-0001	JAGIE06.0584	6.0	0.05	75%	NG	HDO
A-021-0678	JCEXH0408BBB	6.7	0.10	50%	NG	MHDD
A-021-0680	JCEXH0540LBN	8.9	0.02	90%	NG	HHDD
A-021-0681	JCEXH0540LBL	8.9	0.02	90%	NG	MHDD
A-021-0679	JCEXH0540LBM	8.9	0.02	90%	NG	UB
A-021-0674	JCEXH0729XBC	11.9	0.02	90%	NG	HHDD-UB
A-436-0004	JEL3E06.0584	6.0	0.05	75%	NG	HDO
A-436-0005	JEL3E06.8BWZ	6.8	0.02	90%	NG	HDO
A-436-0006	JEL3E06.8BW6	6.8	0.02	90%	NG	HDO
A-344-0082-1	JRIIE06.8BWL	6.8	0.05	75%	LPG	HDO
A-344-0086	JRIIE06.8BW2	6.8	0.02	90%	LPG	HDO
<u>Model Year 2017</u>						
A-021-0646-2	HCEXH0540LBK	8.9	0.02	90%	NG	HHDD
A-021-0660	HCEXH0540LBJ	8.9	0.02	90%	NG	MHDD
A-021-0659	HCEXH0540LBI	8.9	0.02	90%	NG	UB
A-021-0650-2	HCEXHO408BBA	6.7	0.10	50%	NG	MHDD
A-436-0003	HEL3E06.8BWZ	6.8	0.02	90%	NG	HDO
A-436-0001-1	HEL3E06.076P	6.0	0.05	75%	NG	HDO
A-398-0032	HGKTE08.0GL8	8.0	0.02	90%	LPG	HDO
A-398-0033	HGKTE08.0GC8	8.0	0.02	90%	NG	HDO
A-344-0074-1	HRIIE06.8BWL	6.8	0.05	75%	LPG	HDO
A-344-0078	HRIIE06.8BWC	6.8	0.10	50%	NG	HDO
A-426-0005	HBAFE06.8BW6	6.8	0.05	75%	NG	HDO
<u>Model Year 2016</u>						
A-021-0630	GCEXH0540LBJ	8.9	0.02	90%	NG	MHDD
A-344-0070	GRIIE06.8BWC	6.8	0.10	50%	NG	HDO

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