

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-445  
Relating to Certification of New Heavy-Duty Motor Vehicle Engines

FORD MOTOR COMPANY

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 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-45-3;

IT IS ORDERED AND RESOLVED: That the following Ford Motor Company 1990 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

<u>Engine Family</u>	<u>Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
LFM07.8EPC7	7.8/6.6 (474/401)	(Turbocharger)
LFM07.8FPD0	7.8 (474)	(Turbocharger) (Charge Air Cooler)
LFM07.8FPF2	7.8/6.6 (474/401)	(Turbocharger) (Charge Air Cooler)

Engine models and codes are listed on attachments.

The following are the certification emission standards for these engine families:

<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
1.3	15.5	6.0	0.60

The following are the certification emission values for these engine families:

<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
LFM07.8EPC7	0.8	2.2	5.6	0.58
LFM07.8FPD0	0.7	1.8	6.0	0.42
LFM07.8FPF2	0.7	2.2	5.8	0.42

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Health and Safety Code Section 43205.5 and Title 13, California Code of Regulations, Section 2036).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 17<sup>th</sup> day of January, 1990.



K. D. Drachand, Chief  
Mobile Source Division

E.O. # A-10-445

1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL ENGINES

Manufacturer Ford Motor Company Engine Family LFM07.8EPC7  
 Liter (CID) 7.8L (474 CID), 6.6L (401 CID) Eng. Type I6  
 Emission Control Sys. (Special Features) (TC)

Engine Code	Fuel Injection Pump BOSCH (PN)	Fuel Injector BOSCH (PN)	Maximum Rated HP at RPM	Fuel Rate mm <sup>3</sup> /stroke (lbs/hr)	Maximum Rated Torque at RPM	Fuel Rate mm <sup>3</sup> /stroke (lbs/hr)
8-80B-R00	E6HN -9A543- DA	E6HN -9F593- DA	170 @ 2600	86.5	420 @ 1800	92.7
8-80N-R00 R/C 6.6L- HD-1	E7HN -9A543- AA	E7HN -9F593- AA	165 @ 2600	80.8	410 @ 1600	88.8
0-85B-R00	E8HN -9A453- HA	E4HN -9A543- BB	185 @ 2400	103.0	509 @ 1500	112.0

Engine Family L7.8PC7

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1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL ENGINES

E.O. # A-10-445

Manufacturer Ford Motor Company Engine Family LFM07.8FPD0  
 Liter (CID) 7.8L (474 CID) Eng. Type I6  
 Emission Control Sys. (Special Features) (TC) (CAC)

Engine Code	Fuel Injection Pump (mfr/PN)	Fuel Injector (mfr/PN)	Maximum Rated HP at RPM	Fuel Rate mm <sup>3</sup> /stroke @ Rated HP (lbs/hr)	Maximum Rated Torque at RPM	Fuel Rate mm <sup>3</sup> /stroke @ Max TQ (lbs/hr)
8-85D-R10	E6HN -9A543- BB  Alt. P/N E6HN-BC	E5HN -9F593- BA	210 @ 2400	107.3	557 @ 1550	118.1
8-85D-R03 (* )	E6HN -9A543- BB  Alt. P/N E6HN-BC	E5HN -9F593- BA	210 @ 2400	107.3	575 @ 1500	122.1

(\* ) R/C 7.8-HD-3

Engine Family L7.8PD0

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1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL ENGINES

Manufacturer Ford Motor Company Engine Family LFM07.8FPF2  
 Liter (CID) 7.8L (474 CID), 6.6L (401 CID) Eng. Type I6  
 Emission Control Sys. (Special Features) (TC, CAC)

Engine Code	Fuel Injection Pump (9A543) (mfr/PN)	Fuel Injector (9F593) (mfr/PN)	Maximum Rated HP at RPM	Fuel Rate mm <sup>3</sup> /stroke (lbs/hr)	Maximum Rated Torque at RPM	Fuel Rate mm <sup>3</sup> /stroke (lbs/hr)
9-80A-R00	E7HN-BA	E7HN-BA	185 @ 2400	91.3	474 @ 1500	99.8
9-85B-R00	E7HN-CB	E7HN-AA	270 @ 2400	135.0	735 @ 1500	148.0
8-85F-R01	E6HN-CB	E5HN-BA	240 @ 2400	120.0	657 @ 1500	134.5
8-85N-R00	E6HN-FA	E5HN-BA	215 @ 2400	107.3	588 @ 1500	119.8
0-85A-R00	E8HN-FA	E9HN-AA	215 @ 2000	120.0	735 @ 2000	120.0

Engine Family: L7.8PF2

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