



Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC) Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and Executive Order G-02-003;

**IT IS ORDERED AND RESOLVED:** That the engine and emission control systems produced by the manufacturer are certified as described below for use in diesel or incomplete medium-duty vehicles with a manufacturer's gross vehicle weight rating (GVWR) from 8,501 to 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	ENGINE SIZE (liter)	FUEL TYPE (CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas)	STANDARDS & TEST PROCEDURE	EMISSION STANDARD CATEGORY	ON-BOARD DIAGNOSTIC COMPLIANCE
2003	3FMXH05.4TH5	5.4	Gasoline	Otto	ULEV	Full
<b>SPECIAL FEATURES &amp; EMISSION CONTROL SYSTEMS</b>		<b>ENGINE MODELS / CODES (rated power in horsepower, hp)</b>				
TWC, 2HO2S, HO2S, SFI		3E414R0B05, 3E414U0B05, 3E414X0505 (255 hp) 3F714N0B05, 3F714F0B05, 3F714G0B05 (260 hp)				
<small>TWC/OC=three-way/oxidizing catalyst WU (prefix)=warm-up cat. O2S=oxygen sensor HO2S=heated O2S TBI=throttle body fuel injection MFI=multi port fuel injection SFI=sequentialMFI DDI/IDI=direct /indirect diesel injection TC/SC=turbo/super charger CAC=charge air cooler EGR=exhaust gas recirculation AIR=secondary air injection PAIR=pulsed AIR SPL=smoke puff limiter ECM/PCM=engine /powertrain control module EM=engine modification 2 (prefix)=parallel (2) (suffix)=in series</small>						

The following are the exhaust emission standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) in grams per brake horsepower-hour (g/bhp-hr) for this engine family for non-methane hydrocarbon (NMHC) plus oxides of nitrogen (NOx) (NMHC+NOx), NMHC, carbon monoxide (CO) [except that "diesel" CO certification compliance may have been demonstrated pursuant to Code of Federal Regulations, Title 40, Section 86.091-23(c)(2)(i) in lieu of testing], particulate matter (PM), and formaldehyde (HCHO) (Title 13, California Code of Regulations, (13 CCR) Section 1956.8): (For flexible- and dual-fueled engines, the CERT values in brackets [ ] are those when tested on conventional test fuel.)

* = not applicable	[g/bhp-hr]	NMHC+NOx	NMHC	CO	PM	HCHO
(DIRECT) STANDARD		2.5	*	14.4	*	0.050
CORPORATE AVERAGE STANDARD		*	*	*	*	*
FAMILY EMISSION LIMIT (FEL)		*	*	*	*	*
CERTIFICATION LEVEL		1.1	*	2.2	*	0.005

**BE IT FURTHER RESOLVED:** That certification to the FEL(s) listed above, as applicable, is subject to the following terms, limitations and conditions. The FEL(s) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

**BE IT FURTHER RESOLVED:** That the listed engine models have been certified to the optional emission standards and test procedures in 13 CCR Section 1956.8 applicable to diesel or incomplete medium-duty vehicles with a GVWR from 8,501 to 14,000 pounds and, therefore, shall be subject to 13 CCR Section 2139(c) (in-use testing of engines certified for use in diesel or incomplete medium-duty vehicles with a 8,501-14,000 pound GVWR).

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR Sections 1965 (emission control labels), 1968.1 (on-board diagnostic, full or partial compliance), and 2035 et seq. (emission control warranty).

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

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this 3RD day of July 2002.

Allen Lyons, Chief

Mobile Source Operations Division

## 2003 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY DUTY OTTO-CYCLE ENGINES

Manufacturer: Ford Motor Company Engine Family: 3FMXH05.4TH5

Displacement: 5.4L Liter 326 Cubic Inches

All Eng Codes in Eng Family: CA X 49S     50S X

Fuel Type(s): Dedicated X Flex Fuel     Dual-Fuel     Bi-Fuel     Gasoline X CNG      
LNG     LPG     M85     M100     Other (specify)    

Maximum Rated Power: 255 HP @ 4500 RPM E-Series Engine Configuration V8

Exhaust Control System and Special Features TWC, 2HO2S, HO2S, SFI  
(Use abbreviations per SAE J1930 SEP91)

Engine Model (Engine Code)	Ign. System or PCM Part No. -12A650-	Fuel System Injector Part No. -9F593-	Catalyst Part No. -5E212-
E-Series E-350 Strip Chassis, E350 Cutaway (37gal) <sup>1</sup> 3E414R0B05	3C2A - DB	F0TE-DB	1C2C-CB
E-350 Strip Chassis, E350 Cutaway (55gal) <sup>2</sup> 3E414U0B05	3C2A - EB	"	"
E-350 Cutaway Extended (37gal) <sup>1</sup> 3E414X0505	3C2A - FB	"	"

<sup>1</sup> Evap Family 3FMXE0155BAH

<sup>2</sup> Evap Family 3FMXE0310BAH

Comments:

Engine Family: 3FMXH05.4TH5  
Issued: May 30, 2003  
Revised:

## 2003 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY DUTY OTTO-CYCLE ENGINES

Manufacturer: Ford Motor CompanyEngine Family: 3FMXH05.4TH5Displacement: 5.4L Liter 326 Cubic InchesAll Eng Codes in Eng Family: CA X 49S     50S XFuel Type(s): Dedicated X Flex Fuel     Dual-Fuel     Bi-Fuel     Gasoline X CNG      
LNG     LPG     M85     M100     Other (specify)    Maximum Rated Power: 260 HP @ 4500 RPM F-Series Engine Configuration V8Exhaust Control System and Special Features TWC, 2HO2S, HO2S, SFI  
(Use abbreviations per SAE J1930 SEP91)

Engine Model (Engine Code)	Ign. System or PCM Part No. -12A650-	Fuel System Injector Part No. -9F593-	Catalyst Part No. -5E212-
F-Series			
F-350 4x2, 4x4, Chassis Cab, Narrow Frame (40gal, or optional 18.4gal) <sup>1</sup> 3F714N0B05	3C3A - DB	F0TE-DB	2C2C-HC
F-250/350 4x2, 4x4, Long Bed Delete (37.4 gal) <sup>2</sup> 3F714F0B05	3C3A - AB	"	"
F-250/350 4x2, 4x4, Short Bed Delete (29.6 gal) <sup>2</sup> 3F714G0B05	3C3A - BB	"	"

<sup>1</sup> Evap Family 3FMXE0155BAH<sup>2</sup> Evap Family 3FMXE0155BBH

Comments:

Engine Family: 3FMXH05.4TH5

Issued: May 30, 2002

Revised: