

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-721  
Relating to Certification of New Motor Vehicles

FORD MOTOR COMPANY

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That Ford Motor Company 1997 model-year exhaust emission control systems are certified as described below for medium-duty vehicles:

Fuel Type: Gasoline

Engine Family: VFM5.4H8G1EK Displacement: 5.4 Liters (326 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

- Dual Three Way Catalytic Converters (two)
- Dual Heated Oxygen Sensors (two)
- Exhaust Gas Recirculation
- Sequential Multiport Fuel Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The certification exhaust emission standards for this engine family in grams per mile are:

<u>Test Weight</u> <u>(lbs.)</u>	<u>Miles</u>	<u>Non-Methane</u> <u>Hydrocarbons</u>	<u>Carbon</u> <u>Monoxide</u>	<u>Nitrogen</u> <u>Oxides</u>	<u>Carbon</u> <u>Monoxide (20°F)</u>
3751-5750	50,000	0.32	4.4	0.7	12.5
	120,000	0.46	6.4	0.98	n/a

The certification exhaust emission values for this engine family in grams per mile are:

<u>Test Weight</u> <u>(lbs.)</u>	<u>Miles</u>	<u>Non-Methane</u> <u>Hydrocarbons</u>	<u>Carbon</u> <u>Monoxide</u>	<u>Nitrogen</u> <u>Oxides</u>	<u>Carbon</u> <u>Monoxide (20°F)</u>
3751-5750	50,000	0.10	1.2	0.2	2.6
	120,000	0.13	1.7	0.39	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the running loss and useful life standards applicable to 1995 and subsequent model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles," and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).


BE IT FURTHER RESOLVED: That the manufacturer is certifying the listed vehicle models with a partially complying on-board diagnostic system for the aforementioned model year pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(6.2) ("Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines").

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

Vehicles 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 attachment.

Executed at El Monte, California this 27<sup>th</sup> day of June 1996.

  
R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division





1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. FORD MOTOR COMPANY Exhaust Engine Family: VFM5.4H8G1EK  
 Engine Code Types: CA X 49S\_\_\_ 50S\_\_\_ Evaporative Emissions Family: VFM1160AYMGD/MFD  
 Exh Std: Tier-0\_\_\_ Tier-1 X TLEV\_\_\_ LEV\_\_\_ ULEV\_\_\_ ZEV\_\_\_ EPA TIER-0\_\_\_ TIER-1\_\_\_  
 Evap Std: 50K\_\_\_ Useful Life with R/L X In-Use Exh Std: Full In Use X Alt In Use\_\_\_  
 Veh Class(es): PC\_\_\_ LDT1\_\_\_ LDT2\_\_\_ MDV1\_\_\_ MDV2 X MDV3\_\_\_ MDV4\_\_\_ MDV5\_\_\_  
 Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1,MDV1,MDV2,MDV3,MDV4)  
 Exh Cert Fuel(s): Indo X Ph2\_\_\_ Diesel: 13 CCR 2282\_\_\_ or 40CFR 86.113-90\_\_\_ or -94\_\_\_  
 M85\_\_\_ CNG\_\_\_ LPG\_\_\_ Other (specify)\_\_\_  
 Fuel Type(s): Dedicated\_\_\_ Flex Fuel\_\_\_ Dual-Fuel\_\_\_  
 Gasoline X Diesel\_\_\_ M85\_\_\_ CNG\_\_\_ LPG\_\_\_ Other (specify)\_\_\_  
 Hybrid: Type A\_\_\_ B\_\_\_ C\_\_\_, APU Cycle (eg., Otto, Diesel, Turbine)\_\_\_  
 Engine Config V-8 Displacement: 5.4L (326) Liters (Cubic Inches)  
 Valves/Cyl: 2 Rated HP: 235 @ 4250 RPM  
 Engine: Front X Mid\_\_\_ Rear\_\_\_ Drive: Fwd\_\_\_ RWD X 4WD-FT\_\_\_ 4WD-PT X  
 Exhaust Control System and Special Features 2-TWO(?) SFI, 2HO2S(?) EGR  
 (Use abbreviations per SAE J1930 SEP91)

Engine Code (also list CA/49ST/50ST	Vehicle Models (if coded see attachment)	Trans. Type A-Automatic M-Manual	ETW or Test Wt	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
746RR07A/N	F150 4X2	A			F75F-AAD	F75E-CA	F75A-AD ± F75A-AF
	RKL (6050 GVW)		5250	*			
	RKS (6050 GVW)		5250				
	RKL (6550 GVW)		5500				
	RKL (6050 GVW)		5250@				
	RKS (6050 GVW)		5250@				
	RKL (6550 GVW)		5500@				
	SKL (6250 GVW)		5500				
	SKS (6250 GVW)		5500				
	SKL (6250 GVW)		5500@				
	SKS (6250 GVW)		5500@				

\* SEE SECTION 20.09.17.03

a with air conditioning

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. FORD MOTOR COMPANY Exhaust Engine Family: VFM5.4H8G1EK

Engine Code Types: CA X 49S\_\_\_ 50S\_\_\_ Evaporative Emissions Family: VFM1160AYMGD/MED

Exh Std: Tier-0\_\_\_ Tier-1 X TLEV\_\_\_ LEV\_\_\_ ULEV\_\_\_ ZEV\_\_\_ EPA TIER-0\_\_\_ TIER-1\_\_\_

Evap Std: 50K\_\_\_ Useful Life with R/L X In-Use Exh Std: Full In Use X Alt In Use\_\_\_

Veh Class(es): PC\_\_\_ LDT1\_\_\_ LDT2\_\_\_ MDV1\_\_\_ MDV2 X MDV3\_\_\_ MDV4\_\_\_ MDV5\_\_\_

Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1,MDV1,MDV2,MDV3,MDV4)

Exh Cert Fuel(s): Indo X Ph2\_\_\_ Diesel: 13 CCR 2282\_\_\_ or 40CFR 86.113-90\_\_\_ or -94\_\_\_  
M85\_\_\_ CNG\_\_\_ LPG\_\_\_ Other (specicy)\_\_\_

Fuel Type(s): Dedicated\_\_\_ Flex Fuel\_\_\_ Dual-Fuel\_\_\_  
Gasoline X Diesel\_\_\_ M85\_\_\_ CNG\_\_\_ LPG\_\_\_ Other (specify)\_\_\_

Hybrid: Type A\_\_\_ B\_\_\_ C\_\_\_, APU Cycle (eg., Otto, Diesel, Turbine)\_\_\_

Engine Config V-8 Displacement: 5.4L (326) Liters (Cubic Inches)

Valves/Cyl: 2 Rated HP: 235 @ 4250 RPM

Engine: Front X Mid\_\_\_ Rear\_\_\_ Drive: Fwd\_\_\_ RWD X 4WD-FT\_\_\_ 4WD-PT X

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

Engine Code (also list CA/49ST/50ST	Vehicle Models (if coded see attachment)	Trans. Type A-Automatic M-Manual	ETW or Test Wt	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
746RR07A/N	F150 4X4	A			F75F-AAD	F75E-CA	F75A-AD & F75A-AF
	RKL (6050 GVW)		5500	*			
	RKS (6050 GVW)		5250				
	RKL (6050 GVW)		5500@				
	RKS (6050 GVW)		5250@				
	SKL (6250 GVW)		5500				
	SKS (6250 GVW)		5500				
	SKL (6250 GVW)		5500@				
	SKS (6250 GVW)		5500@				

\* SEE SECTION 20.09.17.03

a with air conditioning

ENGINE FAMILY: VFM5.4H8G1EK  
ISSUED:  
REVISED: JUL 18 1996

20.09.17.02 - 4

R/C - 2

37

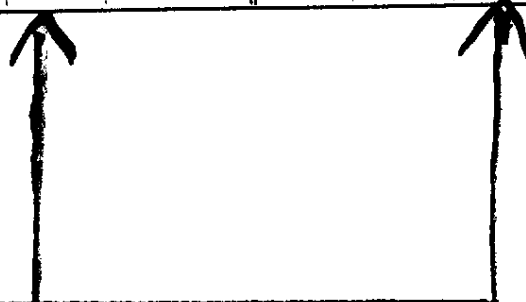
### Supplemental Data Sheet DPA Summary

1997 TRUCK DPA CHART

VEHICLE LINE	ETW	NON - AC				A/C			
		CDT	CODE	DPA	TRLHP (HP)	CDT	CODE	DPA	TRLHP (HP)
		% = LVW/ALVW		\$ = ALVW					
F-150 4x2 (LD)	4500	14.20	(R)	14.2	19.53	13.17	(R)	15.6	21.06
(PN96)	4750	14.91	(R)	14.2	19.64	13.89	(R)	15.6	21.08
AUTO TRANS (E40D)	% 5000	15.62	(R)	14.2	19.73	14.60	(R)	15.6	21.11
P235/70R16 TIRE	\$ 5250	16.33	(R)	14.2	19.82	15.31	(R)	15.6	21.14
	\$ 5500	17.04	(R)	14.2	19.90	16.02	(R)	15.6	21.16
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F-150 4x2 (LD)	4500	13.94	(R)	14.8	19.90	13.13	(R)	16.2	21.13
(PN96)	4750	14.63	(R)	14.8	20.01	13.74	(R)	16.2	21.31
AUTO TRANS (E40D)	5000	15.33	(R)	14.8	20.11	14.34	(R)	16.2	21.49
P255/70R16 TIRE	\$ 5250	16.02	(R)	14.8	20.20	14.94	(R)	16.2	21.66
	\$ 5500	16.71	(R)	14.8	20.29	15.54	(R)	16.2	21.82

VEHICLE LINE	ETW	NON - AC				A/C			
		CDT	CODE	DPA	TRLHP (HP)	CDT	CODE	DPA	TRLHP (HP)
		% = LVW/ALVW		\$ = ALVW					
F-150 4x4 (LD)	5000	13.63	(R)	15.4	22.61	12.84	(R)	16.8	24.00
(PN96)	5250	14.04	(R)	15.4	23.05	13.26	(R)	16.8	24.41
AUTO TRANS (E40D)	\$ 5500	14.44	(R)	15.4	23.48	13.68	(R)	16.8	24.78
P235/70R16 TIRE									
-----									
F-150 4x4 (LD)	5000	13.10	(R)	15.5	23.53	12.48	(R)	16.9	24.70
(PN96)	5250	13.76	(R)	15.5	23.52	12.98	(R)	16.9	24.93
AUTO TRANS (E40D)	\$ 5500	14.42	(R)	15.5	23.51	13.48	(R)	16.9	25.15
P255/70R16 TIRE A/S									
-----									
F-150 4x4 (LD)	5000	13.05	(R)	16.2	23.62	12.31	(R)	17.6	25.04
(PN96)	5250	13.59	(R)	16.2	23.81	12.84	(R)	17.6	25.20
AUTO TRANS (E40D)	\$ 5500	14.12	(R)	16.2	24.01	13.36	(R)	17.6	25.38
P255/70R16 TIRE A/T									
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F-150 4x4 (LD)	5000	13.02	(R)	15.2	23.67	12.08	(R)	16.6	25.51
(PN96)	5250	13.55	(R)	15.2	23.88	12.80	(R)	16.6	25.28
AUTO TRANS (E40D)	\$ 5500	14.08	(R)	15.2	24.08	13.52	(R)	16.6	25.08
P265/70R17 TIRE A/T									

Use these DPA values  
when vehicle is tested  
according to Ford's  
ballasting procedure.  
(300 LBS. ballast.)



EO #A-10-721

Supplemental Data Sheet DPA Summary

VEHICLE LINE	ETW	NON - AC				A C			
		CDT	CODE	DPA	TRLHP (HP)	CDT	CODE	DPA	TRLHP (HP)
		% = LVW/ALVW (BOTH)				% = ALVW			
F-150 4x2 (LD)	4500	14.20	(R)	14.2	19.53	13.17	(R)	15.6	21.08
(PN96)	4750	14.91	(R)	14.2	19.64	13.89	(R)	15.6	21.08
AUTO TRANS (E40D)	% 5000	15.62	(R)	14.2	19.73	14.60	(R)	15.6	21.11
P235/70R16 TIRE	\$ 5250	16.33	(R)	14.2	19.82	15.31	(R)	15.6	21.14
	\$ 5500	17.04	(R)	14.2	19.90	16.02	(R)	15.6	21.16
-----									
F-150 4x2 (LD)	4500	13.94	(R)	14.8	19.90	13.13	(R)	16.2	21.13
(PN96)	4750	14.63	(R)	14.8	20.01	13.74	(R)	16.2	21.31
AUTO TRANS (E40D)	5000	15.33	(R)	14.8	20.11	14.34	(R)	16.2	21.49
P255/70R16 TIRE	\$ 5250	16.02	(R)	14.8	20.20	14.94	(R)	16.2	21.68
	\$ 5500	16.71	(R)	14.8	20.29	15.54	(R)	16.2	21.82
-----									
F-150 4x2 (LD)	4250	12.56	(R)	14.9	20.86	11.86	(R)	16.3	22.09
	4500	13.12	(R)	14.9	21.14	12.37	(R)	16.3	22.42
AUTO TRANS (E40D)	4750	13.67	(R)	14.9	21.42	12.87	(R)	16.3	22.75
LT245/75R16 A/S & A/T TIRE	% 5000	14.23	(R)	14.9	21.66	13.38	(R)	16.3	23.04
	\$ 5250	14.78	(R)	14.9	21.90	13.87	(R)	16.3	23.33
	\$ 5500	15.34	(R)	14.9	22.10	14.37	(R)	16.3	23.59

VEHICLE LINE	ETW	NON - AC				A C			
		CDT	CODE	DPA	TRLHP (HP)	CDT	CODE	DPA	TRLHP (HP)
		% = LVW/ALVW (BOTH)				% = ALVW			
F-150 4x4 (LD)	5000	13.63	(R)	16.0	22.61	12.84	(R)	17.4	24.00
(PN96)	5250	14.04	(R)	16.0	23.05	13.26	(R)	17.4	24.41
AUTO TRANS (E40D)	\$ 5500	14.44	(R)	16.0	23.48	13.68	(R)	17.4	24.78
P235/70R16 TIRE									
-----									
F-150 4x4 (LD)	5000	13.10	(R)	15.5	23.53	12.48	(R)	16.9	24.70
(PN96)	5250	13.76	(R)	15.5	23.52	12.98	(R)	16.9	24.93
AUTO TRANS (E40D)	\$ 5500	14.42	(R)	15.5	23.51	13.48	(R)	16.9	25.15
P255/70R16 TIRE A/S									
-----									
F-150 4x4 (LD)	5000	13.05	(R)	16.2	23.62	12.31	(R)	17.6	25.04
(PN96)	5250	13.59	(R)	16.2	23.81	12.84	(R)	17.6	25.20
AUTO TRANS (E40D)	\$ 5500	14.12	(R)	16.2	24.01	13.36	(R)	17.6	25.38
P255/70R16 TIRE A/T	6000	15.19	(R)	16.2	24.35	14.41	(R)	17.6	25.67
-----									
F-150 4x4 (LD)	5000	13.02	(R)	15.2	23.67	12.08	(R)	16.6	25.51
(PN96)	5250	13.55	(R)	15.2	23.88	12.80	(R)	16.6	25.28
AUTO TRANS (E40D)	\$ 5500	14.08	(R)	15.2	24.08	13.52	(R)	16.6	25.08
P265/70R17 TIRE A/T									
-----									
F-150 4x4 (LD)	4750	11.83	(R)	14.3	24.75	11.18	(R)	15.7	26.19
(PN96)	5000	12.37	(R)	14.3	24.92	11.70	(R)	15.7	26.34
AUTO TRANS	% 5250	12.90	(R)	14.3	25.09	12.20	(R)	15.7	26.53
LT245/75R16 A/T TIRE	\$ 5500	13.43	(R)	14.3	25.24	12.71	(R)	15.7	26.67