

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-667  
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 1996 model-year exhaust emission control systems are certified as described below for medium-duty vehicles:

Fuel Type: Gasoline

Engine Family: TFM4.968GFJK Displacement: 4.9 Liters (300 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

- Three Way Catalytic Converter
- Oxidation Catalytic Converter
- Heated Oxygen Sensors (two)
- Secondary Air Injection
- 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>
5751-8500	50,000	0.39	5.0	1.1	12.5
	120,000	0.56	7.3	1.53	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>
5751-8500	50,000	0.17	2.0	0.8	4.7
	120,000	0.21	2.4	1.16	n/a

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.).

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the 50,000-mile evaporative emission standards applicable to 1980 through 1994 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, based on the evaporative emission phase-in compliance schedule submitted by the vehicle manufacturer, the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles."

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".

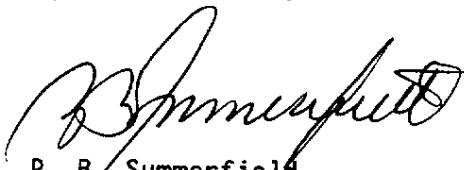
BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned model year.

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 19<sup>th</sup> day of July 1995.



R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

1996 MODEL YEAR SUPPLEMENTAL DATA SHEET  
 EXHAUST/EVAPORATIVE SYSTEM & CALIFORNIA REQUIREMENTS  
 PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. FORD MOTOR COMPANY Exhaust Engine Family: TFM4.968GFJK (T4.96)  
 Engine Code Types: CA\_\_\_ 49S\_\_\_ 50S X Evaporative Emissions Family: TFM1045AYMBB  
 Exh Std: Tier-0\_\_\_ Tier-1 X TLEV\_\_\_ LEV\_\_\_ ULEV\_\_\_ ZEV\_\_\_ EPA TIER-0\_\_\_ TIER-1\_\_\_  
 Evap Std: 50K X Useful Life with R/L\_\_\_ In-Use Exh Std: Full In Use\_\_\_ Alt In Use\_\_\_  
 Veh Class(es): PC\_\_\_ LDT1\_\_\_ LDT2\_\_\_ MDV1\_\_\_ MDV2\_\_\_ MDV3 X 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 In-Line Displacement: 4.9L (300) Liters (Cubic Inches)  
 Valves/Cyl: 2 Rated HP: 150 @ 3400 RPM  
 Engine: Front X Mid\_\_\_ Rear\_\_\_ Drive: Fwd\_\_\_ RWD X 4WD-FT\_\_\_ 4WD-PT X

Exhaust Control System and Special Features TWC, OC, AIR, HO2S(2), EGR, SFI  
 (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.
652LR00N	E250 SVL 2WD	A(AD)	7000	*	F6UF-DA	F4TE-AA	F6UA-AJB
652LR00A	E250 SVL 2WD	A	7000				
652LR00N	E250 RVL 2WD	A	7000				
652LR00A	E250 RVL 2WD	A	7000				
652LR00N	E150 RVC 2WD	A	6000				
652LR00N	E150 RVC 2WD	A	6000				
652LR00A	E150 RVC 2WD	A	6000				
652LR00A	E150 RVC 2WD	A	6000				
672MR05N	E250 CUTAWAY 2WD	A(AD)	7000	*	F6UF-FB	F4TE-AA	F6UA-AJB
672MR05A	E250 CUTAWAY 2WD	A	7000				
652LR00N	E250 RVL 2WD	A(AD)	6000	*	F6UF-DA	F4TE-AA	F6UA-AJB
652LR00A	E250 RVL 2WD	A	6000				
672MR05N	E250 STR-I/C 2WD	A(AD)	7500	*	F6UF-FB	F4TE-AA	F6UA-AJB
672MR05N	E250 STR 2WD	A	7000				
672MR05A	E250 STR-I/C 2WD	A	7500				
672MR05A	E250 STR 2WD	A	7000				

\* To locate TRLP/DPA/CDT information reference page no. 20.09.17.02

Engine Family: T4.96  
 Issue Date: JUN 23 1995  
 Revised:

20.09.17.02 - 1

Last Character  
in Engine Code:  
N = no A/C  
A = A/C

Vehicle Model Codes:

1st character:  
R = regular  
S = super  
C = club

2nd character:  
K = cab  
V = van  
W = wagon

3rd character:  
S = short  
L = long  
C = cut away

SUPPLEMENTAL DATA SHEET

SECTION: 20.09.17.02 ... continued

E.O.#A-10-667

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.
652LR00N	E250 SVL 2WD	A(AD)	6500	*	F6UF-DA	F4TE-AA	F6UA-AJB
652LR00N	E250 SVL 2WD	A	6500				
672MR05N	E350 CWL 2WD	A	7000	*	F6UF-FB	F4TE-AA	F6UA-AJB
672MR05A	E350 CWL 2WD	A	7000				
672MR05N	E350 SVL 2WD	A	7500				
672MR05A	E350 SVL 2WD	A	7500				
672MR05A	E350 SWL-12P 2WD	A	7500				
672MR05N	E350 SWL-15P 2WD	A	7500				
672MR05A	E350 SWL-12P 2WD	A	7500				
672MR05A	E350 SWL-15P 2WD	A	7500				
672MR05N	E350 RVL 2WD	A	7500				
672MR05A	E350 RVL 2WD	A	7500				
652JR05N	E250 SVL 2WD	A(DE)	7000	*	F6UF-BB	F6TE-EA	F6UA-AJB
652JR05A	E250 SVL 2WD	A	7000				
652JR05N	E250 RVL 2WD	A	7000				
652JR05A	E250 RVL 2WD	A	7000				
652KR05N	E150 RVC 2WD	A	6000	*	F6UF-CB	F6TE-EA	F6UA-AJB
652KR05N	E150 RVL 2WD	A	6000				
652KR05N	E150 RVL 2WD	A	6000				
652KR05A	E150 RVC 2WD	A	6000				
652KR05A	E150 RVL 2WD	A	6000				
652KR05N	E150 CWL 2WD	A	6000				
652KR05A	E150 CWL 2WD	A	6000				
652JR05N	E250 CUTAWAY 2WD	A	7000	*	F6TF-GA	F4TE-AA	F6UA-AJB
652JR05A	E250 CUTAWAY 2WD	A	7000				
652JR05N	E250 RVL 2WD	A	6000				
652JR05A	E250 RVL 2WD	A	6000				
652JR05N	E250 SVL 2WD	A	6500				
652JR05A	E250 SVL 2WD	A	6500				

Last Character  
in Engine Code:

N = no A/C  
A = A/C

Vehicle Model Codes:

1st character:  
R = regular  
S = super  
C = club

2nd character:  
K = cab  
V = van  
W = wagon

3rd character:  
S = short  
L = long  
c = cut away

\* To locate TRLP/DPA/CDT information reference page no. 20.09.17.02 - 4

Engine Family: T4.96

20.09.17.02 - 2

Date Issued: JUN 23 1995

Revised:

1996 MODEL YEAR SUPPLEMENTAL DATA SHEET  
EXHAUST/EVAPORATIVE SYSTEM & CALIFORNIA REQUIREMENTS  
PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. FORD MOTOR COMPANY Exhaust Engine Family: TFM4.968GFJK (T4.96)  
 Engine Code Types: CA\_\_\_ 49S\_\_\_ 50S X Evaporative Emissions Family: TFM1045AYCBB  
 Exh Std: Tier-0\_\_\_ Tier-1 X TLEV\_\_\_ LEV\_\_\_ ULEV\_\_\_ ZEV\_\_\_ EPA TIER-0\_\_\_ TIER-1\_\_\_  
 Evap Std: 50K X Useful Life with R/L\_\_\_ In-Use Exh Std: Full In Use\_\_\_ Alt In Use\_\_\_  
 Veh Class(es): PC\_\_\_ LDT1\_\_\_ LDT2\_\_\_ MDV1\_\_\_ MDV2\_\_\_ MDV3 X 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 In-Line Displacement: 4.9L (300) Liters (Cubic Inches)  
 Valves/Cyl: 2 Rated HP: 150 @ 3400 RPM  
 Engine: Front X Mid\_\_\_ Rear\_\_\_ Drive: Fwd\_\_\_ RWD X 4WD-FT\_\_\_ 4WD-PT X

Exhaust Control System and Special Features TWC, OC, AIR, HO2S, EGR, SFI  
 (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.
672JR00N	F350 RCC-SRW 2WD <sup>®</sup>	A(AD)	7500	*	F6TF-GA	F4TE-AA	F6TA-AKB
672JR00A	F350 RCC-SRW 2WD	A	7500				
672JR00N	F250 RKL 2WD	A	6500				
672JR00A	F250 RKL 2WD	A	6500				
672JR00N	F250 SKL 2WD	A	7000				
672JR00A	F250 SKL 2WD	A	7000				

## Vehicle Model Codes:

Last Character  
in Engine Code:N = no A/C  
A = A/C

## 1st character:

R = regular  
S = super  
C = club

## 2nd character:

K = cab  
V = van  
W = wagon  
C = chassis

## 3rd character:

S = short  
L = long

C = Cut away

® SRW = single rear wheels

\* To locate TRLP/DPA/CDT information reference page no. 20.09.17.02 - 4.

Engine Family: T4.96  
 Issue Date: JUN 23 1995  
 Revised:

20.09.17.02 - 3

SECTION: 20.09.17.02 ... continued

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.
652NR11N	E250 SVL 2WD	A(AD)	7000	*	F6PF-GD	F4TE-AA	F6UA-AJB
652NR11A	E250 SVL 2WD	A	7000				
652NR11N	E250 RVL 2WD	A	7000				
652NR11A	E250 RVL 2WD	A	7000				
652NR11N	E150 RVC 2WD	A	6000				
652NR11N	E150 RVC 2WD	A	6000				
652NR11A	E150 RVC 2WD	A	6000				
652NR11A	E150 RVC 2WD	A	6000				
672WR11N	E250 CUTAWAY 2WD	A(AD)	7000	*	F6PF-HD	F4TE-AA	F6UA-AJB
672WR11A	E250 CUTAWAY 2WD	A	7000				
652NR11N	E250 RVL 2WD	A(AD)	6000	*	F6PF-GD	F4TE-AA	F6UA-AJB
652NR11A	E250 RVL 2WD	A	6000				
672WR11N	E250 STR-I/C 2WD	A(AD)	7500	*	F6PF-HD	F4TE-AA	F6UA-AJB
672WR11N	E250 STR 2WD	A	7000				
672WR11A	E250 STR-I/C 2WD	A	7500				
672WR11A	E250 STR 2WD	A	7000				
652NR11N	E250 SVL 2WD	A(AD)	6500	*	F6PF-GD	F4TE-AA	F6UA-AJB
652NR11N	E250 SVL 2WD	A	6500				
672WR11N	E350 CWL 2WD	A	7000	*	F6PF-HD	F4TE-AA	F6UA-AJB
672WR11A	E350 CWL 2WD	A	7000				
672WR11N	E350 SVL 2WD	A	7500				
672WR11A	E350 SVL 2WD	A	7500				
672WR11A	E350 SWL-12P 2WD	A	7500				
672WR11N	E350 SWL-15P 2WD	A	7500				
672WR11A	E350 SWL-12P 2WD	A	7500				
672WR11A	E350 SWL-15P 2WD	A	7500				
672WR11N	E350 RVL 2WD	A	7500				
672WR11A	E350 RVL 2WD	A	7500				
652VR11N	E250 SVL 2WD	A(DE)	7000	*	F6PF-CD	F6TE-EA	F6UA-AJB
652VR11A	E250 SVL 2WD	A	7000				
652VR11N	E250 RVL 2WD	A	7000				
652VR11A	E250 RVL 2WD	A	7000				
652GR11N	E250 SVL 2WD	A(DE)	7000	*	F6PF-FD	F6TE-EA	F6UA-AJB
652GR11A	E250 SVL 2WD	A	7000				
652GR11N	E250 RVL 2WD	A	7000				
652GR11A	E250 RVL 2WD	A	7000				
652GR11N	E250 CUTAWAY 2WD	A	7000	*	F6PF-FD	F4TE-AA	F6UA-AJB
652GR11A	E250 CUTAWAY 2WD	A	7000				
652GR11N	E250 RVL 2WD	A	6000				
652GR11A	E250 RVL 2WD	A	6000				
652GR11N	E250 SVL 2WD	A	6500				
652GR11A	E250 SVL 2WD	A	6500				

\* To locate TRLP/DPA/CDT information reference page no. 20.09.17.02 - 4

Engine Family: T4.96

20.09.17.02 - 11

Date Issued: JUN 26 1996

Revised:

SUPPLEMENTAL DATA SHEET

E.O.#A-10-667 P.01

07-14-1995 12:58

3133231053

AEFEO-CPD/FE

1996 VEHICLE COVERAGE GUIDELINES  
FOR VCM# AND VCM# TRUCK LINES

VEHICLE LINE	ETW LIMIT	NON A/C			A/C				
		CDT(Sec)	Code	DPA(HP)	CDT(Sec)	CODE	DPA(HP)	TRLHP(HP)	
-----									
F-SERIES (HD)									
F-250 4x2 HD & F-350 4x2 SRW (ALL TRANS)	\$ 5250	17.56	(C)	20.0	22.82	16.55	(C)	21.5	
	\$ 6500	18.89	(C)	14.6	22.84	17.85	(C)	16.3	
	\$ 7000	20.22	(C)	14.5	TBD	19.06	(C)	15.9	
	\$ 7500							TBD	
-----									
F-250 4x4 HD (ALL TRANS)	5000	13.16	(C)	16.9	23.42	12.56	(C)	18.3	
	3500		(CB)	20.0			(CB)	21.5	
	\$ 6500	15.92	(C)	17.1	25.17	15.09	(C)	18.5	
	\$ 7000	16.8	(C)	17.5	25.68	15.94	(C)	18.9	
	\$ 7500	17.68	(C)	17.8	26.15	16.79	(C)	19.2	
-----									
F-350 4x4 SRW (ALL TRANS)	6000		(CB)	20.0			(CB)	21.5	
	\$ 6500	15.38	(C)	18.4	26.05	14.61	(C)	19.8	
	\$ 7000	16.39	(C)	18.5	26.33	15.55	(C)	19.9	
	\$ 7500	17.39	(C)	18.3	26.58	16.53	(C)	19.7	
	\$ 8000	18.4	(C)	18.2	26.80	17.46	(C)	19.6	
-----									
F-350 4x2 DRW	\$ 7500	17.39	(C)	19.2	26.59	16.53	(C)	20.6	
	\$ 8000	18.22	(C)	18.9	27.07	17.32	(C)	20.3	
-----									
F350 4x2 SRW CC	6000	13.16	(C)	22.7	28.10	12.49	(C)	24.1	
	46.2 SQ.FT							29.61	
-----									
F-350 4x2 DRW CC	7000	9.34	(C)	32.4	46.20	9.07	(C)	33.8	
	84.6 SQ.FT							47.57	
	8000	12.41	(C)	24.18	39.74	11.99	(C)	25.58	
	9000	Requirement dropped from Powertrain			Line-up due to low volume				41.13
	50.4 SQ.FT	12.87	(C)	26.5R	38.32	12.30	(C)	27.9R	
								40.09	
-----									
E-SERIES (HD)									
ECON. E250 (HD)	\$ 7000	19.04	(C)	14.5	22.66	17.91	(C)	15.9	
-----									
E-250 CUTAWAY (ALL TRANS)	6000	14.00	(MA)	18	26.42	13.28	(MA)	19.4	
	6500	15.17	(C)	18	26.41	14.39	(C)	19.4	
	7000	16.34	(MA)	18	26.41	15.50	(MA)	19.4	
	33 SQ.FT.							27.84	
-----									
E-250 STRIP CHASSIS (ALL TRANS)	6000		(CB)	26.5			(CB)	27.9	
	6500		(CB)	26.5			(CB)	27.9	
	7500		(CB)	26.5			(CB)	27.9	
	59 SQ.FT.								
-----									
ECON. E-350	6000		(CB)	20.0			(CB)	21.5	
	\$ 7000	17.95	(C)	15.4	24.04	16.99	(C)	16.8	
	\$ 7500	19.18	(C)	15.4	24.10	18.11	(C)	16.8	
	\$ 8000	20.42	(C)	14.4	24.15	19.29	(C)	15.8	
								25.53	
-----									
ECONLINE E-350 CA/SC SRW/DRW (ALL TRANS)	7000	10.03	(C)	33	43.02	9.71	(C)	34.4	
	77.9 SQ.FT							44.44	

(E) = ESTIMATED (REG) = REGRESSED CDT  
 (C) = CERTIFICATION TEST POINT (ADJ) = DPA ADJUST (HIGHER THAN CERT DPA)  
 (CB) = ESTIMATED COOKBOOK DATA (MA) = MASS ADJUSTED CDT  
 TBD = NEW VEHICLE PROGRAM - NOT CERTIFIED TO DATE.  
 \* = Indicates Sub Heading \$ = Indicates ALW CDT/DPA

Engine Family: T4.96

20.09.17.02 - 4

Issue Date: 6-23-95  
 Revised: