State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-776 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 1998 model-year Ford Motor Company exhaust emission control systems are certified as described below for light-duty trucks:

Fuel Type: Gasoline

Engine Family: WFMXT04.6AAA Displacement: 4.6 Liters (280 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:

Loaded Vehicle	Miles	Non-Methane	Carbon	Nitrogen	Carbon
<u>Weight (lbs.)</u>		<u>Hydrocarbons</u>	<u>Monoxide</u>	_Oxides	<u>Monoxide (20°F)</u>
3751-5750	50,000	0.32	4.4	0.7	12.5
	100,000	0.40	5.5	0.97	n/a

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

Loaded Vehicle	Miles	Non-Methane	Carbon	Nitrogen	Carbon
Weight (1bs.)		<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Monoxide (20°F)</u>
3751-5750	50,000	0.14	1.7	0.1	5.0
	100,000	0.16	2.0	0.17	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average non-methane organic gases (NMOG) exhaust mass emission requirements as set forth 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 under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

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 and Smog Index 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 16 day of July 1997.

m

R. B. Summerfield, Chief

Mobilé Source Operations Division

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Manufacturer <u>FORD MOTOR COMPANY</u>

Exhaust Engine Family: WFMXT04,6AAA

Engine Code Types: CA XXX 49S 50S

Evap Emissions Family: WFMXE0160B0E

Exhaust Std: Tier-1 XXX

ORVR: No

R/L. Test Procedure: Pt. Source

Evaporative Std: 50K_ Useful Life with R/L XXX

-9-5

Vehicle Class(es): LDT2_XXX

Service Accumulation: Mfr. AUP

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

Exhaust Cert Fuel: Indolene Clear XXX

Fuel Type: Gasoline XXX

APU Cycle (eg.., Otto, Diesel, Turbine)_____

Engine Configuration V-8

Displacement: <u>4.6L (280 in³)</u>

Valves/CyI: 2

Rated HP: 220 @ 4500 RPM

Engine: Front_XXX_Mid__Rear__

Drive: Fwd_ RWD_XXX_ 4WD-FT_ 4WD-PT_XXX

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

EngineCode	Vehicle Models	Trans.			Ignition	EGR	Catalytic
California		A-Auto M-Man	ETW	DPA	Part No (PCM)	System Part No	Converter Part No
848QR05N 848QR05A 848QR05N 848QR05A 848QR05N 848QR05A 848QR05N 848QR05A	F150 RKL 2WD F150 RKL 2WD F150 RKS 2WD F150 RKS 2WD F150 SKL 2WD F150 SKL 2WD F150 SKS 2WD F150 SKS 2WD	A A A A A A A	4500 4750 4500 4500 4750 5000 4750 4750	*	F85F-PA	F65E-BA	F65A-CG (LH) F65A-BF (RH)
848RR05N 848RR05A 848RR05N 848RR05A 848RR05N 848RR05A 848RR05N 848RR05A	F150 RKL 2WD F150 RKL 2WD F150 RKS 2WD F150 RKS 2WD F150 SKL 2WD F150 SKL 2WD F150 SKS 2WD F150 SKS 2WD	A A A A A A	4500 4750 4500 4500 4750 5000 4750 4750	*	F85F-RA	F65E-BA	F65A-CG (LH) F65A-BF (RH)

Continued on next page

* See page 20.09.17.03 - 1

Engine Family: WFMXT04.6AAA

Issued: JUN 13 1997 Revised: 20.09.17.02 - 1

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

٠ ' س						0.10	
EngineCode California	Vehicle Models	Trans. A-Auto M-Man	ETW	DPA	Ignition Part No (PCM)	EGR System Part No	Catalytic Converter Part No
							7 317 170
848RR05N	F150 RKL 4WD	Α	5000	*	F85F-RA	F65E-BA	F65A-EG (LH)
848RR05A	F150 RKL 4WD	Α	5250				F65A-DG (RH)
848RR05N	F150 RKS 4WD	Α	5000				
848RR05A	F150 RKS 4WD	Α	5000				
848RR05N	F150 SKL 4WD	Α	5500				
848RR05A	F150 \$KL 4WD	Α	5500				
848RR05N	F150 SKS 4WD	Α	5250				
848RR05A	F150 SKS 4WD	Α	5250				
747QR11N	F150 RKL 2WD	М	4500	*	F75F-ASC	F65E-BA	F65A-CG (LH)
747QR11A	F150 RKL 2WD	М	4500			. 002 571	F65A-BF (RH)
747QR11N	F150 RKS 2WD	М	4500				1007 DI (KII)
747QR11A	F150 RK\$ 2WD	М	4500				
747QR11N	F150 SKL 2WD	М	4750				
747QR11A	F150 SKL 2WD	М	4750				
747QR11N	F150 SKS 2WD	М	4500				
747QR11A	F150 SKS 2WD	M	4750				
747RR11N	F150 RKL 2WD	М	4500	*	F75F-ATC	F65E-BA	F65A-CG (LH)
747RR11A	F150 RKL 2WD	М	4500		17017(16	1035-57	F65A-BF (RH)
≠ 747RR11N	F150 RKS 2WD	М	4500		•		וואן ום-אכסו
747RR11A	F150 RKS 2WD	M	4500				
747RR11N	F150 SKL 2WD	М	4750				
747RR11A	F150 SKL 2WD	М	4750				
747RR11N	F150 SKS 2WD	М	4500				
747RR11A	F150 SKS 2WD	М	4750				
747QR11N	F150 RKL 4WD	М	5000	*	F75F-ASC	F65E-BA	F65A-EG (LH)
747QR11A	F150 RKL 4WD	M	5000		1701 7130	103L-DA	F65A-DG (RH)
747QR11N	F150 RKS 4WD	M	5000				100A-DG (KII)
747QR11A	F150 RKS 4WD	M	5000				
747QR11N	F150 SKL 4WD	M	5250				
747QR11A	F150 SKL 4WD	М	5500				
747QR11N	F150 SKS 4WD	М	5250				
747QR11A	F150 SKS 4WD	M	5250				
747RR11N	F150 RKL 4WD	М	5000	*	F75F-ATC	F65E-BA	E45A EC ULD
747RR11A	F150 RKL 4WD	M	5000		1731-110	LODE-DY	F65A-EG (LH)
747RR11N	F150 RKS 4WD	M	5000				F65A-DG (RH)
747RR11A	F150 RKS 4WD	M	5000				
747RR11N	F150 SKL 4WD	M	5250				
747RR11A	F150 SKL 4WD	M	5500				
747RR11N	F150 SKS 4WD	M	5250				
747RR11A	F150 SKS 4WD	M	5250				
	, 100 and 411D	771	J2J0				
,							

* See page 20.09.17.03 - 1

Engine Family: WFMXT04.6AAA

Issued: JUN 1 3 1997

Revised:

				NON A/C		;	A	VC	
	VEHICLE LINE	ETW	_	CDI	DP/	٩	CDT	DP/	
	F1 F0 + 0		▗▐						
	F150 4x2	4250	- 1	14.20		.]	3.40		
	MANUAL TRANS	4500	- 1	14.96		2 1	4.03	14.5	
		4750	- 1	15.60		ı	4.67	14.5	
		5000	- I	16.27		- 1	5.30	14.5	
		5250)	16.95	13.2	2 1	5.94	14.5	
	F150 4x2	4250	1	13.95	12.9	,	3.24	14.2	
	AUTO TRANS	4500	- 1	14.57			3.76		
1	P235/70R16 TIRE	4750	•	15.20			4.29		
1		5000	-	15.83			4.81		
ł		5250	-	16.45			5.33	14.2	
- [5500	1	17.08			5.85	14.2	
ŀ			1			Ľ		17,2	
	F150 4x2	4250		13.77	13.4	1;	3.00	14.7	
1	AUTO TRANS	4500	ŀ	14.54	13.4	113	3.69		
1	P255/70R16 A/S TIRE	4750	ŀ	15.30	13.4	1	1.39		
ł		5000	ŀ	16.07	13.4	115	5.08	14.7	
		5250	h	16.83	13,4	1	5.78		
		5500	1	7.60	13.4	1	5.47	14.7	
\vdash			┞			┞			
Ĺ	F150 4x2	4250	1	3.92	13.3	13	.44	14.6	
	AUTO TRANS	4500	1	4.57	13.3		.92	14.6	
	255/70R16 A/T TIRE	4750	1	5.21	13.3	•	.40	14.6	
l		5000	1	5.86	13.3		.88	14.6	
1		5250	1	6.51	13.3	15	.36	14.6	
		5500	1	7.15	13.3	ľ	.84	14.6	
\vdash			_	<u> </u>		<u> </u>			
	F150 4x2	4250	1.	2.66	14.6	11.	.84	16.0	
١. ـ	AUTO TRANS	4500	1	3.28	14.6	12.	.42	16.0	
L	245/75R16 A/S TIRE	4750		3.89	14.6	13.	.00	16.0	
		5000	1.	4.49	14.6	13.	57	16.0	
		5250	1.	5.08	14.6	14.	13	16.0	
		5500	1.	5.67	14.6	14.	69	16.0	
L.									

Г					<u> </u>	
	VEHICLE LINE			VA/C		/C
┝	VERICLE LINE	ETW	CDT	DPA	CDT	DPA
ı	E1 60 4 4					
ĺ	F150 4x4	4750			14.03	14.5
1	MANUAL TRANS	5000	1		14.67	14.5
1		5250		13.2	15.30	14.5
		5500	16.95	13.2	15.94	14.5
L			<u></u>		1	
ı	51.50					
1	F150 4x4	4750	13.21	16.0	12.48	17.4
	AUTO TRANS	5000	13.79	16.0	13.05	17.4
ı	P235/70R16 TIRE	5250	14.37	16.0	13.62	17.4
		5500	14.95	16.0	14.19	17.4
L					<u></u>	
	E1.50 Au 4					
l	F150 4x4	4750	13.88	15.6	13.14	17.0
L	AUTO TRANS	5000	14.19	15.6	13.41	17.0
١٢	255/70R16 A/S TIRE	5250	14.49	15.6	13.67	17.0
l		5500	14.80	15.6	13.94	17.0
-						
i	F150 4x4	4750				
		4750	13.11	16.1	12.38	17.5
۱.	AUTO TRANS	5000	13.50	16.1	12.74	17.5
	255/70R16 A/T TIRE		13.89	16.1	13.10	17.5
۱۲:	265/70R17 A/T TIRE	5500	14.27	16.1	13.46	17.5
<u> </u>						
	F150 4x4	1750	11.70	,,,		
		4750	11.75	17.3	11,1	18.7
	AUTO TRANS	5000	12.28	17.3	11.61	18.7
Li	245/75R16 A/T TIRE		12.81	17.3	12.11	18.7
		5500	13.34	17.3	12.61	18.7

Engine Family: WFMXT04.6AAA

Issued: JUN 1 3 1997

Revised: