State of California AIR RESOURCES BOARD

EXECUTIVE ORDER $\underline{A-10-740}$ 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 passenger cars:

Fuel Type: Gasoline

Engine Family: WFMXV02.5AFA Displacement: 2.5 Liters (155 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Dual Three Way Catalytic Converters Three Way Catalytic Converter 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:

Miles	Non-Methane	Carbon	Nitrogen	Carbon	
	Hydrocarbons	<u>Monoxide</u>	<u>Oxides</u>	Monoxide (20°F)	
50,000	0.25	3.4	0.4	10.0	
100,000	0.31	4.2	0.6	n/a	

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

Miles	Non-Methane	Carbon	Nitrogen	Carbon	
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Monoxide (20°F)</u>	
50,000	0.13	1.8	0.1	6.7	
100,000	0.16	2.3	0.1	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 Models 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 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.

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 seg.).

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 14 day of January 1997.

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R. B. Summerfield, Chief Mobile Source Operations Division

1998 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET Page <u>1</u> PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES Evap Fam: WFMXE0115B1E Manufacturer: FORD MOTOR COMPANY Exh Eng Fam: WFMXV02.5AFA Exh Std: CA Tier-1 X TLEV LEV ULEV SULEV_ ORVR: YES ___ NO_X_ ILEV____ CFV___ US EPA Tier-1 __ AB965____ All Engine Codes in Engine Familiy: CA X 49S **5**ÓS Veh Class(es): PC_X_LDT1___LDT2___MDV1__MDV2___MDV3___MDV4___ MDV5 Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4) Fuel Type(s): DedicatedX Flex-Fuel___ Dual-Fuel Bi-Fuel__ GasolineX Diesel__ LNG___ LPG___ M85___ Other (specify)___ CNG Emiss Test Fuel(s): Indo_X CBG___ CNG__ LPG/_ M85__ Other (specify)__ 40 CFR 86.113-94___ 40 CFR 86.113-90____ Diesel: 13 CCR 2282____ Mfr ADP___ Other (specify)___ Mod AMA____ Service Accum: Std AMA X_ R/L Test Proc: SHED___ Pt Source_X_ Equiv NMOG Test Procedure: N/A_X Std Engine Configuration: V-6 Displacement: 2.5 / Liters 155 / Cubic Inches Æated HP: Valves per Cylinder: 4 4WD-PT RWD 4WD-FT____ Drive: FWD_X Engine: Front<u>X</u> Mid___ Rear__ 2TWC, TWC, 2HO2S(2), EGR, SFI (use abbreviations per SAE J1930 JUN93) Exhaust ECS (e.g., MFI, EGR, TC, CAC): Catalytic EGR ETW Trans DPA Ignition Vehicle Models Engine Code System Converter (M5, A/4)(ECM/PCM) or o۳ (if coded see also list Part No. **RLHP** Part No. Test Wt. Part No. etc/.) CA/49ST/50ST attachment) 97BB-CA F53E-AA 5.1 5.4 97BB-HA or L4 3250* 812TR00 A CONTOUR 1FA " XA 5.1 5.4 3375 MYSTIQUE 2FA 11 97BB-FA or 97BB-BA 5.2 5.5 CONTOUR 1FA MYSTIQUE 2FA M5 3375 811TR00 A п 5.2 5.5 3375 Α 97BB-CA 3250* 5.1 5.4 97BB-XB CONTOUR 1FA MYSTIQUE 2FA/ L4 812TR05 A 5.1 5.4 3375 5.2 5.5 5.2 5.5 97BB-BA 97BB-VB **M5** 3375 CONTOUR 1FA 811TR05 A MYSTIQUE 2FA 3375 Α 5.1 5.4 5.1 5.4 5.2 5.5 5.2 5.5 97BB-CA CONTOUR YFA MYSTIQUE ZFA 3250* 97BB-XC L4 812TR06 A 3375 97BB-BA 97BB-VC CONTOUR/1FA M5 3375 811TR06 A MYSTIOU€ 2FA 3375 * Test at next higher ETW @ Standard tire (P1\$5/65R14) # Optional tire (P2/05/60R15)

Date Issued: 12-5-96 Revisions:

E.O.# <u>A-10-7</u>40

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

	HODD MOTOR	COMPANY		Eng. Fam	ily_WFMXV02.52	AFA		
Manufacturer FORD MOTOR COMPANY Eng. Family WFMXV02.5AFA Evap Std: 100K X Useful Life with R/L Evap Engine Family: WFMXE0115B1E Evap Std: 100K X Useful Life with R/L Evap Engine Family: WFMXE0115B1E								
Evap Std: 10	r-0Tier-1_	Y TLEV	LEV	ULEV	ZEV ; EPA T	ier-0	Tier-l	
Single Cert	Std for Multi- el(s): Indo <u>X</u>	DPS DI	Diesel:	13 CCR 228	2 or 40 CF	R 86.113-	90 or -94_	
Exh Cert Fue	I(S): INGO A	CNG	LPG	Other (spe	cify)			
	M85 : Dedicated	Flex-	Fuel	Dual-Fuel	Gasoli	ne <u>X</u> Die	sel M85	
Fuel Type(s)	: Dealcated	- LPG	Other	(specify)	Diegol Turbi			
						ne)		
Hybrid: Type	ABC	, Aro c	cement:	2.5 /	Liter	_/	_Cubic Inche	
Engine Confi	ABC_ iguration:_V-6 nt_X_MidF	_ Dispia	rive: FW	ID X RWD	4WD-FT4	WD-PT		
Engine: From	nt_X Mid F & Special Feat	ures (EG	EGR.					
Exhaust ECS	& Special read	.ures (be	., 2011,	(Use abb	reviations pe	r SAE J19	30 Sep 91)	
	Veh. Models	Trans	Equiv.	RLHP	Ign. Sys.		Catalyst	
Engine	Ven. Models (If Coded			or	(ECM/PCM)	Syst.	Part No	
Code/	(II Coded	A-Auto			Part No.			
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	Attachmt.)	M-Mail.					<u></u>	
				@ #				
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	 	151	i			1		
# Optional	tire (P205/60F	1	1	i		j		
Certificat:	ion Standards	1		ì	j	1	1	
	50K/100K							
NMHC:	0.25/0.31			1		İ	1	
CO:	3.4/4.2	1	l I]	i	İ	
	0.4/0.6	_		<u> </u>	<u> </u>	<u>.i</u>	<u>i</u>	
	2.0/2.5/0.0	s — ——						
COLD CO:	10.0							

ENGINE FAMILY: WFMXV02.5AFA

ISSUED: 12-5-96 REVISED: 1-14-97 20.09.17.02 - 1

E.O.# <u>A-10-740</u>

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET Page of _____ OF _____ PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Evap Std: 10 Exh Std: Tie Veh Class(es Single Cert Exh Cert Fue Fuel Type(s) Hybrid: Type Engine Confi	FORD MOTOR OK X Useful 10 C Y Useful 11 C Y Useful 12 C Y Useful 13 C Y Useful 14 C Y Useful 15 C Y Useful 16 C Y Useful 17 C Y Useful 18 C Y Usef	Life wit X_ TLEV_ 1 LD Class En Ph2 CNG Flex- LPG , APU C _ Displa	LEV	ULEV	ZEV; EPA T DV2 MDV3 Cify: N/A, LDT Cacify) Gasoli Diesel, Turbi Liter_15	Tier-0MDV4	Tier-1MDV5 ETC.) 90 or -94 selM85Cubic Inche
Engine Code/ CALIF	Veh. Models (If Coded see Attachmt.)	Type: A-Auto		or		Syst. Part No	
A 811TR07 A	CONTOUR 1FA MYSTIQUE 2FA CONTOUR 1FA MYSTIQUE 2FA	M	3375 3375 3250* 3375	@ # 5.1 5.4 5.2 5.5 5.2 5 5	97BBXD " 97BBVD	11 11 11 11 11 11 11 11 11 11 11 11 11	97BBCA " 97BBBA "
811FR05 A	CONTOUR 1FA CONTOUR 1FA	М .	3375 3375	6.2	F8RFAB	F53E-AA	F7NVAB
@ Standard	next higher ETW tire (P195/65R tire (P205/60R ion Standards	(P205	 /55R16 c	on SVT)			
NMHC: CO: NOx: Enh EVAP	50K/100K 0.25/0.31 3.4/4.2 0.4/0.6	 					

ENGINE FAMILY: WFMXV02.5AFA ISSUED: 1-14-97 REVISED: 2-17-97

COLD CO: 10.0

R/C 2.5-8 R/C 2.5-4,10 1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET Page of ____ OF ____ PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer FORD MOTOR COMPANY Eng. Family WFMXV02.5AFA Evap Std: 100K X Useful Life with R/L Evap Engine Family: WFMXE0115B1E Exh Std: Tier-0 Tier-1 X TLEV LEV ULEV ZEV; EPA Tier-0 Tier-1 Veh Class(es): PC X LDT1 LDT2 MDV1 MDV2 MDV3 MDV4 MDV5 Single Cert Std for Multi-Class Eng Fam: (specify: N/A, LDT1, MDV1, ETC.) Exh Cert Fuel(s): Indo X Ph2 Diesel: 13 CCR 2282 or 40 CFR 86.113-90 or -94 M85 CNG LPG Other (specify) Fuel Type(s): Dedicated X Flex-Fuel Dual-Fuel Gasoline X Diesel M85 CNG LPG Other (specify) Hybrid: Type A B C APU Cycle (e.g., Otto, Diesel, Turbine) Engine Configuration: V-6 Displacement: 2.5 / Liter / Cubic Inchesence Configuration: V-6 Displacement: 2.5 / Liter / Cubic Inchesence Configuration: V-6 Displacement: 2.5 / Liter / Cubic Inchesence Configuration: V-6 Displacement: Configuration: V-6 Displacement: Configuration: V-6 Displacement: Configuration: V-6 Displacement: Configuration: V-6 Displacement: Configuration: Con								
Engine Code/ CALIF	Veh. Models (If Coded see Attachmt.)	Trans. Type: A-Auto M-Man.	Equiv. Test Weight	or	Ign. Sys. (ECM/PCM) Part No. -12A650-	EGR Syst. Part No -9D475-		
2.5L 812TR07 A A 811TR07 A A	CONTOUR 1FA MYSTIQUE 2FA CONTOUR 1FA MYSTIQUE 2FA	A " M "	3375 3375 3250* 3375	@ # 5.1 5.4 5.1 5.4 5.2 5.5 5.2 5.5	97BBVD	F53E-AA " "	97BBCA " 97BBBA	
811FR00 A 811FR05 A	CONTOUR 1FA	M M	3375 3375	6.2 6.2	F8RFAA F8RFAB	F53E-AA	F7NVAB	
811TR10 A	CONTOUR 1FA	M M	3375 3375	5.2 5.5 5.2 5.5	97BBVE 97BBVE	F53E-AA	97BBBA	
	ext higher ETW		/55D16 c	n SVT)				
	tire (P195/65R tire (P205/60R)					
-	000 Standards 50K/100K 0.25/0.31 3.4/4.2 0.4/0.6 2.0/2.5/0.05							

ENGINE FAMILY: WFMXV02.5AFA ISSUED: 1-14-97 REVISED: 2-17-97, 9-30-97

COLD CO: 10.0

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
Page 4-/4-746
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer FORD MOTOR COMPANY Eng. Family WFMXV02.5AFA Evap Std: 100K X Useful Life with R/L Evap Engine Family: WFMXE0115B1E Exh Std: Tier-0 Tier-1 X TLEV LEV ULEV ZEV ; EPA Tier-0 Tier-1 Veh Class(es): PC X LDT1 LDT2 MDV1 MDV2 MDV3 MDV4 MDV5 Single Cert Std for Multi-Class Eng Fam: (specify: N/A, LDT1, MDV1, ETC.) Exh Cert Fuel(s): Indo X Ph2 Diesel: 13 CCR 2282 or 40 CFR 86.113-90 or -94 M85 CNG LPG Other (specify) Fuel Type(s): Dedicated X Flex-Fuel Dual-Fuel Gasoline X Diesel M85 CNG LPG Other (specify) Hybrid: Type A B C APU Cycle (e.g., Otto, Diesel, Turbine) Engine Configuration: V-6 Displacement: 2.5 / Liter / Cubic Inchesence Configuration: V-6 Displacement: 2.5 / Liter / Cubic Inchesence Configuration: V-6 Displacement: 2.5 / Liter / Cubic Inchesence Configuration: V-6 Displacement: Configuration: V-6 Displacement: Configuration: V-6 Displacement: Configuration: V-6 Displacement: Configuration: V-6 Displacement: Configuration: V-6 Displacement: Configuration: V-6 Displacement: Configuration: Configuration: V-6 Displacement: Configuration: V-6 Displac								
Engine Veh. Models Code/ (If Coded CALIF see Attachmt.)	Trans. Type: A-Auto M-Man.	Equiv. Test Weight	or	Ign. Sys. (ECM/PCM) Part No. -12A650-	EGR Syst. Part No -9D475-	Catalyst Part No. -5E212-		
2.5L 812TR07 A CONTOUR 1FA A MYSTIQUE 2FA CONTOUR 1FA A MYSTIQUE 2FA	A " M "	3375 3375 3250* 3375	@ # 5.1 5.4 5.1 5.4 5.2 5.5 5.2 5.5	97BBXD " 97BBVD	11 11	97BBCA " 97BBBA "		
811FR00 A CONTOUR 1FA 811FR05 A CONTOUR 1FA	M M	3375 3375	6.2 6.2	F8RFAA F8RFAB	11	F7NVAB		
811TR10 A CONTOUR 1FA MYSTIQUE 1FA	M M	3375 3375	5.2 5.5 5.2 5.5	97BBVE 97BBVE	11	97BBBA		
812TR10 A CONTOUR 1FA MYSTIQUE 1FA	A "	3375 3375	5.1 5.4 5.1 5.4	97BBXE	F53E-AA	97BBCA "		
* Test at next higher ETW @ Standard tire (P195/65F	i e	/ /55R16 c	on SVT)					
# Optional tire (P205/60F								
Certification Standards	5							

COLD CO: 10.0

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