State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-652 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 light-duty trucks:

Fuel Type: Gasoline

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Engine Family: TFM2.318G1EK Displacement: 2.3 Liters (140 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Three Way Catalytic Converter 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	<u>Miles</u>	Non-Methane	Carbon	Nitrogen	Carbon
<u>Weight(lbs.)</u>		<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Monoxide (20°F)</u>
0-3750	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:

Loaded Vehicle	Miles	Non-Methane	Carbon	Nitrogen	Carbon	
<u>Weight(lbs.)</u>		<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Monoxide (20°F)</u>	
0-3750	50,000 100,000	0.12 0.14	0.9	0.2 0.3	4.0 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 gas (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".

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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 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.

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.). ۰.

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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 20 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

Exhaust Engine Family: TFM2.318G1EK Mfgr. FORD MOTOR COMPANY Engine Code Types: CA_X_495___ 505___ Evaporative Emissions Family: TFM1045AYPBA__ 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_X__ LDT2___ MDV1___ MDV2___ 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)______ APU Cycle (eg., Otto, Diesel, Turbine)___ Hybrid: Type A____ B____ C___, Engine Config <u>I-4</u> Displacement: <u>2.3L (140)</u> Liters (Cubic Inches) Rated HP: 112 @ 4800 RPM Valves/Cyl: <u>2</u> Drive: Fwd____ RWD_X___4WD-FT_____4WD-PT_X__ Engine: Front<u>X</u> Mid____ Rear____ Exhaust Control System and Special Features TWC. SFI, HO2S(2)EGR (Use abbreviations per SAE J1930 SEP91) Engine Code | Vehicle Models| Trans. Type | ETW DPA Ignition EGR Catalytic (ECM/PCM) System Converter or (if coded see | A-Automatic | (also list \mathbf{or} Part No. Test Wt RLHP Part No. Part No. CA/49ST/50ST | attachment) M-Manual F57A-DC SSOTDISA/N Panger/Mazda 4x2 5575-53 ħΛ

550TR15A/N	Ranger/Mazda 4x2	A4			F57F-CDA	5F7E-BA	F57A-DC
	RC LWB		3375	11.2			
	RC SWB		3375	11.2			
	RC LWB		3500	12.3*			
	RC SWB		3500	12.3*			
549TR15A/N	Ranger/Mazda 4x2	M5			F57F-CBA	п	Ħ
	RC LWB		3375	11.2			
	RC SWB		3375	11.2			
	RC LWB		3375	12.3*			
	RC SWB		3375	12.3*			
	SC SWB		3625	11.2			
	SC SWB		3625	12.3*			
	SC SWB		3625	12.3*			

* with air conditioning

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

Mfgr. FORD MOTOR COMPANY Engine Code Types: CA_X_ 49S___ 50S___ Evaporative Emissions Family: TFM1045AYPBA___ 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_X__LDT2____ MDV1____ MDV2____ MDV3____ MDV4____ MDV5___ Single Cert Std for Multi-Class Eng Fam: <u>N/A</u> (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)______ APU Cycle (eg.., Otto, Diesel, Turbine)_____ Hybrid: Type A____ B___ C___, Engine Config <u>I-4</u> Displacement: <u>2.3L (140)</u> Liters (Cubic Inches) Rated HP: <u>112 @ 4800</u> RPM Valves/Cyl: <u>2</u> Drive: Fwd____ RWD_X___4WD-FT_____4WD-PT_X___ Engine: Front X Mid Rear Exhaust Control System and Special Features TWC, SFI, HO2S2 EGR (Use abbreviations per SAE J1930 SEP91) DPA | Ignition EGR Catalytic Vehicle Models Trans. Type ETW Engine Code Converter System | (if coded see | A-Automatic | or or (ECM/PCM) (also list Test Wt RLHP Part No. Part No. Part No. attachment) M-Manual CA/49ST/50ST F57F-CAA 5F7E-BA F57A-DC M5 549QR15A/N Ranger/Mazda 4x4 3625 12.0 RC LWB RC SWB 3625 12.0 13.2/ RC LWB 3625* 13.3@ 3625* 13.2/ RC SWB 13.3@

@ with P215 tires

* with air conditioning

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1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

4fgr. FORD MOTOR COMPANY Exhaust Engine Family: <u>TFM2.318G1EK</u> Engine Code Types: CA_X_49S____50S____ Evaporative Emissions Family: TEM1045AYPBA___ 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_X_LDT2____MDV1____MDV2____MDV3____MDV4____MDV5___ Single Cert Std for Multi-Class Eng Fam: <u>N/A</u> (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)______ APU Cycle (eg.., Otto, Diesel, Turbine)_____ Hybrid: Type A____ B____ C___, Engine Config <u>I-4</u> Displacement: <u>2.3L (140)</u> Liters (Cubic Inches) Rated HP: 113 @ 5000 RPM Valves/Cyl: <u>2</u> Drive: Fwd____ RWD_X__ 4WD-FT____ 4WD-PT_X__ Engine: Front X Mid ____ Rear____ Exhaust Control System and Special Features TWC, SFI, HO2S(2)EGR (Use abbreviations per SAE J1930 SEP91) Engine Code | Vehicle Models | Trans. Type | ETW | DPA | Ignition | EGR | Catalytic or (ECM/PCM) System Converter (if coded see | A-Automatic | or (also list Test Wt RLHP Part No. Part No. Part No. CA/49ST/50ST | attachment) M-Manual Т F57E-BA F57A-DC 550TR16A/N F57F-CDB/ Ranger/Mazda 4x2 A4 3375 11.2 F57F-CDC RC LWB RC SWB 3375 11.2 RC LWB 3500 12.3* 12.3* RC SWB 3500 U. 11 F57F-CBB/ 549TR16A/N Ranger/Mazda 4x2 M5 RC LWB 3375 11.2 F57F-CBC/ 11.2 F67F-YA RC SWB 3375 12.3* RC LWB 3375 12.3* RC SWB 3375 SC SWB 3625 11.2

* with air conditioning

SC SWB

ENGINE FAMILY: TFM2.318G1EK ISSUED: 7-28-95 REVISED: 1-30-96 | MAY 2 9 1996 3625

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1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. ____FORD MOTOR COMPANY____ Engine Code Types: CA_X_ 49S____ 50S____ Evaporative Emissions Family: TFM1045AYPBA_ Exh Std: Tier-0____ Tier-1_X_ TLEV____ LEV____ ULEV____ ZEV____ EPA TIER-0____ TIER-1___ Evap Std: 50K<u>X</u> Useful Life with R/L___ In-Use Exh Std: Full In Use___ Alt In Use___ Veh Class(es): PC____LDT1_X_LDT2____MDV1____MDV2____MDV3____MDV4____MDV5____ Single Cert Std for Multi-Class Eng Fam: <u>N/A</u> (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4) Exh Cert Fuel(s): Indo<u>X</u> 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)______ APU Cycle (eg.., Otto, Diesel, Turbine)___ Hybrid: Type A____ B____ C___, Engine Config <u>I-4</u> Displacement: <u>2.3L (140)</u> Liters (Cubic Inches) Rated HP: 113 @ 5000 RPM Valves/Cyl: <u>2</u> Drive: Fwd____ RWD_X___4WD-FT_____4WD-PT_X___ Engine: Front X Mid____ Rear____ Exhaust Control System and Special Features TWC, SFI, HO2SQ EGR (Use abbreviations per SAE J1930 SEP91) DPA Ignition Catalytic ngine Code | Vehicle Models | Trans. Type EGR ETW or (ECM/PCM) System Converter | (if coded see | A-Automatic (also list or Part No. Part No. | Part No. | CA/49ST/50ST | attachment) M-Manual Test Wt RLHP F57F-CAB/ F57E-BA F57A-DC Ranger/Mazda 4x4 M5 549QR16A/N 12.0 F57F-CAC/ RC LWB 3625 12.0 F67F-XA RC SWB 3625 13.2* RC LWB 3625 RC SWB 3625 13.2*

* with air conditioning

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1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. FORD MOTOR COMPANY Exhaust Engine Family: TFM2.318G1EK Engine Code Types: CA_X_49S____50S____ Evaporative Emissions Family: TFM1045AYPBA___ Exh Std: Tier-0____ Tier-1_X_ TLEV____ LEV____ ULEV____ ZEV____ EPA TIER-0____ TIER-1___ Evap Std: 50KX Useful Life with R/L___ In-Use Exh Std: Full In Use___ Alt In Use___ Veh Class(es): PC____LDT1_X_LDT2___MDV1___MDV2___MDV3___MDV4____MDV5___ Single Cert Std for Multi-Class Eng Fam: <u>N/A</u> (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)__ ____ Liters (Cubic Inches) Engine Config <u>I-4</u> Displacement: <u>2.3L (140)</u> Rated HP: 113 @ 5000 RPM Valves/Cyl: <u>2</u> Engine: Front X Mid Rear Drive: Fwd____ RWD_X___4WD-FT_____4WD-PT_X___ Exhaust Control System and Special Features TWC. SFI. HO2S EGR. (Use abbreviations per SAE J1930 SEP91) Engine Code | Vehicle Models | Trans. Type | ETW | DPA | Ignition EGR Catalytic (also list | (if coded see | A-Automatic | or (ECM/PCM) System Converter or CA/49ST/50ST attachment) M-Manual Test Wt RLHP Part No. Part No. Part No. F67F-XB F57E-BA F57A-DC 649QR10A/N Ranger/Mazda 4x4 M5 RC LWB 3625 12.0 RC SWB 3625 12.0 RC LWB 3625 13.2* RC SWB 3625 13.2*

* with air conditioning

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1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. FORD	MOTOR COMPANY	Exh	aust Engi	ne Fam	ily: <u>TFM2.3</u>	18G1EK		
Engine Code	Types: CA <u>X</u> 49S_	50S Eva	porative	Emissi	ons Family:	TFM1045AYP	BA	
Exh Std: Tie	r-0 Tier-1_X	TLEV LEV	ULEV	ZI	EV EPA T	IER-0 7	TIER-1	
Evap Std: 5	OK <u>X</u> Üseful Life	e with R/L	In-Use E	xh Std	: Full In Use	e Alt 1	In Use	
Veh Class(es): PC LDT1_X_	LDT2MDV	1 MDV	2 I	MDV3 MDV4	4 MDV5_		
Single Cert	Std for Multi-Clas	s Eng Fam: <u>N</u>	<u>/A</u> (sp	ecify:	N/A, LDT1,MI	DV1, MDV2, MI	DV3,MDV4)	
Exh Cert Fue	l(s): Indo <u>X</u> Ph2 M85 CN0	2 Diesel: 3 LPG			or 40CFR 86.1	L13-90 <u></u> c	or -94	
Fuel Type(s)	: Dedicated H Gasoline_X Di	Flex Fuel	Dual-Fuel		Other (s	specify)		
Hybrid: Typ	e A B C							
Engine Config <u>I-4</u> Displacement: <u>2.3L (140)</u> Liters (Cubic Inches) Valves/Cyl: <u>2</u> Rated HP: <u>113 @ 5000</u> RPM								
-	nt <u>X</u> MidRea					4WD-P'	r <u>x</u>	
Exhaust Cont	rol System and Spe	cial Features			(2)EGR tions per SA	E J1930 SE	P91)	
ingine Code	Vehicle Models	Trans. Type	ETW	DPA	Ignition	EGR	Catalytic	
(also list	(if coded see		:	or	-		-	
	attachment)		Test Wt	RLHP	Part No.	Part No.	Part No.	
650TR10A/N	Ranger/Mazda 4x2	A4			F57F-CDD	F57E-BA	F57A-DC	
	RC LWB		3375	11.2				
	RC SWB		3375	11.2				
	RC LWB		3500	12.3*				
	RC SWB		3500	12.3*				
649TR10A/N	Ranger/Mazda 4x2	M5			F67F-YB	87	н	
,	RC LWB	-	3375	11.2				
	RC SWB		3375	11.2				
	RC LWB		3375	12.3*				
	RC SWB		3375	12.3*				
	SC SWB		3625	11.2				
	SC SWB		3625	12.3*				

* with air conditioning

ENGINE FAMILY: TFM2.318G1EK ISSUED: 2-08-96 REVISED: MAY 2 9 1996