State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-570 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 Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That Ford Motor Company 1994 model-year exhaust emission control systems are certified as described below for light-duty trucks:

Fuel Type: Gasoline

Engine Family: RFM4.028G1EA <u>Displacement</u>: 4.0 Liters (244 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

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

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
Weight(lbs.)		<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>
3751-5750	50,000	0.32	4.4	1.0
	100,000	0.40	5.5	n/a

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

Loaded Vehicle Weight(lbs.)	Miles	Non-Methane <u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>
3751- 5750	50,000	0.19	1.4	0.2
	100,000	0.21	1.7	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".

BE IT FURTHER RESOLVED: That under the submitted 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 on January 14, 1993, the Air Resources Board approved the repeal of the currently-effective requirement that each manufacturer certify a minimum of 80 percent of its projected sales of 1994 model-year California-certified passenger cars and light-duty trucks to the phase-in standards for non-methane hydrocarbons (NMHC), or the more stringent standards in section 1960.1(g)(2) of Title 13, California Code of Regulations. If the repeal of such requirement does not become effective by December 31, 1993, the manufacturer shall submit a plan for compliance with the requirement; passenger cars and light-duty trucks not meeting such phase-in or more stringent standards shall be certified only to the extent allowed under the requirement.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "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 2290).

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 for 1988 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles with Three-Way Catalyst Systems and Feedback Control" (Title 13, California Code of Regulations, Section 1968) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed vehicle models have been exempted from compliance with the "Malfunction and Diagnostic System Requirements-1994 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles and Engines" pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(2.0) 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.).

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 Anday of August, 1993.

R. B. Summerfiel

Assistant Division Chief Mobile Source Division

Engine Code	Vehicle Models	Trans. Type A-Automatic M-Manual	ETW	DPA	Ignition (PCM) Part No.	EGR System Part No.	Catalyst Part No.
358U R00A/N	Ranger 4x2 SC SWB	A4	3750 3875	11.2 12.3*	F37F-PA	E6AE-BA	F37A-HD/ F47A-FA
358T R00A/N	Ranger 4x4 RC LWB		3875 3875	12.4 13.6*	F37F-NA		
	RC SWB		3750 3875 4000	12.4 13.6* 12.4			
			4250	13.6*			

* with air conditioning

ENGINE FAMILY: RFM4.028G1EA ISSUED: JUL 1 4 1993 REVISED:

Manufacturer: FORD MOTOR COMPANY

Eng. Family: RFM4.028G1EA

Pass Car: __ (PC) Light-Duty Truck: T2 (T1/T2) Med-Duty Vehicle: ___ (M1/M2/M3/M4/M5)

Standards Type: T-1 (Tier 0/1,AB965,TLEV,LEV,ULEV) Vehicle Type: ___(FFV,HEV (type A/B/C)

Fuel Type: Gasoline

Evaporative Family: RFM1045AYP0A

Engine Config: V-6

Liter (CID): 4.0L (244)

Engine: Front X Mid. Rear Drive: FWD RWD X 4WD-FT 4WD-PT X

Exhaust ECS & Special Features: SFI/EGR/HO2S/TWC(2)

(Use abbreviations per SAE J1930, May 91)

Engine Code	Vehicle Models	Trans. Type A-Automatic M-Manual	ETW	DPA	Ignition (PCM) Part No.	EGR System Part No.	Catalyst Part No.
357R R00A/N	Explorer 4x2	M5			F37F-AGA	E6AE-BA	F37A-HD/
33711 71007014	2 Door SWB	,,,,	4000	11.3	,		F47A-FA
•	2 000, 01.5		4000	12.4*			
	4 Door LWB		4250	11.3			
	, 500. 25		4250	12.4*			
	Explorer 4x4				·		
	2 Door SWB		4250	12.0			
			4250	13.2*			
	4 Door LWB		4500	12.0			
			4500	13.2*			
357T R00A/N	Ranger 4x2				F37F-LA		
	SC SWB		3750	12.3*			
*	Ranger 4x4						
	RC LWB		3750	12.4			
			3750	13.6*			
	RC SWB		3750	13.6*			
	SC SWB		4000	12.4			
	4		4000	13.6*			

* with air conditioning

Manufacturer: FORD MOTOR COMPANY

Eng. Family: RFM4.028G1EA

Pass Car: __ (PC) Light-Duty Truck: T2 (T1/T2) Med-Duty Vehicle: __ (M1/M2/M3/M4/M5)

Standards Type: T-1 (Tier 0/1,AB965,TLEV,LEV,ULEV) Vehicle Type: __(FFV,HEV (type A/B/C)

Fuel Type: Gasoline

Evaporative Family: RFM1045AYP0A

Engine Config: V-6

Liter (CID): 4.0L (244)

Engine: Front X Mid. Rear___

Drive: FWD __ RWD X 4WD-FT __ 4WD-PT X

Exhaust ECS & Special Features: ___SFI/EGR/HO2S/TWC(2)

(Use abbreviations per SAE J1930, May 91)

Engine Code	Vehicle Models	Trans. Type A-Automatic M-Manual	ETW	DPA	Ignition (PCM) Part No.	EGR System Part No.	Catalyst Part No.
				•			
458U R10A/N	Ranger 4x2	A4			F47F-DDA	E6AE-BA	F37A-HD/
1000 11101 411	SC SWB	• • • •	3750	11.2			F47A-FA
	00 0110		3875	12.3*			
			00,0				
458T R10A/N	Ranger 4x4				F47F-DCA		
	RC LWB		3750	12.4			
			3875	13.6*			
	RC SWB		3750	12.4			
			3875	13.6*			
	SC SWB		4000	12.4			
			4000	13.6*			
	•		7000	13.0			

^{*} with air conditioning

Manufacturer: FORD MOTOR COMPANY Eng. Family: RFM4.028G1EA

Pass Car: __ (PC) Light-Duty Truck: T2 (T1/T2) Med-Duty Vehicle: __ (M1/M2/M3/M4/M5)

Standards Type: T-1 (Tier 0/1,AB965,TLEV,LEV,ULEV) Vehicle Type: ___(FFV,HEV (type A/B/C)

Fuel Type: Gasoline

Evaporative Family: <u>RFM1045AYP0A</u>

Engine Config: V-6

Liter (CID): 4.0L (244)

Engine: Front X Mid. Rear___ 8

Drive: FWD RWD X 4WD-FT 4WD-PT X

Exhaust ECS & Special Features: SFI/EGR/HO2S/TWC(2)

(Use abbreviations per SAE J1930, May 91)

Engine Code	Vehicle Models	Trans. Type A-Automatic M-Manual		DPA	Ignition (PCM) Part No.	EGR System Part No.	Catalyst Part No.
457R R10A/N	Explorer 4x2	M5			F47F-CTA	E6AE-BA	F37A-HD/
	2 Door SWB		4000	11.3			F47A-FA
			4000	12.4*			
	4 Door LWB		4250	11.3			
			4250	12.4*			
	Explorer 4x4						
	2 Door SWB		4250	12.0			
			4250	13.2*			
	4 Door LWB		4500	12.0			
	•		4500	13.2*			
457T R10A/N	Ranger 4x2				F47F-CJA		
	SC SWB		3750	12.3*			
	Ranger 4x4						
	RC LWB		3750	12.4			
			3750	13.6*		•	
	RC SWB		3750	13.6*			
	SC SWB		4000	12.4			
			4000	13.6*			

^{*} with air conditioning

Manufacturer: FORD MOTOR COMPANY

Eng. Family: RFM4.028G1EA

Pass Car: __ (PC) Light-Duty Truck: T2 (T1/T2)

Med-Duty Vehicle: ___ (M1/M2/M3/M4/M5)

Standards Type: T-1 (Tier 0/1,AB965,TLEV,LEV,ULEV) Vehicle Type: ___(FFV,HEV (type A/B/C)

Fuel Type: Gasoline

Evaporative Family: RFM1045AYP0A

Engine Config: V-6

Liter (CID): 4.0L (244)

Engine: Front X Mid. Rear___

Drive: FWD __ RWD X 4WD-FT __ 4WD-PT X

Exhaust ECS & Special Features: SFI/EGR/HO2S/TWC (2)

(Use abbreviations per SAE J1930, May 91)

Engine Code	Vehicle Models	Trans. Type A-Automatic M-Manual	ETW	DPA	Ignition (PCM) Part No.	EGR System Part No.	Catalyst Part No.
e <u>a.,</u>	· · · · · · · · · · · · · · · · · · ·						
358U R00A/N	Ranger 4x2	A4			F37F-PA	E6AE-BA/	F37A-HD/
·	SC SWB		3750	11.2		F37E-AA#	F47A-FA
			3875	12.3*			
358T R00A/N	Ranger 4x4				F37F-NA		
,	RC LWB		3875	12.4			
			3875	13.6*			
	RC SWB		3750	12.4			
			3875	13.6*			
	SC SWB		4000	12.4			
			4250	13.6*			

Last Character in Engine Code:

N = no A/CA = A/C

Vehicle Codes:

1st character:

R = regular
S = super
C = club

C = club

2nd character:

K = cabV = van

W = wagon

3rd character:
S = short

S = short L = long

* with air conditioning

ENGINE FAMILY: RFM4.028G1EA

ISSUED: 7-14-93 REVISED: 2-25-94# 20.09.17.02 - 1

Manufacturer: FORD MOTOR COMPANY

Eng. Family: RFM4.028G1EA

Pass Car: __ (PC) Light-Duty Truck: T2 (T1/T2)

Med-Duty Vehicle: ___ (M1/M2/M3/M4/M5)

Standards Type: T-1 (Tier 0/1,AB965,TLEV,LEV,ULEV) Vehicle Type: ___(FFV,HEV (type A/B/C)

Fuel Type: Gasoline

Evaporative Family: RFM1045AYP0A

Engine Config: V-6

Liter (CID): 4.0L (244)

Engine: Front X Mid. Rear___

Drive: FWD RWD X 4WD-FT 4WD-PT X

SFI/EGR/HÖ2S/TWC(L) Exhaust ECS & Special Features:

(Use abbreviations per SAE J1930, May 91)

Engine Code	Vehicle Models	A-Automatic	ETW	DPA	Ignition (PCM)	EGR System	Catalyst
		M-Manual			Part No.	Part No.	Part No.
357R R00A/N	Explorer 4x2	M5			F37F-AGA	E6AE-BA/	F37A-HD/
	2 Door SWB		4000 4000	11.3 12.4*		F37E-AA#	F47A-FA
	4 Door LWB		4250 4250	11.3 12.4*			
	Explorer 4x4						
	2 Door SWB		4250	12.0			
	4 Door LWB		4250 4500 4500	13.2* 12.0 13.2*			
357T R00A/N	Ranger 4x2 SC SWB		3750	12.3*	F37F-LA		
	Ranger 4x4						
	RC LWB		3750 3750	12.4 13.6*			Last Character in Engine Code:
	RC SWB		3750 4000	13.6* 12.4			N = no A/C
	SC SWB		4000	13.6*			A = A/C
							Vehicle Codes:

* with air conditioning

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S = super C = club 2nd character:

K = cab $\hat{V} = van$ W = wagon

1st character: R = regular

3rd character: S = short L = long

ENGINE FAMILY: RFM4.028G1EA

ISSUED: 7-14-93 REVISED: 2-25-94#

Manufacturer: FORD MOTOR COMPANY

Eng. Family: RFM4.028G1EA

Pass Car: __ (PC) Light-Duty Truck: T2 (T1/T2)

Med-Duty Vehicle: ___(M1/M2/M3/M4/M5)

Standards Type: T-1 (Tier 0/1,AB965,TLEV,LEV,ULEV) Vehicle Type: ___(FFV,HEV (type A/B/C)

Fuel Type: Gasoline

Evaporative Family: _RFM1045AYP0A_

Engine Config: V-6

Liter (CID): 4.0L (244)

Engine: Front X Mid. Rear

Drive: FWD __ RWD X 4WD-FT __ 4WD-PT X

SFI/EGR/HO2S/TWC(2) Exhaust ECS & Special Features: _

(Use abbreviations per SAE J1930, May 91)

Engine Code	Vehicle Models	Trans. Type A-Automatic M-Manual	ETW	DPA	Ignition (PCM) Part No.	System Part No.	Part No.
458U R10A/N	Ranger 4x2 SC SWB	A4	3750 3750#	11.2 #12.3*	F47F-DDA	E6AE-BA/ F37E-AA\$	F37A-HD/ F47A-FA
458T R10A/N	Ranger 4x4 RC LWB RC SWB SC SWB			13.6* 12.4	F47F-DCA		Last Character in Engine Code:
							N = no A/C A = A/C

Vehicle Codes:

lst character:
 R = regular

S = super C = club

2nd character:

K = cabV = van

W = wagon

3rd character:
 S = short
 L = long

* with air conditioning # R/C 4.0-124

ENGINE FAMILY: RFM4.028G1EA ISSUED: 9-2-93 REVISED: 2-9-94 | 2-25-94\$ 20.09.17.02 - 3

R/C 4.0-103

Manufacturer: FORD MOTOR COMPANY

Eng. Family: RFM4.028G1EA

Pass Car: __ (PC) Light-Duty Truck: T2 (T1/T2) Med-Duty Vehicle: __ (M1/M2/M3/M4/M5)

Standards Type: T-1 (Tier 0/1,AB965,TLEV,LEV,ULEV) Vehicle Type: ___(FFV,HEV (type A/B/C)

Fuel Type: Gasoline

Evaporative Family: <u>RFM1045AYP0A</u>

Engine Config: V-6

Liter (CID): 4.0L (244)

Engine: Front X Mid. Rear___

Drive: FWD __ RWD X 4WD-FT __ 4WD-PT X

Exhaust ECS & Special Features: SFI/EGR/HO2S/TWC(L)

(Use abbreviations per SAE J1930, May 91)

Engine Code	Vehicle Models	Trans. Type A-Automatic M-Manual	ETW	DPA	Ignition (PCM) Part No.	EGR System Part No.	Catalyst Part No.
457R R10A/N	Explorer 4x2	M5			F47F-CTA	E6AE-BA/	F37A-HD/
4071111107411	2 Door SWB	****	4000	11.3		F37E-AA#	F47A-FA
			4000	12.4*			
	4 Door LWB		4250	11.3			
			4250	12.4*			
	Explorer 4x4						
	2 Door SWB		4250	12.0			
			4250	13.2*			
	4 Door LWB		4500	12.0			
			4500	13.2*		-	Last Character in Engine Code:
457T R10A/N	Ranger 4x2				F47F-CJA		N = no A/C
4071 11101911	SC SWB		3750	12.3*			A = A/C
	Ranger 4x4						
	RC LWB		3750	12.4			Vehicle Codes:
			3750	13.6*			
	RC SWB		3750	13.6*			1st character:
	SC SWB		4000	12.4			R = regular S = super
			4000	13.6*			C = club
							<pre>2nd character: K = cab</pre>
							v = van
							W = wagon
air conditioning							3rd character: S = short L = long

ENGINE FAMILY: RFM4.028G1EA

ISSUED: 9-2-93 REVISED: 2-25-94#

* with