

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-657  
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

Engine Family: TFM3.028G1FK Displacement: 3.0 Liters (183 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Three Way Catalytic Converters (two)  
Dual Heated Oxygen Sensors  
Heated Oxygen Sensor  
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>Loaded Vehicle Weight(lbs.)</u>	<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Carbon 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:

<u>Loaded Vehicle Weight(lbs.)</u>	<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Carbon Monoxide (20°F)</u>
3751-5750	50,000	0.14	1.0	0.2	4.5
	100,000	0.17	1.0	0.23	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 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).

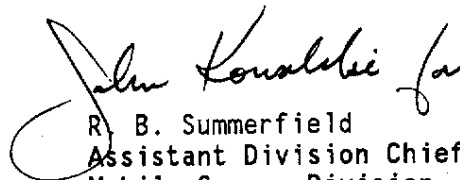
BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned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

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 1<sup>st</sup> day of August 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: TFM3.028G1FK  
 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 X Alt In Use\_\_\_  
 Veh Class(es): PC\_\_\_ LDT1\_\_\_ LDT2 X 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)\_\_\_  
 Hybrid: Type A\_\_\_ B\_\_\_ C\_\_\_, APU Cycle (eg., Otto, Diesel, Turbine)\_\_\_  
 Engine Config V-6 Displacement: 3.0L (183) Liters (Cubic Inches)  
 Valves/Cyl: 2 Rated HP: 140 @ 5000 RPM  
 Engine: Front X Mid\_\_\_ Rear\_\_\_ Drive: Fwd\_\_\_ RWD X 4WD-FT\_\_\_ 4WD-PT X  
 Exhaust Control System and Special Features TWO(2)SFI, 2HO2S, EGR, HO2S  
 (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.
556SR15A/N	Ranger/Mazda 4x2 <u>B3000</u>	A4			F57F-CJA	F37E-CA F3DE-AA E6AE-BA	F57A-ED
	SC SWB		3750	11.2			
	SC SWB		3750	12.3*			
556RR15A/N	Ranger/Mazda 4x4	A4			F57F-CLA	"	"
	RC LWB		3875	12.0			
	RC SWB		3875	12.0			
	RC LWB		3875	13.2*			
	RC SWB		3875	13.2*			
	SC SWB		4000	12.0			
	SC SWB (Mazda only)		4000	13.2*			
	SC SWB (Ranger only)		4250	13.2*			

\* with air conditioning

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 EXHAUST/EVAPORATIVE SYSTEM & CALIFORNIA REQUIREMENTS  
 PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. FORD MOTOR COMPANY Exhaust Engine Family: TFM3\_028G1FK  
 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\_\_\_ LDT2 X 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 (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 V-6 Displacement: 3.0L (183) Liters (Cubic Inches)  
 Valves/Cyl: 2 Rated HP: 140 @ 5000 RPM  
 Engine: Front X Mid\_\_\_ Rear\_\_\_ Drive: Fwd\_\_\_ RWD X 4WD-FT\_\_\_ 4WD-PT X  
 Exhaust Control System and Special Features TWC(2),SFI,2HO2S, EGR, H025  
 (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.
556SR15A/N	Ranger/Mazda 4x2	A4			F57F-CJA	F37E-CA F3DE-AA E6AE-BA	F57A-ED
	SC SWB		3750	11.2			
	SC SWB		3750	12.3*			
556RR15A/N	Ranger/Mazda 4x4	A4			F57F-CLA	"	"
	RC LWB		3875	12.0			
	RC SWB (Ranger only)		3750	12.0			
	RC SWB (Mazda only)		3875	12.0			
	RC LWB		3875	13.2*			
	RC SWB		3875	13.2*			
	SC SWB		4000	12.0			
	SC SWB		4000	13.2*			

\* with air conditioning

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EXHAUST/EVAPORATIVE SYSTEM & CALIFORNIA REQUIREMENTS  
PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. FORD MOTOR COMPANY Exhaust Engine Family: TFM3.028G1FK  
 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     LDT2 X 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 (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 V-6 Displacement: 3.0L (183) Liters (Cubic Inches)  
 Valves/Cyl: 2 Rated HP: 140 @ 5000 RPM  
 Engine: Front X Mid     Rear     Drive: Fwd     RWD X 4WD-FT     4WD-PT X  
 Exhaust Control System and Special Features TWC(S), SFI, 2HO2S, EGR, HO2S  
 (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.
656SR10A/N	Ranger/Mazda 4x2	A4			F57F-CJB	F37E-CA F3DE-AA E6AE-BA	F57A-ED
	SC SWB		3750	11.2			
	SC SWB		3750	12.3*			
656RR10A/N	Ranger/Mazda 4x4	A4			F57F-CLB	"	"
	RC LWB		3875	12.0			
	RC SWB (Ranger only)		3750	12.0			
	RC SWB (Mazda only)		3875	12.0			
	RC LWB		3875	13.2*			
	RC SWB		3875	13.2*			
	SC SWB		4000	12.0			
	SC SWB		4000	13.2*			

\* with air conditioning

ENGINE FAMILY: SFM3.028G1FK  
ISSUED: 10-13-95  
REVISED:

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 EXHAUST/EVAPORATIVE SYSTEM & CALIFORNIA REQUIREMENTS  
 PASSENGER CARS, LIGHT-DUTY AND MEDIUM-DUTY TRUCKS

Mfgr. FORD MOTOR COMPANY Exhaust Engine Family: TFM3.028G1FK  
 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\_\_\_ LDT2 X 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 (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 V-6 Displacement: 3.0L (183) Liters (Cubic Inches)  
 Valves/Cyl: 2 Rated HP: 140 @ 5000 RPM  
 Engine: Front X Mid\_\_\_ Rear\_\_\_ Drive: Fwd\_\_\_ RWD X 4WD-FT\_\_\_ 4WD-PT X  
 Exhaust Control System and Special Features TWC(2), SFI, 2HO2S, EGR, HO2S

(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.
655SR10A/N	Ranger/Mazda 4x2	M5			F57F-CHB	F37E-CA F3DE-AA E6AE-BA	F57A-ED
	SC SWB		3750	12.3*			
655RR10A/N	Ranger/Mazda 4x4	M5			F57F-CGB	"	"
	RC LWB		3750	12.0			
	RC SWB		3750	12.0			
	RC LWB		3875	13.2*			
	RC SWB (Mazda only)		3875	13.2*			
	RC SWB (Ranger only)		3750	13.2*			
	SC SWB		4000	12.0			
	SC SWB		4000	13.2*			

\* with air conditioning





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 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\_\_\_ LDT2 X 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 (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 V-6 Displacement: 3.0L (183) Liters (Cubic Inches)  
 Valves/Cyl: 2 Rated HP: 140 @ 5000 RPM  
 Engine: Front X Mid\_\_\_ Rear\_\_\_ Drive: Fwd\_\_\_ RWD X 4WD-FT\_\_\_ 4WD-PT X  
 Exhaust Control System and Special Features TWC(2), SFI, 2HO2S, EGR, HO2S  
 (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.
655SR11A/N	Ranger/Mazda 4x2	M5			F57F-CHC	F37E-CA F3DE-AA E6AE-BA	F57A-ED
	SC SWB		3750	12.3*			
655RR11A/N	Ranger/Mazda 4x4	M5			F57F-CGC	"	"
	RC LWB		3750	12.0			
	RC SWB		3750	12.0			
	RC LWB		3875	13.2*			
	RC SWB (Mazda only)		3875	13.2*			
	RC SWB (Ranger only)		3750	13.2*			
	SC SWB		4000	12.0			
	SC SWB		4000	13.2*			

\* with air conditioning

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