

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-346  
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 1988 model-year Ford Motor Company emission control systems are certified as described below for gasoline-powered light-duty trucks and medium-duty vehicles:

<u>Engine Family</u>	<u>Displacement Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems (Special Features)</u>
JFM5.8T5HAC3	5.0	(302)	Air Injection - Pump Exhaust Gas Recirculation Three-Way Catalyst Oxidation Catalyst Oxygen Sensor (Electronic Port Fuel Injection) (On-Board Diagnostics)
	5.8	(351)	

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the emission standards for this engine family:

<u>Loaded Vehicle Weight</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
3751-5750	0.50	9.0	1.0

The following are the certification emission values for this engine family:

<u>Loaded Vehicle Weight</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
3751-5750	0.35	5.1	0.8

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered 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" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards 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 Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle models listed in Attachment A also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s] ..." (Title 13, California Administrative Code, Section 1968) 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 regulations (Title 13, California Administrative Code, 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 23<sup>rd</sup> day of July, 1987.

  
K. D. Drachand, Chief  
Mobile Source Division

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

E.O. # A-10-346

Page 1

manufacturer Ford Motor Company Engine Family JFM5.8T5HAC3  
 Evaporative Family BHM Engine Type V-8  
 Liters (CID) 5.0L (302) 5.8L (351)

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance  
 ECU-Electronic Control Unit  
 EI-Electronic Ignition  
 ESAC-Electronic Spark Advance Control  
 VA-Vacuum Advance  
 VR-Vacuum Retard

Fuel System

CFI, CL, DID, DIP, EFI, MFI  
 nV-nVenturi Carburetor

Exhaust Emissions Control System

AIP-Air Injection-Pump  
 AIV-Air Injection-Valve  
 DBC-Dual Bed Catalyst  
 EGR-Exhaust Gas Recirculation  
 EIC-Electronic Injection Control  
 EM-Engine Modification  
 OC-Oxidation Catalyst  
 OS-Oxygen Sensor  
 HOS-Heated Oxygen Sensor  
 SPL-Smoke Puff Limiter or Throttle Delay  
 TOC-Trap Oxidizer, Continual  
 TOP-Trap Oxidizer, Periodical  
 TWC-Three-Way Catalyst  
 WUOC-Warm-Up Oxidation Catalyst  
 WUTWC-Warm-Up Three-Way Catalyt

Special Features

CCV-Combustion Chamber Valve  
 CFI-Central Fuel Injection or Throttle Body Injection  
 DID-Diesel Injection-Direct  
 DIP-Diesel Injection-Prechamber  
 EFI-Electronic Fuel Injection  
 IC-Intercooler or Aftercooler  
 MFI-Mechanical Fuel Injection  
 OBD-On-Board Diagnostics  
 TC-Turbocharger

VEHICLE MODELS:

see attached pages

Engine: Front x Mid. \_\_\_\_\_ Rear \_\_\_\_\_  
 Drive: FWD \_\_\_\_\_ RWD x 4WD Full Time \_\_\_\_\_ 4WD Part Time x

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEETPassenger Cars      Light-Duty Trucks X Medium-Duty Vehicles X Gas X Diesel     Manufacturer FORD MOTOR COMPANY Engine Family JFM5.8T5HAC3Liter (CID) 5.0L (302) 5.8L (351) Eng. Type V-8Emission Control Sys. and (Special Features) AIP/EGR/TWC/HOS/OC (EFI)

Engine Code (5.0L)	Vehicle Models	Trans. Type	Equiv. Test Weight	Ign. System (ECU)	Fuel System EFI	EGR Valve	Catalyst
				Part No.	Part No.	Part No.	Part No.
		L4		-12A650-	-9F593-	-9F483-	-5F250-
754SR11A/N	F150 4x2 RC SWB LWB SC SWB LWB F250 4x2 RC LWB	AOX071	4250 4250 4500* 4750 4750 4750	E8TF-GA	E5TE-AB or E5TE-BB	E7TE-FA	E8TA-LA
754RR11A/N	F150 4x4 RC SWB LWB SC SWB LWB F250 4x4 RC LWB Bronco	AOX071 AOX076 AOX076 AOX076 AOX071	4750 4750 5000 5000 5250* 5000 5000 5250*	E8TF-EA	E5TE-AB or E5TE-BB	E7TE-FA	E8TA-MA

Comments: See Page One for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

\*with A/C

Date of Issue \_\_\_\_\_

Revisions:

19 88 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars        Light-Duty Trucks X Medium-Duty Vehicles X Gas X Diesel         
 Manufacturer FORD MOTOR COMPANY Engine Family JFM5.8T5HAC3  
 Liter (CID) 5.0L (302) 5.8L (351) Eng. Type V-8  
 Emission Control Sys. and (Special Features) AIP/EGR/TWC/HOS/OC (EFI)

Engine Code (5.0L)	Vehicle Models	Trans. Type	Equiv. Test Weight	Ign. System (ECU) = Part No. -12A650-	Fuel System EFI Part No. -9F593-	EGR Valve Part No. -9F483-	Catalyst Part No. -5F250-
754TR12A/N	E150 Van RV SWB RV LWB SV LWB E150 Bus CW LWB E250 Van RV LWB SV LWB	AOX071	4500 4750* 4750 5000* 5000 5250 5250 5250 5500*	E8FF-AHB	E5TE-AB or E5TE-BB	E7TE-FA	E8VA-NA

Comments: See Page One for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

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1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars \_\_\_\_\_ light-Duty Trucks X Medium-Duty Vehicles X Gas X Diesel \_\_\_\_\_

Manufacturer Ford Motor Company Engine Family JFM5,8T5HAC3

Liter (CID) 5.8L (351 CID) Eng. Type V-8

Emission Control Sys. (Special Features) AIP/EGR/TWC/HOS/OC (EFI)

Engine Code	Vehicle Models (If Coded see attachment)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No. -12A650-	Fuel System EFI Part No. -9F593-	EGR Valve Part No. -9F483-	Catalyst Part No. -5F250-
864SR00A/N	F-150 4x2 RC SWB LWB	C6-036	4500 4500/ 4750#	E8TF-APA	E5TE-BB	E8TE-AA	E8TA-PA
	SC SWB LWB		4750 5000*				
	F-250 4x2 RC LWB	C6-037	4750				
	F-150 4x4 RC SWB LWB	C6-036	4750 5000				
	F-250 4x4 RC LWB	C6-037	5250				
	Bronco	C6-036	5250				

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

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Revisions: # R/C 5.8-130 (4-5-88)

## 1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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Engine Code	Vehicle Models (If Coded see attachment)	Trans. Type	Equiv. Test Weight	Ign. System (ECU)	Fuel System EFI	EGR Valve	Catalyst	
				Part No. -12A650-	Part No. -9F593-	Part No. -9F483-	Part No. -5F250-	
864RR00A/N	F-150 4x2 RC SWB LWB	C6-037	4500 4500/ 4750#	E8TF-ALA	ESTE-BB	ESTE-AA	E8TA-PA	
	SC SWB LWB		4750 5000* 5000					
	F-250 4x2 RC LWB		4750					
	F-150 4x4 RC SWB LWB		4750 5000					
	SC SWB LWB		5250/ 5000# 5250					
	F-250 4x4 RC LWB		5250					
	Bronco		5250					E8TA-RA

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

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Engine Code	Vehicle Models (If Coded see attachment)	Trans. Type	Equiv. Test Weight	Ign. System (ECU)	Fuel System EFI	EGR Valve	Catalyst
				Part No. -12A650-	Part No. -9F593-	Part No. -9F483-	Part No. -5F250-
864SR00A/N	E-150 Van RV LWB	C6-036	5000	E8TF-APA	E5TE-BB	E8TE-AA	E8UA-SA
	SV LWB		5250*/ 5000#				
	E-150 Bus CW LWB		5250 5500*/ 5250#				
	E-250 Van RV LWB	C6-037	5250				
	SV LWB		5500*				
			5250				

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

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Passenger Cars \_\_\_\_\_ light-Duty Trucks X Medium-Duty Vehicles X Gas X Diesel \_\_\_\_\_

Manufacturer Ford Motor Company Engine Family JFM5.8T5HAC3

Liter (CID) 5.8L (351 CID) Eng. Type V-8

Emission Control Sys. (Special Features) AIP/EGR/TWC/HOS/OC (EFI)

Engine Code	Vehicle Models (If Coded see attachment)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System EFI Part No.	EGR Valve Part No.	Catalyst Part No.
		A3		-12A650-	-9F593-	-9F483-	-5F250-
864RR00A/N	E-150 Van RV LWB  SV LWB  E-150 Bus CW LWB  E-250 Van RV LWB  SV LWB	C6-037	5000 5250*/ 5000# 5250 5500*/ 5250#  5250 5500*  5250 5500* 5500/ 5250#	E8TF-ALA	E5TE-BB	E8TE-AA	E8TA-SA

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

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Engine Code	Vehicle Models (If Coded see attachment)	Trans. Type	Equiv. Test Weight	Ign. System (ECU)	Fuel System EFI	EGR Valve	Catalyst
				Part No. -12A650-	Part No. -9F593-	Part No. -9F483-	Part No. -5F250-
864SR10A/N	F-150 4x2 RC SWB LWB	C6-036	4500	E8TF-APB	E5TE-BB	E8TE-AA	E8TA-PA
			4500/ 4750#				
	SC SWB	4750					
	LWB	5000*					
		5000					
	F-250 4x2 RC LWB	C6-037	4750				
	F-150 4x4 RC SWB LWB	C6-036	4750 5000				
F-250 4x4 RC LWB	C6-037	5250					
Bronco	C6-036	5250	E8TA-RA				

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Engine Code	Vehicle Models (If Coded see attachment)	Trans. Type	Equiv. Test Weight	Ign. System (ECU)	Fuel System EFI	EGR Valve	Catalyst
				Part No. -12A650-	Part No. -9F593-	Part No. -9F483-	Part No. -5F250-
864RR10A/N	F-150 4x2 RC SWB LWB	A3	C6-037	E8TF-ALB	E5TE-BB	E8TE-AA	E8TA-PA
	SC SWB LWB						
	F-250 4x2 RC LWB						
	F-150 4x4 RC SWB LWB SC SWB LWB						
	F-250 4x4 RC LWB						
	Bronco						
	E8TA-RA						

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

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				Part No. -12A650-	Part No. -9F593-	Part No. -9F483-	Part No. -5F250-
864SR10A/N	E-150 Van RV LWB	C6-036	5000	E8TF-APB	E5TE-BB	E8TE-AA	E8UA-SA
			5250*/				
			5000#				
	SV LWB	5250					
		5500*/					
		5250#					
E-150 Bus CW LWB		5250					
		5500*					
E-250 Van RV LWB	C6-037	5250					
		5500*					
SV LWB		5500/ 5250#					

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

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Passenger Cars \_\_\_\_\_ light-Duty Trucks X Medium-Duty Vehicles X Gas X Diesel \_\_\_\_\_

Manufacturer Ford Motor Company Engine Family JFM5.8T5HAC3

Liter (CID) 5.8L (351 CID) Eng. Type V-8

Emission Control Sys. (Special Features) AIP/EGR/TWC/HOS/OC (EFI)

Engine Code	Vehicle Models (If Coded see attachment)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System EFI Part No.	EGR Valve Part No.	Catalyst Part No.
		A3		-12A650-	-9F593-	-9F483-	-5F250-
864RR10A/N	E-150 Van RV LWB  SV LWB  E-150 Bus CW LWB  E-250 Van RV LWB  SV LWB	C6-037	5000 5250*/ 5000# 5250 5500*/ 5250#  5250 5500*  5250 5500* 5500/ 5250#	E8TF-ALB	E5TE-BB	E8TE-AA	E8TA-SA

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