

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-384
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 1989 model-year Ford Motor Company exhaust emission control systems are certified as described below for gasoline-powered light-duty trucks and medium-duty vehicles:

<u>Engine Family</u>	<u>Displacement</u> <u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems</u> <u>(Special Features)</u>
KFM5.8T5HAC4	5.8	(351)	Air Injection - Pump Exhaust Gas Recirculation Heated Oxygen Sensor Oxidation Catalyst Three-Way Catalyst (Electronic Port Fuel Injection) On-Board Diagnostics (Exempted)
	5.0	(302)	

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</u> <u>Weight (lbs.)</u>	<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(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</u> <u>Weight (lbs.)</u>	<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
3751-5750	0.23	3.4	0.6

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.

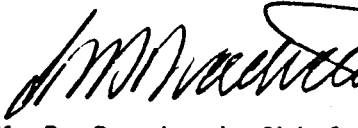
BE IT FURTHER RESOLVED: That the vehicle models listed have been granted an exemption from compliance with the requirements of the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Administrative Code, Section 1968) for the aforementioned model year.

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 19th day of July, 1988.


K. D. Drachand, Chief
Mobile Source Division

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Page 1

Manufacturer Ford Motor Company Engine Family K5.8TAC (KFM5.8T5HAC4)
 Evaporative Family 9HM Engine Type V8
 Liters (CID) 5.0 (302)/5.8 (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

Exhaust Emissions Control System

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

Special Features

CFI-Central Fuel Injection or Throttle Body Injection
 EPFI-Electronic Port Fuel Injection
 MPFI-Mechanical Port Fuel Injection
 SFI-Sequential Fuel Injection
 DID-Diesel Injection-Direct
 DIP-Diesel Injection-Prechamber
 TC-Turbocharger
 SC-Supercharger
 IC-Intercooler or Aftercooler
 CCV-Combustion Chamber Valve
 OBD-On-Board Diagnostics

Fuel System

CFI, EPFI, MPFI, SFI, DID, DIP, HOS, OS
 nV-nVenturi Carburetor
 VV-Variable Venturi Carburetor

VEHICLE MODELS:

F150 4x2/4x4 E150
 RCS, RCL, SCS, SCL RVS, RVL, SVL, CWL
 F250 4x2/4x4 E250
 RCL RVL, SVL

Bronco 4x4

Engine: Front X Mid Rear
 Drive: FWD RWD X 4WD Full Time 4WD Part Time X

1989 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 K5.8TAC (KFM5.8T5HAC4)Liter (CID) 5.0 (302) Eng. Type V8Emission Control Sys. (Special Features) AIP, EGR, OC, TWC, HOS (EPFI, OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) (EEC IV) Part No. -12A650-	Fuel System (EPFI) Part No. -9F593-	EGR Valve (Sonic) Part No. -9F483-	Catalyst (OC, TWC) Part No. -5F250-
754SR11A/N	F150 4x2 RCS, RCL SCS SCL F250 4x2 RCL	L4	4500 4750 4750/ 5000* 4750	E8TF-GA	E5TE-AB	E7TE-FA	E8TA-LB

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 air conditioning

Date of Issue: JUN 27 1988

Revisions:

1989 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 K5.8TAC (KFM5.8T5HAC4)

Liter (CID) 5.0 (302) Eng. Type V8

Emission Control Sys. (Special Features) AIP, EGR, OC, TWC, HOS (EPFI, OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) (EEC IV) Part No. -12A650-	Fuel System (EPFI) Part No. -9F593-	EGR Valve (Sonic) Part No. -9F483-	Catalyst (OC,TWC) Part No. -5F250-
754RR11A/N	F150 4x4 RCS, RCL SCS, SCL F250 4x4 RCL Bronco 4x4	L4	4750 5000	E8TF-EA	E5TE-AB	E7TE-FA	E8TA-LB 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 air conditioning

Date of Issue: JUN 27 1988

Revisions:

1989 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 K5.8TAC (KFM5.8T5HAC4)

Liter (CID) 5.0 (302) Eng. Type V8

Emission Control Sys. (Special Features) AIP, EGR, OC, TWC, HOS (EPFI, OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) (EEC IV) Part No. -12A650-	Fuel System (EPFI) Part No. -9F593-	EGR Valve (Sonic) Part No. -9F483-	Catalyst (OC,TWC) Part No. -5F250-
754TR12A/N	E150 RVS RVL SVL, CWL E250 RVL SVL	L4	4250/ 4500* 4750/ 5000* 5000/ 5250* 5000/ 5250* 5250	E8TF-AHB	E5TE-AB	E7TE-FA	E8UA-NA 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 air conditioning

Date of Issue: JUN 27 1988

Revisions:

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

E.O. # A-10-384

Page 5

Passenger Cars _____ light-Duty Trucks X Medium-Duty Vehicles X Gas X Diesel _____

Manufacturer Ford Motor Company Engine Family K5.8TAC (KFM5.8T5HAC4)

Liter (CID) 5.8 (351) Eng. Type V8

Emission Control Sys. (Special Features) AIP, EGR, OC, TWC, HOS (EPFI, OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) (EEC IV) Part No. -12A650-	Fuel System (EPFI) Part No. -9F593-	EGR Valve (Sonic) Part No. -9F483-	Catalyst (OC,TWC) Part No. -5F250-	
964RR00A/N	F150 4x2	A3		E8TF-ALB	E5TE-AB/ E5TE-BB	E8TE-AA	E8TA-PC	
	RCS		4500					
	RCL		4750					
	SCS		4750/ 5000*					
	SCL		5000					
	F150 4x4							
	RCS		4750					
	RCL		5000					
	SCS							
	SCL		5250					
	F250 4x2							
	RCL		4750/ 5000*					
	F250 4x4							
	RCL		5000/ 5250*					
	Bronco 4x4		5250					
	E150							
	RVL		4750/ 5000*					
	SVL		5000/ 5250*					
CWL	5250							
E250								
RVL	5250							
SVL	5250/ 5500*							

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 air conditioning

Date of Issue: JUN 27 1988
Revisions:

1989 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 K5.8TAC (KFM5.8T5HAC4)

Liter (CID) 5.8 (351) Eng. Type V8

Emission Control Sys. (Special Features) AIP, EGR, OC, TWC, HOS (EPFI, OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) (EEC IV) Part No. -12A650-	Fuel System (EPFI) Part No. -9F593-	EGR Valve (Sonic) Part No. -9F483-	Catalyst (OC, TWC) Part No. -5F250-	
964RR10A/N	F150 4x2	A3		E9TF-AAA	E5TE-AB/ E5TE-BB	E8TE-AA	E8TA-PC	
	RCS		4500					
	RCL		4750					
	SCS		4750/ 5000*					
	SCL		5000					
	F150 4x4							
	RCS		4750					
	RCL		5000					
	SCS							
	SCL		5250					
	F250 4x2							
	RCL		4750/ 5000*					
	F250 4x4							
	RCL		5000/ 5250*					
	Bronco 4x4		5250					E8TA-RB
	E150							E8UA-SB
	RVL		4750/ 5000*					
	SVL		5000/ 5250*					
CWL	5250							
E250								
RVL	5250							
SVL	5250/ 5500*							

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 air conditioning

Date of Issue: JUN 27 1988

Remarks:

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

E.O. # A-10-34

Page 7

Passenger Cars light-Duty Trucks Medium-Duty Vehicles Gas Diesel

Manufacturer Ford Motor Company Engine Family K5.8TAC (KFM5.8T5HAC4)

Liter (CID) 5.8 (351) Eng. Type V8

Emission Control Sys. (Special Features) AIP, EGR, OC, TWC, HOS (EPFI, OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) (EEC IV) Part No. -12A650-	Fuel System (EPFI) Part No. -9F593-	EGR Valve (Sonic) Part No. -9F483-	Catalyst (OC,TWC) Part No. -5F250-
964SR00A/N	F150 4x2	A3		E8TF-APB	E5TE-AB/ E5TE-BB	E8TE-AA	E8TA-PC
	RCS		4500				
	RCL		4750				
	SCS		4750/ 5000*				
	SCL		5000				
	F150 4x4						
	RCS		4750				
	RCL		5000				
	SCS						
	SCL		5250				
	F250 4x2						
	RCL		4750/ 5000*				
	F250 4x4						
	RCL		5000/ 5250*				
	Bronco 4x4		5250				
	E150						
	RVL		4750/ 5000*				
	SVL		5000/ 5250*				
CWL	5250						
E250							
RVL	5250						
SVL	5250/ 5500*						
							E8TA-RB E8UA-SB

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 air conditioning

Issue: JUN 27 1988

ons:

1989 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 K5.8TAC (KFM5.8T5HAC4)

Liter (CID) 5.8 (351) Eng. Type V8

Emission Control Sys. (Special Features) AIP, EGR, OC, TWC, HOS (EPFI, OBD)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) (EEC IV) Part No. -12A650-	Fuel System (EPFI) Part No. -9F593-	EGR Valve (Sonic) Part No. -9F483-	Catalyst (OC, TWC) Part No. -5F250-
964SR10A/N R11A/N#	F150 4x2	A3		E9TF-ACA/ E9TF-ACB#	E5TE-AB/ E5TE-BB	E8TE-AA	E8TA-PC
	RCS		4500				
	RCL		4750				
	SCS		4750/ 5000*				
	SCL		5000				
	F150 4x4						
	RCS		4750				
	RCL		5000				
	SCS						
	SCL		5250				
	F250 4x2						
	RCL		4750/ 5000*				
	F250 4x4						
	RCL		5250\$				
	Bronco 4x4						
	E150		5250				
	RVL		4750/ 5000*				
	SVL		5000/ 5250*				
CWL	5250						
E250							
RVL	5250						
SVL	5250/ 5500*						
						E8TA-RB E8UA-SB	

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 air conditioning

Date Issue: 6-27-88
Revisions: # 7-27-88 (R/C 5.8-101)
 \$ 9-30-88 (R/C 5.8-105)