State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-23-73
Relating to Certification of New Motor Vehicles

HONDA MOTOR CO., LTD.

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 Honda Motor Co., Ltd. exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family	Displacement Liters (Cubic Inches)	Exhaust Emission Control Systems (Special Features)
KHN2.0V5FPCX	2.0 (119)	Oxygen Sensor Exhaust Gas Recirculation Three-Way Catalyst On-Board Diagnostics (Exempted) (Electronic Port Fuel Injection)

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

The following are the emission standards for this engine family:

Hydrocarbons (Grams per Mile)	Carbon Monoxide (Grams per Mile)	Nitrogen Oxides (Grams per Mile)
0.39	7.0	0.4

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

Hydrocarbons (Grams per Mile)	Carbon Monoxide (Grams per Mile)	Nitrogen Oxides (Grams per Mile)
0.20	2.4	0.3

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 8th day of August, 1988.

K. D. Drachand, Chief
Mobile Source Division

E.O. # A-23-73

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer HONDA

Engine Family KHN2.0V5FPCX

Evaporative Family 89FG

Engine Type I - 4

Liters (CID) 2.0 (119)

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

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

VEHICLE MODELS:

Accord HB LXi
Accord Sedan LXi
Accord 2 Dr Coupe LXi
Accord Sedan SEi

Engine : Front X Mid. ____ Rear ____

Drive : FWD X RWD ____ 4WD Full Time ____ 4WD Part Time ____

E.O. # A-23-73

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars X Light-Duty Trucks ___ Medium-Duty Vehicles ___ Gas X Diesel ___

Manufacturer HONDA Engine Family KHN2.0V5FPCX

Liter (CID) 2.0 (119) Engine Type I - 4

Emission Control Sys. (Special Features) OS, EGR, TWC, (EPFI) (OBD Exempt)

Engine Code	Vehicle Models (If Coded see attachment) *(Dyno HP)	Trans. Type	Equiv. Test Weight	Ign. System Part No. (Vendor's)	Fuel System Part No. (Vendor's)	EGR Valve Part No. (Vendor's)	Catalyst Part No. (Vendor's)
KP1/1	Accord HB LXi Accord Sedan LXi Accord 2 Dr Coupe LXi Accord Sedan SEi	M5	3000	EI, CA & VA Toyo Denso Distributor: 30100-PJ0 -A131 (TD-10N)	EPFI ECU 37820-PJ0 -L010 (37820-PJ0 -L01)	18710-PH3 -0150(10J)	18150-PJ0 -L011(HCU)
KP3/1	Accord HB LXi Accord Sedan LXi Accord 2 Dr Coupe LXi	L4	3000				
	Accord Sedan SEi		3125				

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. Add 10% to dyno test HP for air conditioning usage.

*: Please refer to page 08-1.1 in 1989 Application.

Date of Issued 05/31/88 Revisions:

E.O. # A-23-73

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars X Light-Duty Trucks ___ Medium-Duty Vehicles ___ Gas X Diesel ___

Manufacturer HONDA Engine Family KHN2.0V5FPCX

Liter (CID) 2.0 (119) Engine Type I - 4

Emission Control Sys. (Special Features) OS, EGR, TWC, (EPFI)

Engine Code	Vehicle Models (If Coded see attachment) *(Dyno HP)	Trans. Type	Equiv. Test Weight	Ign. System Part No. (Vendor's)	Fuel System Part No. (Vendor's)	EGR Valve Part No. (Vendor's)	Catalyst Part No. (Vendor's)
KP1/1 -19	Accord HB LXi Accord Sedan LXi Accord 2 Dr Coupe LXi Accord Sedan SEi Accord 2 Dr Coupe SEi	M5	3000	EI, CA & VA Toyo Denso Distributor: 30100-PJ0 -A040 (TD-09N)	EPFI ECU 37820-PJ0 -L022 (37820-PJ0 -L022)	18710-PH3 -0150(10J)	18150-PJ0 -L011(HCU) 18150-PJ0 -L011(4 or 5XXXXE)
KP3/1 -19	Accord HB LXi Accord Sedan LXi Accord 2 Dr Coupe LXi Accord 2 Dr Coupe SEi Accord Sedan SEi	L4	3125	EI, CA & VA Toyo Denso Distributor: 30100-PJ0 -A140 (TD-10N)			

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. Add 10% to dyno test HP for air conditioning usage.

*: Please refer to page 08-1.1 in 1989 Application.

Date of Issued 01/20/89 Revisions: 06/23/89 (P/N update)

08.00.00 GENERAL TECHNICAL DESCRIPTION

Road Force and Dynamometer Setting Specifications

Vehicle Model	Tires	Trs.	ETW	W/O AC Factor CD Time	W/O AC Factor Test HP	W/ AC Factor CD Time	W/ AC Factor Test HP
Prelude S	185/70HR13(BS)	M5	2875	15.91	7.5	15.07	8.2
	185/70HR13(DL)	M5	2875	15.11	7.5	14.34	8.2
	185/70HR13(BS)	L4	3000	15.91	7.5	15.07	8.2
	185/70HR13(DL)	L4	3000	15.11	7.5	14.34	8.2
Prelude Si	195/60R14 85H	M5	3000	N/A	N/A	13.28	8.2
	195/60R14 85H	L4	3000	N/A	N/A	13.28	8.2
Accord DX	P185/70R13	M5	2875	16.66	6.2	15.82	6.8
	P185/70R13	L4	2875	16.66	6.2	15.82	6.8
Accord LX	P185/70R13	M5	2875	N/A	N/A	16.02	7.7
	P185/70R13	L4	3000	N/A	N/A	16.02	7.7
Accord LXi	195/60R14 85H	M5	3000	N/A	N/A	14.76	7.4
	195/60R14 85H	L4	3000	N/A	N/A	14.76	7.4
Accord SEi	195/60R14 85H	M5	3000	N/A	N/A	14.76	7.4
	195/60R14 85H	L4	3125	N/A	N/A	14.76	7.4
Legend Sedan	205/60R15 90H	M5	3500	N/A	N/A	15.01	8.5
	205/60R15 90H	L4	3625	N/A	N/A	15.01	8.5
Legend Coupe	205/60VR15	M5	3500	N/A	N/A	15.96	7.7
	205/60VR15	L4	3625	N/A	N/A	15.96	7.7

Note: CD Time/Test HP determined using coastdown method.

ED # A-23-73

DURABILITY VEHICLE CARRYOVER SELECTION COMPARISON

	1985 Durability Vehicle (VID : A85AA1)	1989 California Family Durability Vehicle Selection
Engine Family-Displacement	FHN2.0V5FAF5 -119 CID	KHN2.0V5FPCX -119 CID
Model	Prelude Si	Accord Sedan LXi
Exhaust Emission Control System	OS, EIC, EGR, TWC	OS, EIC, EGR, TWC
Crankcase Emission Control System	PCV	PCV
Catalyst Code	TW-10	TW-17 — but same volume higher precious metal loading
Transmission	M-5	L-4
Horsepower/Type	7.8/CD	7.4/CD
Inertia Weight	2750 lbs.	3000 lbs.
Equivalent Test Weight	2750 lbs.	3000 lbs.
Final Drive Ratio	4.07	4.07
N/V Ratio-rpm/mph	41.8	43.0
Tire Size	185/70R13 86H	195/60R14 85H

Based on the criteria specified in U.S.E.P.A. OMS Advisory circular No. 17F, the durability data derived from A85AA1 can be carried over to engine family KHN2.0V5FPCX.