State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-23-70 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 | | splacement (Cubic Inches) | Exhaust Emission Control Systems (Special Features) |
|---------------|-----|------------------------------|--|
| KHN1.6V5FVC1 | 1.6 | (97) | Three-Way Catalyst Oxygen Sensor (Electronic Port Fuel Injection) (On-Board Diagnostics) |

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 | Carbon Monoxide | Nitrogen Oxides |
|------------------|------------------|------------------|
| (Grams per Mile) | (Grams per Mile) | (Grams per Mile) |
| 0.39 | 7.0 | 0.7 |

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

| Hydrocarbons | Carbon Monoxide | Nitrogen Oxides |
|------------------|------------------|------------------|
| (Grams per Mile) | (Grams per Mile) | (Grams per Mile) |
| 0.15 | 2.4 | 0.5 |

BE IT FURTHER RESOLVED: That the listed models are certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Administrative Code which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying to the optional NOx standard by providing evidence that there are sufficient projected sales of vehicles certifying to the primary NOx

emission standard, or is allowed a delay in implementation under small volume manufacturer provisions, or is allowed a delay in implementation under the "in lieu" standards, or is certifying passenger cars weighing more than 5250 lbs. loaded vehicle weight.

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 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 at seq.), and with the 2 year/24,000 mile warranty provisions of Health and Safety Code Section 43204.

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 27 day of August, 1988.

K. D. Drachand, Chief Mobile Source Division

E.D. # A-23-70

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

| Manufacturer | HONDA | Engine Family | KHN1.6V5FVC1 |
|---|----------------------------------|---|---|
| Evaporative Family | 89FD | Engine Type | I - 4 |
| | | Liters (CID) | 1.6 (97) |
| ABBREVIATIONS | | | |
| Ignition System | E | xhaust Emissions Control System | Special Features |
| CA-Centrifugal Advance ECU-Electronic Control Un EI-Electronic Ignition ESAC-Electronic Spark Advance Control VA-Vacuum Advance VR-Vacuum Retard Fuel System | nit A: E(vance E: Si T(D) O(T) | IP-Air Injection - Pump IV-Air Injection - Valve GR-Exhaust Gas Recirculation IC-Electronic Injection Control (Diesel Only) M-Engine Modification PL-Smoke Puff Limiter or Throttle Delay OC-Trap Oxidizer, Continual OP-Trap Oxidizer, Periodical BC-Dual Bed Catalyst C-Oxidation Catalyst WC-Three-way Catalyst UOC-Warm-Up Oxidation Catalyst | 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 |
| CFI, EPFI, MPFI, SFI, DID, DIP, HOS, OS nV-nVenturi Carburetor VV-Variable Venturi Carb | WI O: He | UTWC-Warm-Up Three-Way Catalyst S-Oxygen Sensor OS-Heated Oxygen Sensor | TC-Turbocharger SC-Supercharger IC-Intercooler or Aftercooler CCV-Combustion Chamber Valve OBD-On-Board Diagnostics |
| | | en e | * * * * * * * * * * * * * * * * * * * |
| VEHICLE MODELS: Civic Wagon 4W | D D | | · |
| Engine : Front X Drive : FWD | | Rear4WD Full Time X | 4WD Part Time |

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ISSUED: 05/31/88

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

| E.O. ★ <u>A-23-70</u> |
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|---|------------|--------|-----------------|----------|---|-----|----------|--------|---|
| X | Light-Duty | Trucks | Medium-Duty | Vehicles | | Gas | <u>x</u> | Diesel | |
| | | | | | | | Page | | 2 |

| Lassenger Cars | right-bucy | Trucks | medium-Duty ve | uicies | Gas | Y DIESEL | · |
|------------------|---------------|-----------|----------------|--------|-----------|----------|---|
| Manufacturer | HONDA | | Engine Family | · | KHN1. | 6V5FVC1 | |
| Liter (CID) | 1.6 (97) | | Engine Type _ | | 1 - 4 | | |
| Emission Control | Sys. (Special | Features) | os, | TWC (| EPFI, OBD |) | |
| | | | | | | | |

| Engine Code | Vehicle Models (If Coded see attachment) *(Dyno HP) | Trans. Type | Equiv. Test Weight | Part No. | Fuel System Part No. (Vendor's) | EGR Valve Part No. (Vendor's) | Catalyst Part No. (Vendor's) |
|----------------|---|----------------|--------------------------|---|---|-------------------------------|-------------------------------|
| | | | | (Vendor 8) | (Vendor a) | (Vendor 8) | (Vendor s) |
| KV1 KV1/1 | Civic Wagon 4WD | м5 | 2875 | EI & ESAC Distributor: 30100-PM6 -0161(TD-02U) ECU: 37820-PM6 -L140 (37820-PM6 -L14) | EPFI ECU: 37820-PM6 -L140 (37820-PM6 -L14) | N/A | 18150-PM6 -A010(HDE) |
| KV3 KV3/1 | Civic Wagon 4WD | L4 | | EI & ESAC Distributor: 30100-PM6 -0161(TD-02U) ECU: 37820-PM6 -L510 (37820-PM6 -L51) | EPFI ECU: 37820-PM6 -L510 (37820-PM6 -L51) | | |

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 | pages | 08-1 | in | 1989 | App. | lication. |
|-----|----|--------|-------|----|-------|------|----|------|------|-----------|
| | *: | Please | reter | to | pages | 08-1 | 1n | 1989 | App. | lication |

| Date | of | Issued | 05/31/88 | Revisionn |
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1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

| E.O. | # | A-23-70 |
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| Fage | 2.3 |
|------|-----|
| | |

| Passenger Ca | rs X Li | ght-Duty | Trucks | _ Medium- | Duty V | ehicles | Gas X Die | sel |
|--------------|-----------|----------|------------|-----------|--------|--------------|--------------|-----|
| Manufacturer | н | ONDA | | Engine | Famil | y <u> </u> | CHN1.6V5FVC1 | |
| Liter (CID) | 1 | .6 (97) | | Engine | Type | | [- 4 | |
| Emission Con | trol Sys. | (Specia | l Features |) | os | , TWC (EPFI, | OBD) | |
| | | | | | | | ECD W-1 | |

| Engine Code | Vehicle Models (If Coded see attachment) *(Dyno HP) | Trans. Type | Equiv. Test Weight | (ECU) Part No. | Fuel System Part No. (Vendor's) | EGR Valve Part No. (Vendor's) | Catalyst Part No. (Vendor's) |
|--------------------|--|----------------|--------------------------|--|--|-------------------------------|------------------------------|
| KV1-25 KV1/1-25 | Civic Wagon 4WD | M5 | 2875 | EI & ESAC Distributor: 30100-PM6 -0265(TD-02U) ECU: 37820-PM6 -L170 (37820-PM6 -L170) | EPFI ECU: 37820-PM6 -L170 (37820-PM6 -L170) | N/A | 18150-PM6 -A020(HDE) |
| KV3-25 KV3/1-25 | Civic Wagon 4WD | L4 | | EI & ESAC Distributor: 30100-PM6 -0265(TD-02U) ECU: 37820-PM6 -L520 (37820-PM6 -L520) | EPFI ECU: 37820-PM6 -L520 (37820-PM6 -L520) | | |

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 | pages | 08-1 | in | 1989 | Application. |
|----|--------|-------|----|-------|------|----|------|--------------|
| | | | | | | | | |

| Date | of | Issued | 11/24/89 | Revisions: |
|------|----|--------|----------|------------|
|------|----|--------|----------|------------|