

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-23-178
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 1995 model-year Honda Motor Co., Ltd. exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: SHN2.2VJGKEA Displacement: 2.2 Liters (132 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

- Three Way Catalytic Converter
- 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>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>
50,000	0.25	3.4	0.4
100,000	0.31	4.2	n/a

The certification exhaust emission values for this engine family in grams per mile are:

<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>
50,000	0.09	1.1	0.1
100,000	0.09	1.2	n/a

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 "Malfunction and Diagnostic System for 1988 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles with Three-Way Catalyst Systems and Feedback Control" (Title 13, California Code of Regulations, Section 1968) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed vehicle models have been exempted from compliance with the "Malfunction and Diagnostic System Requirements-1994 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles and Engines" pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(2.0) for the aforementioned model year.

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 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 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 12th day of December, 1994.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division

1995 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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Manufacturer HONDA Exh Engine Family: SHN2.2VJGKEA
 Evap Std: 50K X Useful Life with R/L Evap Engine Family: SHN1150BYMOH
 Exh Std: Tier-0 Tier-1 X TLEV LEV ULEV ZEV ; EPA Tier-0 Tier-1 X
 Veh Class(es): PC X LDT1 LDT2 MDV1 MDV2 MDV3 MDV4 MDV5
 Single Cert Std for Multi-Class Eng Fam: N/A
 Exh Cert Fuel(s): Indo X Ph2 Diesel: 13 CCR 2282 or 40 CFR 86.113-90 or -94
 M85 CNG LPG Other
 Fuel Type(s): Dedicated X Flex-Fuel Dual-Fuel Gasoline X Diesel M85
 CNG LNG LPG Other
 Hybrid: Type A B C , APU Cycle
 Engine Configuration: I-4 Displacement: 2.2 Liters 132 Cubic Inches
 Engine: Front X Mid Rear Drive: FWD X RWD 4WD-FT 4WD-PT
 Exhaust ECS: TWC/HO2S/EGR/SFI

Engine Code (also list CA/ 49ST/50ST)	Vehicle Models (if coded see attachment)	Trans. Type A-automatic M-manual	ETW	DPA	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
SBA3/1 (50ST)	Odyssey EX Odyssey LX	A	3750	10.1(GY)	EI Distributor: D4T93-03 ECM:37820-P1E -A50	EGR Valve: 11K	XC

9.000

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1995 MODEL-YEAR CERTIFICATION REVIEW SHEET
EXHAUST/EVAPORATIVE SYSTEM & CALIFORNIA REQUIREMENTS

Manufacturer: HONDA Exh Engine Family: SHN2.2VJGKEA
 All Eng Codes in Eng Fam: CA 49S 50S X Evap Engine Family: SHN1150BYMOH
 Exh Std: Tier-0 Tier-1 X TLEV LEV ULEV ZEV ; EPA Tier-0 Tier-1 X
 Evap Std: 50K X Useful Life with R/L In-Use Exh Std: Full In Use X Alt In Use
 Veh Class(es): PC X LDT1 LDT2 MDV1 MDV2 MDV3 MDV4 MDV5
 Single Cert Std for Multi-Class Eng Fam: N/A
 Exh Cert Fuel(s): Indo X Ph2 Diesel: 13 CCR 2282 or 40 CFR 86.113-90 or -94
 M85 CNG LPG Other
 Fuel Type(s): Dedicated X Flex-Fuel Dual-Fuel Gasoline X Diesel M85
 CNG LNG LPG Other
 Hybrid: Type A B C , APU Cycle
 Engine Configuration: I-4 Displacement: 2.2 Liters 132 Cubic Inches
 Valves per Cylinder: 4 Rated HP: 140 @ 5600 RPM
 Engine: Front X Mid Rear Drive: FWD X RWD 4WD-FT 4WD-PT
 Exhaust ECS: TWC/HO2S/EGR/SFI

	Sect./Page #		Sect./Page #
1 Authorized Representative	<u>P.01-2 & -3</u>	20 Gen Std, Increase in	
2 Fuel Specifications	<u>P.03-1</u>	Emiss,Safety, Meets all	
3 Test Equipment	<u>P.04-1</u>	Reqmts	<u>S.16.01.00</u>
4 Test Procedure	<u>P.05-1</u>	21 Emission Label Durability	<u>P.17.05.00-1</u>
5 Mileage Accumulation		22 Driveability Statement	<u>P.17.05.00-1</u>
Route	<u>P.04-1</u>	23 Adjustable Parameters	<u>Not applicable</u>
6 Emission Warranty		24 Tamper Resistance	
Statement	<u>S.17.02.01</u>	Method(s)	<u>P.21.10.00-1</u>
7 Maint: Cert/Req'd/Recm'd	<u>P.06-1</u>	25 Fill Pipe Specifications	<u>P.17.04.02-3</u>
8 Emiss Label/Vac Hose Diag	<u>P.07-1 & -2</u>	26 High Altitude Compliance	<u>S.17.06.00</u>
9 Evap Control System	<u>S.21.08.00</u>	27 OBD Sys incl Marked	
10 Engine Parameters	<u>P.20.01-A95B-1</u>	Revisions	<u>S.21.14.00</u>
11 Fuel System	<u>S.21.13.00</u>	28 I&M Test Procedure & Data	<u>P.17.08-A95B-2</u>
12 Ignition System	<u>S.21.04.00</u>	29 50 Degree F Compliance	<u>Not applicable</u>
13 Exhaust Control System	<u>S.21.11.00</u>	30 Manufacturer's RAF	<u>Not applicable</u>
14 Proj Sales	<u>P.17.03.02-18</u>	31 Phase-In Plans:	
15 Vehicle Description	<u>P.20.08-A95B-1</u>	Exh Cert Stds	<u>P.17.03.03-1</u>
16 Evap Bench Test Procedure	<u>MAC #81-011</u>	Exh In-Use Stds	<u>P.17.03.04-1</u>
17 EDV Selection	<u>P.20.10-A95B-1</u>	Evap Cert Stds	<u>P.17.03.05-1</u>
	<u>& -2</u>	32 NMOG Fleet Average	
18 Prod Veh same as Test Veh	<u>P.17.05.00-1</u>	Calculation	<u>P.17.03.03-1</u>
		33 AB965 Credits/Withdrawals	<u>Not applicable</u>
		34 EPA Certificate	<u>Pending</u>
		35 LEV Requirement <u>1/</u>	<u>Not applicable</u>
		Emission	
19 Test Vehicle Information	Durability	Data Vehicle	
C/O or C/A MY & ID	<u>1995 D95BA1</u>	(Exh./Evap.)	<u>1995 E95BA6</u>
Vehicle Log Page(s)	<u>P.17.10.00-1</u>		<u>P.17.10.00-1</u>
Zero Mile Book Page(s)	<u>Filed at Honda</u>		<u>P.17.11.00-1</u>
Maint Logs & Engr Eval	<u>P.17.12.00-1</u>		<u>P.17.12.00-1</u>

Note 1/: Continuity in emission in the temp. range 20~86°F

1995 MODEL-YEAR CERTIFICATION REVIEW SHEET
EXHAUST/EVAPORATIVE SYSTEM & CALIFORNIA REQUIREMENTS

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Manufacturer: HONDA

Exh Engine Family: SHN2.2VJGKEA

Evap Engine Family: SHN1150BYMOH

PROJECTED EMISSIONS

(g/mi, except mg/mi for HCHO and g/test for evap.)(1), (2)

Data (3) Veh ID	Code (Displ)	Test Loc	TW/ Trans	DPA/ ETW	MPG RLHP	City/Hwy City/Hwy	X NMHC		Hwy NOx	HCHO	Evaporative			City CO2
							NMOC	CO			NOx	D+HS	R/L	
E95BA6 (VV01)	SBA3/1 (132 CID)	Mfr. L4	L4	3750	10.1	22.3/30.8	0.09 0.09	1.1 1.2	0.00	---	0.12	---	---	393 (50K) --- (100K)

- (1) The EDV(s) above comply with standards of (50K): 0.25 3.4 0.4 0.5 N/A 2.0 N/A N/A N/A
 (100K): 0.31 4.2 N/A N/A N/A N/A N/A N/A N/A
 and include deterioration factors (DFs) of (50K): 1.018 1.076 1.000 1.000 N/A 0.0 N/A N/A N/A
 (100K): 1.037 1.158 N/A N/A N/A N/A N/A N/A N/A
 and a Reactivity Adjustment Factor (RAF) of: NMOG N/A Methane (CNG or LNG only) N/A
 TLEV/LEV/ULEV 50°F emissions (w/RAF but w/o DFs): N/A N/A N/A N/A Exempted N/A
 TLEV/LEV/ULEV 50°F standards: N/A N/A N/A N/A Exempted N/A

- (2) Diurnal+Hot Soak (D+HS) evaporative DF is the average of: D+HS Vehicle DF -0.05 and D+HS Bench DF -0.25
 Running Loss (R/L) evaporative DF is the average of: R/L Vehicle DF N/A and R/L Bench DF N/A

(3) List configuration with the highest projected sales first

I/M Test Results (We conducted the I/M test based on California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.)

Veh. ID (Trans.)	Idle		Hi-Idle	
	HC(ppm)	CO(%)	HC(ppm)	CO(%)
E95BA6 (L4) (VV 01)	5.2	0.01	7.8	0.01

The emission data vehicle above complies with I/M standards of
: 100 1.0 220 1.2

This engine family also complies with I/M standards at ambient temperature from 35 to 68° F.

Remarks

Application _____
 Processed by Joseph Jegede Date 12/8/94 Reviewed by L. Hada Date 12-9-94