

E.C. Board

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-16-17
Relating to Certification of New Motor Vehicles

TOYO KOGYO CO., LTD.

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102, and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED: That Toyo Kogyo Co., Ltd. exhaust emission control systems for 1977 model-year passenger cars are certified for the engine family described below:

Engine Family: REP
Engine: 40.0 X2
Transmission: Automatic 3-Speed, Manual 4 & 5 Speed
Exhaust Emission Control Systems: Air Injection, Thermal Reactor, Exhaust Gas Recirculation for Automatic Transmission only.

Models: Mazda RX-4
Sedan
Coupe
Station Wagon
Mazda Cosmo
Coupe

The following are the recommended values to be listed on the window decal required by California Assembly-Line Test Procedures for 1977 model vehicles:

<u>Engine Family</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
REP	.35	4.3	1.0

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Department of Motor Vehicles, the California Highway Patrol, and the Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California, this 21st day of October, 1976.

G. C. Hass by A. D. Anderson
G. C. Hass, Chief
Division of Vehicle Emissions Control

Manufacturer Toyo Kogyo Executive Order No. A-16-17 Page 1
 Engine Family REP Engine (CID) 40.0 X 2 Code CR-M, CR-A
 Emission Control System AI + TR + EGR* +10%(A/C) Yes No

Vehicle Models (If Coded see attachment)	Trans	Inertia Weight	Distributor	Fuel System	EGR System	Tune-Up Specification (1) Basic Timing (2) Idle Mixture (3) Idle Speed
			Type C,V Mfgr. Part Number	Type 1-4V Mfgr. Part Number	Part No. Service*	
REP Mazda RX-4 Sedan Coupe St. Wagon Mazda Cosmo Coupe	M-4 M-5 A-3 M-5 A-3	3000	Mitsubishi T5T02273	Hitachi KCH348-80 for manual KCH348-85 for automatic	EGV-1 (only for Automatic) Clean	See label attached See Page 2 1) T; 25+4° ATDC L; 5+1° ATDC at idle speed 2) Less than 0.1% 3) 750+25 in Neutral for Manual 750+25 in "D" Range for Automatic

Comments *EGR for automatic transmission only

Date of Issue See R/C # RCREP-2, 7-7-76.
See E. O. A-16-17-1.

Abbreviations

- Distributor
 C-Centrifugal Advance
 V-Vacuum Advance
 VR-Vacuum Retard
 HEI-High Energy Ignition
 EI-Electronic Ignition
Fuel System
 EFI, FI
 nV-nVenturi Carburetor
 VV-Variabale Venturi

Exhaust Emission Control System

- AI-Air Injection
 CAI-Catalyst Air Injection
 EFI-Electronic Fuel Injection
 EGR-Exhaust Gas Recirculation
 EM-Engine Modification
 EFE-Early Fuel Evaporation
 ESAC-Electronic Spark Advance
 Control
 FI-Fuel Injection

- OC-Oxidation Catalyst
 PAI-Pulse Air Injection
 RC-Reduction Catalyst
 TR-Thermal Reactor
 TWC-Three Way Catalyst
 λ-Air Fuel Ratio Sensor
*Service
 I-Inspect, repair/replace
 as needed
 R-Replace

5. Label for Family REP (MAZDA RX-4 & MAZDA COSMO)
California State

VEHICLE EMISSION CONTROL INFORMATION

MODEL: Mazda RX-4 & Mazda COSMO
ENGINE DISPLACEMENT: 40.0 CU. IN. x 2
ENGINE FAMILY: REP
EXHAUST EMISSION CONTROL TYPE: A.I., T.R. & *E.G.R.
(* AUTOMATIC TRANSMISSION ONLY)
ENGINE TUNE UP SPECIFICATIONS AND ADJUSTMENTS

A. IGNITION TIMING: TRAILING: $25 \pm 4^\circ$ ATDC AT IDLE SPEED SPECIFIED BELOW
LEADING: $5 \pm 1^\circ$ ATDC AT IDLE SPEED SPECIFIED BELOW
(WITH DIST. VACUUM LINE CONNECTED)

B. IDLE ADJUSTMENT
FOLLOW THE INSTRUCTIONS BELOW BEFORE CHECKING OR SETTING THE IDLE SPEED AND THE IDLE MIXTURE:
WARM UP THE ENGINE. TURN OFF ALL ACCESSORIES.
REMOVE THE FUEL FILLER CAP. PLUG THE IDLE COMPENSATOR HOSE.

B-1. IDLE SPEED AND SETTING PROCEDURE

MANUAL TRANSMISSION : 750 ± 25 RPM IN NEUTRAL
AUTOMATIC TRANSMISSION: 750 ± 25 RPM IN "D" RANGE

IF THE IDLE SPEED IS NOT AS SPECIFIED ABOVE, ADJUST THE IDLE SPEED TO 750 RPM BY TURNING THE AIR ADJUST SCREW.

B-2. IDLE MIXTURE AND SETTING PROCEDURE

CO: LESS THAN 0.1 %

IF THE CO CONCENTRATION IS LESS THAN 0.1 % AND THE ENGINE OPERATION IS STABLE AFTER SETTING THE IDLE SPEED, THE IDLE MIXTURE ADJUSTMENT IS NOT REQUIRED. IF NOT, ADJUST THE IDLE MIXTURE WITH FOLLOWING PROCEDURE.

1. REMOVE THE IDLE LIMITER CAP (PLASTIC CAP) FROM THE MIXTURE ADJUST SCREW (MAS).
2. TURN MAS CLOCKWISE UNTIL THE ENGINE HUNTS SEVERELY.
3. THEN TURN MAS COUNTER-CLOCKWISE IN SMALL STEPS UNTIL CO DECREASES TO 0.1 %. (DO NOT OVERTURN MAS TO GET CO LESS THAN 0.1 %.)
4. FROM THAT POSITION, TURN MAS COUNTER-CLOCKWISE 1/4 TURN. (IDLE CO SHOULD BE LESS THAN 0.1 % AFTER THESE ADJUSTMENTS.)
5. IF THE IDLE SPEED SHIFTS FROM THE SPECIFIED RPM AS THE RESULT OF THE ABOVE PROCEDURE, ADJUST THE IDLE SPEED AND REPEAT THE PROCEDURE 2-4.
6. INSERT THE IDLE LIMITER CAP TO FIX THE MAS POSITION.

C. HIGH IDLE SPEED

FAST IDLE SPEED: 3,000 - 3,500 RPM UNDER WARM ENGINE CONDITION

FOR DETAILED MAINTENANCE INFORMATION, PLEASE REFER TO THE OWNER'S MANUAL AND THE SERVICE BOOK.

STATEMENT

THIS VEHICLE CONFORMS TO U.S.E.P.A. REGULATIONS APPLICABLE TO 1977 MODEL YEAR NEW MOTOR VEHICLES. THIS VEHICLE ALSO CONFORMS TO CALIFORNIA REGULATIONS APPLICABLE TO 1977 MODEL YEAR NEW MOTOR VEHICLES.

THIS VEHICLE IS CERTIFIED AS HAVING DEMONSTRATED CONFORMANCE WITH FEDERAL AND CALIFORNIA EMISSION STANDARDS ONLY AT ELEVATIONS EQUAL TO OR LOWER THAN 1,219 METERS (4,000 FEET)

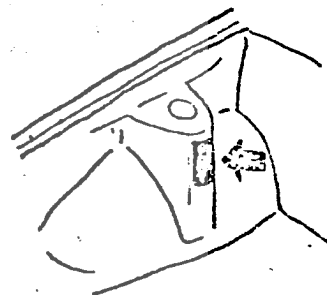
CATALYST IDENTIFICATION: NON CATALYST

MAZDA Toyo Kogyo Co., Ltd.

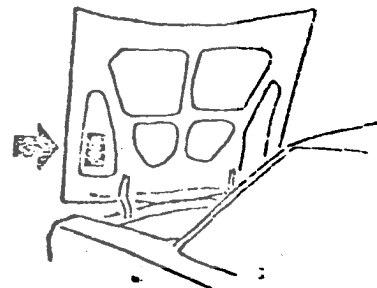
BASE COLOR --- WHITE
LETTERING & FRAME --- BLACK

LOCATION OF THE LABEL

MAZDA RX-4



MAZDA COSMO



190

99

unit; mm

Date: Jul. 14 1976

No.	TK II-2			
	P-31-76			

PAGE IS SATISFACTORY UNSATISFACTORY

DATE _____ EPA REP _____