State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-11
Relating to Certification of New Motor Vehicles

ISUZU MOTORS LIMITED

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43100, 43102, 43103, and 43835; 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 Isuzu Motors Limited exhaust emission control systems for 1979 model-year gasoline-powered light duty trucks are certified for the vehicles described below:

Engine Family	Displacement Cubic Inches	Exhaust Emission Control Systems (Special Features)
G180ZL-E	110.8	Air Injection Exhaust Gas Recirculation Oxidation Catalyst

Vehicle Models, Transmissions, Engine Codes and Evaporative Emission Control Families as listed on attachments.

The following are the certification emission values to be listed on the window decal required by California Assembly-Line Test Procedures for 1979 model-year vehicles:

Engine Family	Inertia Weight Class	Hydrocarbons Grams per Mile	Carbon Monoxide Grams per Mile	Nitrogen Oxides Grams per Mile
G180ZL-E	0-3999	.18	4.2	1.5

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 except Motorcycles".

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.

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 14 day of September, 1978.

G. C. Hass

G. C. Hass, Chief
Vehicle Emissions Control Division

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Engine Family G180ZL-E Engine (CID) 110.8

ABBREVIATIONS

Ignition System
CA-Centrifugal Advance
EI-Electronic Ignition
ESAC
VA-Vacuum Advance
VR-Vacuum Retard

Fuel System
EFI, MFI
nV-nVenturi Carburetor
VV-Variable Venturi

Exhaust Emissions Control System
AI-Air Injection
CCAV-Comb. Chamber Air Valve
EFI-Electronic Fuel Injection
EGR-Exhaust Gas Recirculation
EM-Engine Modification

ESAC-Electronic Spark Advance Control
MFI-Mechanical Fuel Injection

OC-Oxidation Catalyst
PAI-Pulse Air Injection
TC-Turbo Charged
TR-Thermal Reactor
TWC-Three Way Catalyst (Feedback Control)
WOC-Warm-up Oxidation Catalyst

Evaporative Emission Family CRK-L

Models:
LUV-1 & -3 Two-wheel drive Pick-up
LUV-2 Two-wheel drive Cab-Chassis
LUV-4 Four-wheel drive Pick-up

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[ ] Passenger Cars [X] Light-Duty Trucks [ ] Medium-Duty Vehicles

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Engine Family G180ZL-E Engine (CID) 110.8 Engine Code

Emission Control System AI, EGR, OC + 10% (A/C) Yes ___ No X

Eng. Code	Vehicle Models (If Coded see attachment)	Trans.	Inertia Weight Class (Axle Ratio)*	Ign. Sys. CA, VA Distrib. Part No.	Fuel System 2V Carb. Part No.	EGR Valve Part No.	Tune-up Specification (1) Basic Timing (2) Idle Mixture (3) Idle Speed
LE-1	LUV-1	M-4	2750	Nippon Denso Ltd. 8942099010	Hitachi Ltd. 8942141900	Automobile Parts Mfg. Co., Ltd. 8942123000	See Tune-up label 6660 (pg. 3)
	LUV-3		3000				
LE-2	LUV-2		3000		8942141910		Label 6670 (pg. 4)
	LUV-4						Label 6660
LE-3	LUV-1	A-3	2750	8942095640	8942141920		Label 6660
	LUV-2		3000				Label 6670
	LUV-3						Label 6660

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, equipment and inertia weight class.

*Axle ratio is that of medium duty certification vehicle.

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LUV

VEHICLE EMISSION CONTROL INFORMATION

ISUZU MOTORS LIMITED

SET PARKING BRAKE AND BLOCK DRIVE WHEELS

ENGINE TUNE-UP CONDITIONS

MAKE ALL ADJUSTMENT AT NORMAL OPERATING TEMPERATURE, CHOKE OPEN, AIR CLEANER INSTALLED, DISTRIBUTOR, IDLE COMPENSATOR AND EGR VACUUM LINES DISCONNECTED AND PLUGGED, ALL ACCESSORIES OFF, AND TRANSMISSION IN NEUTRAL (BOTH MANUAL AND AUTOMATIC).

IDLE SPEED AND IDLE MIXTURE SETTING PROCEDURE (IDLE SPEED DROP)

1. TURN THE IDLE MIXTURE ADJUST SCREW ALL THE WAY IN AND BACK OUT 3 TURNS.
2. ADJUST THROTTLE ADJUST SCREW TO 900 RPM.
3. ADJUST SETTING OF IDLE MIXTURE ADJUST SCREW TO ACHIEVE THE MAXIMUM SPEED.
4. RESET THROTTLE ADJUST SCREW TO 900 RPM.
5. TURN IDLE MIXTURE ADJUST SCREW CLOCKWISE (LEAN) UNTIL ENGINE SPEED IS DOWN TO 850 RPM.
6. RESET IDLE MIXTURE ADJUST SCREW 1/2 TURN COUNTERCLOKEWISE (RICH).
7. RESET THROTTLE ADJUST SCREW TO 900 RPM.

ADDITIONAL PROCEDURES

IF AIR CONDITIONER IS INSTALLED: TURN A.C. ON MAX. COLD AND HIGH BLOWER. OPEN THE THROTTLE TO APPROX. 1/3 AND ALLOW THE THROTTLE TO CLOSE. (THIS ALLOWS THE SPEED-UP SOLENOID TO REACH FULL TRAVEL.) ADJUST THE SPEED-UP CONTROLLER ADJUSTING SCREW TO SET IDLE AT 900 RPM.

CATALYST

OC, AI AND EGR EXHAUST EMISSION CONTROL

EVAPORATIVE FAMILY		CPK-L
ENGINE FAMILY		G180ZL-E
ENGINE DISPLACEMENT		110.8 C.I.D. (1.8 LITRE)
IDLE SPEED		900 RPM
IDLE MIXTURE		IDLE SPEED DROP
IGNITION TIMING		0° BTDC AT 900 RPM
DWELL ANGLE		52°
BREAKER POINT GAP		0.018 IN. (0.45 MM)
SPARK PLUG GAP		0.030 IN. (0.75 MM)
VALVE LASH (COLD)	IN.	0.006 IN. (0.15 MM)
	EXH.	0.010 IN. (0.25 MM)

IGNITION TIMING SETTING PROCEDURE

1. SET IDLE SPEED TO 900 RPM.
2. CONNECT TIMING LIGHT LEAD TO NO. 1 CYLINDER.
3. ALIGN MARK ON CRANKSHAFT PULLEY TO TIMING MARK WITH TIMING LIGHT AIMED TOWARD TIMING MARK.

UNPLUG AND RECONNECT ALL VACUUM LINES WHEN ADJUSTMENTS ARE COMPLETED.

SEE SHOP MANUAL AND MAINTENANCE SCHEDULE FOR ADDITIONAL INFORMATION.

THIS VEHICLE CONFORMS TO U.S. EPA AND CALIFORNIA REGULATIONS APPLICABLE TO 1979 MODEL YEAR NEW MOTOR VEHICLES.

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LUV

VEHICLE EMISSION CONTROL INFORMATION

ISUZU MOTORS LIMITED

SET PARKING BRAKE AND BLOCK DRIVE WHEELS

ENGINE TUNE-UP CONDITIONS

MAKE ALL ADJUSTMENT AT NORMAL OPERATING TEMPERATURE, CHOKE OPEN, AIR CLEANER INSTALLED, DISTRIBUTOR, IDLE COMPENSATOR AND EGR VACUUM LINES DISCONNECTED AND PLUGGED, ALL ACCESSORIES OFF, AND TRANSMISSION IN NEUTRAL (BOTH MANUAL AND AUTOMATIC).

IDLE SPEED AND IDLE MIXTURE SETTING PROCEDURE (IDLE SPEED DROP)

1. TURN THE IDLE MIXTURE ADJUST SCREW ALL THE WAY IN AND BACK OUT 3 TURNS.
2. ADJUST THROTTLE ADJUST SCREW TO 900 RPM.
3. ADJUST SETTING OF IDLE MIXTURE ADJUST SCREW TO ACHIEVE THE MAXIMUM SPEED.
4. RESET THROTTLE ADJUST SCREW TO 900 RPM.
5. TURN IDLE MIXTURE ADJUST SCREW CLOCKWISE (LEAN) UNTIL ENGINE SPEED IS DOWN TO 850 RPM.
6. RESET IDLE MIXTURE ADJUST SCREW 1/2 TURN COUNTERCLOKEWISE (RICH).
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ADDITIONAL PROCEDURES

IF AIR CONDITIONER IS INSTALLED: TURN A.C. ON MAX. COLD AND HIGH BLOWER. OPEN THE THROTTLE TO APPROX. 1/3 AND ALLOW THE THROTTLE TO CLOSE. (THIS ALLOWS THE SPEED-UP SOLENOID TO REACH FULL TRAVEL) ADJUST THE SPEED-UP CONTROLLER ADJUSTING SCREW TO SET IDLE AT 900 RPM.

CATALYST

OC, AI AND EGR EXHAUST EMISSION CONTROL

EVAPORATIVE FAMILY		CRK-L
ENGINE FAMILY		G180ZL-E
ENGINE DISPLACEMENT		110.8 C.I.D. (1.8 LITRE)
IDLE SPEED		900 RPM
IDLE MIXTURE		IDLE SPEED DROP
IGNITION TIMING		6° BTDC AT 900 RPM
DWELL ANGLE		52°
BREAKER POINT GAP		0.018 IN. (0.45 MM)
SPARK PLUG GAP		0.030 IN. (0.75 MM)
VALVE LASH (COLD)	IN.	0.006 IN. (0.15 MM)
	EXH.	0.010 IN. (0.25 MM)

IGNITION TIMING SETTING PROCEDURE

1. SET IDLE SPEED TO 900 RPM.
2. CONNECT TIMING LIGHT LEAD TO NO. 1 CYLINDER.
3. ALIGN MARK ON CRANKSHAFT PULLEY TO TIMING MARK WITH TIMING LIGHT AIMED TOWARD TIMING MARK.

UNPLUG AND RECONNECT ALL VACUUM LINES WHEN ADJUSTMENTS ARE COMPLETED.

SEE SHOP MANUAL AND MAINTENANCE SCHEDULE FOR ADDITIONAL INFORMATION.

THIS VEHICLE CONFORMS TO U.S. EPA AND CALIFORNIA REGULATIONS APPLICABLE TO 1979 MODEL YEAR NEW MOTOR VEHICLES, WHEN COMPLETED AT A MAXIMAM CURB WEIGHT OF 2,950 POUNDS AND A MAXIMUM FRONTAL AREA OF 25.4 SQUARE FEET.

PT. NO. 8942166670

Issued: 091578

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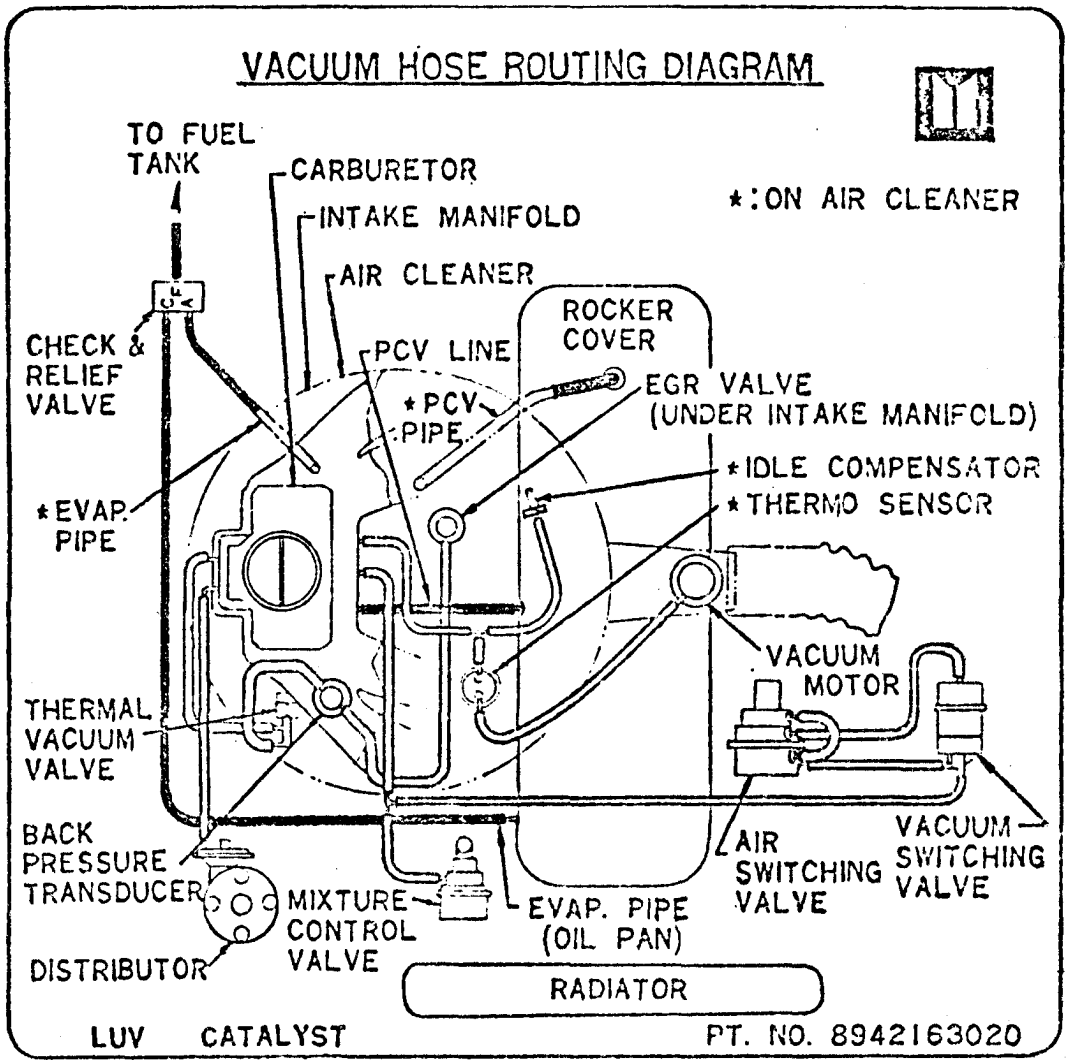

Issued: 091578.