

State of California
Air Resources Board

EXECUTIVE ORDER A-20-6
Relating to Certification of New Motor Vehicles

ISUZU MOTORS LIMITED

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 Isuzu Motors Limited exhaust emission control systems for 1977 model-year light-duty trucks are certified for the engine family described below:

Engine Family: G180ZL-E
Engine: 110.8 CID
Transmission: 4-Speed Manual, 3-Speed Automatic
Exhaust Emissions Control Systems: Exhaust Gas Recirculation, Oxidation Catalyst, Air Injection

Models: LUV, KB30
LUV, Cab-Chassis
(Both marketed by General Motors as Chevrolet LUV)

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>
G180ZL-E	0.4	10	1.6

BE IT FURTHER RESOLVED: That this certification is contingent upon Isuzu Motors Limited affixing a permanent catalyst overheat warning label on the driver's sun-visor of all catalyst-equipped vehicles. This label must be approved by the Executive Officer.

BE IT FURTHER RESOLVED: That this certification is also contingent upon Isuzu Motors Limited listing in the owner's manual the operating cautions associated with a catalyst-equipped vehicle. This listing must be approved by the Executive Officer.

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 1st day of September, 1976.

G.C. Hass by P.J. Orshandel

G. C. Hass, Chief
Division of Vehicle Emissions Control

Manufacturer Isuzu Motors Limited Executive Order No. A-20-6 Page 1

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

Emission Control System EGR,OC,AI +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	Type 1-2V	Part No.	
			Mfgr. Part Number	Mfgr. Part Number	Service*	
LUV	M-4	2750 3000	Nippon Denso 8942065420	Hitachi Co., LTD 8942063560, 8942137300	Automobile Parts Mfg. Co., LTD. 5161100010 No service	See tune up label on page 2.
	A-3	2750 3000			8942063580, 8942137310	

Comments

Date of Issue 08/31/76. Carb. PN8942137300 & 310 added by FF JPK-085, on 122977.

Abbreviations

Distributor

- C-Centrifugal Advance
- V-Vacuum Advance
- R-Vacuum Retard
- HEI-High Energy Ignition
- EI-Electronic Ignition

Fuel System

- EFI, FI
- nV-nVenturi Carburetor
- VV-Variable 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

Passenger Cars

Light-Duty Trucks

Engine Family 180ZL-E

For California

LOW ALTITUDE CERTIFICATION		VEHICLE EMISSION CONTROL INFORMATION	
		ISUZU MOTORS LIMITED	
<p>ENGINE TUNE-UP CONDITIONS</p> <p>MAKE ALL ADJUSTMENT AT NORMAL OPERATING TEMPERATURE, CHOKE OPEN, AIR CLEANER INSTALLED, DISTRIBUTOR AND IDLE COMPENSATOR VACUUM LINES DISCONNECTED AND PLUGGED, ALL ACCESSORIES OFF, DASHBOARD FULLY BOTTOMED IF INSTALLED, AND TRANSMISSION IN NEUTRAL, BOTH MANUAL AND AUTOMATIC. UNPLUG AND RECONNECT BOTH VACUUM LINES WHEN ADJUSTMENTS ARE COMPLETED.</p> <p>SIT PARKING BRAKE AND BLOCK DRIVE WHEELS.</p> <p>IDLE SPEED AND IDLE MIXTURE SETTING PROCEDURE (IDLE SPEED DROP)</p> <ol style="list-style-type: none"> 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 COUNTERCLOCKWISE(LEAN) UNTIL ENGINE SPEED IS DOWN TO 850 RPM. 6. RESET IDLE MIXTURE ADJUST SCREW 1/2 TURN COUNTERCLOCKWISE(RICH) FROM ITEM 5 POSITION. 7. RESET THROTTLE ADJUST SCREW TO 900 RPM. 8. 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. 9. ADDITIONAL PROCEDURE IF DASHBOARD IS INSTALLED : KEEP THE ENGINE SPEED BETWEEN 2400 RPM AND 2800 RPM, AND TURN THE DASHBOARD UNTIL THE END OF THE DASHBOARD SHAFT CONTACTS THE DASHBOARD LEVER, THEN FULLY TIGHTEN THE LOCK NUT. <p>IGNITION TIMING SETTING PROCEDURE</p> <ol style="list-style-type: none"> 1. SET IDLE SPEED TO 900 RPM. 2. CONNECT TIMING LIGHT LEAD TO NUMBER 1 CYLINDER. 3. ADJUST IGNITION TIMING WITH TIMING LIGHT AIMED TOWARD TIMING MARK. (ALIGN MARK ON CRANKSHAFT PULLEY TO TIMING MARK) <p>THIS VEHICLE CONFORMS TO U. S. E. P. A. REGULATIONS APPLICABLE TO 1977 MODEL YEAR NEW MOTOR VEHICLES. THIS VEHICLE CONFORMS TO CALIFORNIA REGULATIONS APPLICABLE TO 1977 MODEL YEAR NEW MOTOR VEHICLES.</p>			
O.C., A.I. AND E.G.R. EXHAUST EMISSION CONTROL		ENGINE	
IDLE SPEED		1100 cc (IN/1.8 LITRE)	
IDLE MIXTURE		G180Z-B	
IGNITION TIMING		G180Z-E	
DWEIL ANGLE		OPEL BY ISUZU	
BREKMER POINT GAP		LUV	
SPARK PLUG GAP		900 RPM	
VALVE LASH (COLD)		IDLE SPEED DROP	
IN.		6* B/DIC AT 900 RPM	
EXH.		52°	
		0.018 IN.	
		0.030 IN.	
		0.008 IN.	
		0.010 IN.	

SEE SHOP MANUAL FOR ADDITIONAL INFORMATION.

CATALYST

PT. NO. 8942107940