

Confidential

Rev.

ENGINE SPECIFICATIONS

Engine Model	Base Model 4JG1
	Model No. 4JG1TPV
Customer	EXPORT STANDARD
Application	GENERATOR USE
Drawing No.	E3-1039-015-0
Emission Regulation	EPA TIER-2 LEVEL

Revision	Date	Revision Record	Issue Symbol
0	30-Jun-08	Issued for volume production	
:	:		:
:	:		:
:	:		:

ISUZU MOTORS LIMITED	Approval	Check	Issue
Sales Engineering Group	<i>S. Nogami</i>	<i>H. Harada</i>	<i>H. Harada</i>
Powertrain Business Division	Satoshi Nogami Group Leader	Hideaki Harada Manager	Hideaki Harada Manager

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Manufacturer	ISUZU MOTORS LIMITED		
Engine Model	Base Model	4JG1	Model No. 4JG1TPV
Application	Generator		
Engine type	Four cycle, water cooled, direct injection type, over head valve type		
No. of cylinders - bore x stroke	4 Inline - 95.4 mm x 107 mm		
Total piston displacement	3.059 litter		
Compression ratio	18.6		

Engine performance	Rating	
Conditions	Standard atmospheric condition	
	Breaking time 30 hours	
	With AC generator (No load)	
	Without cooling fan, air cleaner and exh. silencer	
Prime output	43.2 kW / 1800 min ⁻¹	35.7 kW / 1500 min ⁻¹
Overload output	48.8+/-1.5 kW / 1750 min ⁻¹	41.3 kW / 1450 min ⁻¹
Stand-by output	49.5+/-1.0 kW / 1800 min ⁻¹	41.9 kW / 1500 min ⁻¹
Fuel consumption (at rated output power)	214+/-15 gr / kW.h	220+/-15 gr / kW.h
High idle speed	1940+/-5 min ⁻¹	1620+/-5 min ⁻¹
Low Idle speed	1000+/-25 min ⁻¹	1000+/-25 min ⁻¹
Type of fuel	Diesel fuel	
Engine dry weight	Approx. 262 kg	
Engine Dimensions (L x W x H)	719.5 mm x 599 mm x 801 mm	
Firing order	1 - 3 - 4 - 2	
Rotating direction	Clockwise viewed from cooling fan side	

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Aspiration	:	Turbocharged
Supercharged device	:	Exhaust turbocharger
Fuel device	:	Bosch In-line, AS Type
Injection nozzle	:	Multi hole type
Governor	:	Mechanical controlled type
Fuel supply pump	:	Plunger type integral injection pump
Fuel filter	:	Paper element type
Exhaust gas recirculation system	:	None
Lubrication device	:	Trochoid type, Camshaft driven, Full forced pressure
Oil pressure indicate device	:	Oil pressure switch, Push-off type, 1-Pole Type, Operate pressure 98+/-20kPa
Oil filter	:	Full flow paper element type
Oil cooling device	:	Oil filter integrated type
Cooling fan	:	400 mm dia., sucker, 6-blade, Plastic type (Shipped loose)
Water pump	:	Impeller type, Belt driven
Thermostat	:	Wax pellet type
Water temp. indicate device	:	None
Ventilation system	:	Open breather type
Starter	:	12V-2.2kW, Magnetically actuated, Reduction type
Alternator	:	12V-50A, AC type, IC regulator build in type, Belt driven from crankshaft pulley
Pre-heating device	:	Glow plug, Quick on start - II (QOS-II) type
Engine stop device	:	Manual fuel shut down, Fuel cut leber on injection pump

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- Power take off : Without
- Inclination limit : Front and rear down 15deg / Side by side 15deg
- Lubrication oil capacity : Maximum 6.6 litter - Minimum 9.6 litter (Oil pan only)
- Cooling water capacity : 4.5 litter (Engine only)
- Injection timing : 5deg BTDC
- Initial injection pressure : 18.1 MPa
- Compressive pressure : 3.0 MPa at 200 rpm engine speed

Valve clearance :

Valve	Valve Clearance	Valve timing	
		Open	Close
Inlet	0.4mm at cold	24.5deg BTDC	55.5deg ABDC
Exhaust	0.4mm at cold	54deg BBDC	26deg ATDC

- Paint : Clear
- Recommended lubrication oil : API classification, Service CD class, SAE10W-30

Shipped loose parts

<u>No.</u>	<u>Parts name</u>	<u>Part number</u>	<u>Qty</u>
1	Cooling Fan	513660-3080	1
2	Starter Switch	894402-5000	1
3	Control Resistance	894137-9480	1

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ISUZU

**4JG1TPV
Performance Curve**

Condition	JIS D0006 / SAE J1349 / ISO15550
Atmospheric Condition	25 deg C
Braking time	30 hours
Cooling Fan	Without
Air Cleaner	Without
Alternator	With (No Load)
Exhaust Silencer	Without



