

# ISUZU DIESEL 4JB1T ENGINE SPECIFICATIONS

SPEC. NO. 6581  
DATE MAY. '98

ENGINE MODEL	4JB1TPK-01
TYPE	FOUR CYCLE. WATER COOLED, OVERHEAD VALVE VERTICAL IN-LINE, DIRECT INJECTION TYPE
CYL.NO.-BORE × STROKE	4-93.0 × 102.0
DISPLACEMENT	2.771 Lit
COMPRESSION RATIO	17.5 TO 1
FIRING ORDER	1-3-4-2
EMISSION REGULATION CERTIFICATE EPA'98	
ENGINE FAMILY	WSZXL02.7DTA
ENGINE CODE	27DTA
RATING (SAE J1995 GROSS; PRODUCTION TOLERANCE ±5%)	
RATED OUTPUT	83 HP / 3000 rpm
MAX. TORQUE	172 lbft / 2000 rpm
IDLE ENGINE SPEED	1000±50 rpm
NO LOAD MAX.ENGINE SPEED	MAXIMUM 3400 rpm
AIR INTAKE SYSTEM	TURBOCHARGED
LUBRICATION SYSTEM	FULL FORCED PRESSURE FEED TYPE
OIL PUMP	TROCHOID TYPE, GEAR DRIVEN FROM CAMSHAFT
ANGULARITY LIMIT	0.523 rad (30° ) ALL DIRECTION
LUBRICATION OIL CAPACITY	MAX. 7.5 lit. MIN. 5.5 lit. (OIL PAN ONLY)
TYPE OF LUBRICATION OIL	API CD
COOLING SYSTEM	WATER CIRCULATION TYPE BY PRESSURIZED CENTRIFUGAL VANE TYPE BY VEE BELT DRIVEN
COOLANT CAPACITY	5.0 Lit. (ENGINE ONLY)
FAN SPEED RATIO	1.12 (CRANKSHAFT PULLEY DIA. / FAN PULLEY DIA.)

# ISUZU DIESEL 4JB1T ENGINE SPECIFICATIONS

SPEC. NO. 6581  
DATE MAY. '98

FUEL SYSTEM	BY PLUNGER AND NOZZLE, HIGH PRESSURE SOLID INJ. TYPE
INJECTION PUMP	ZEXEL MAKE, BOSCH DISTRIBUTOR VE-TYPE,
GOVERNOR	VARIABLE SPEED CONTROL MACHANICAL GOVERNOR
INJECTION TIMING	0.244 rad (14° ) BTDC
INJ. NOZZEL OPENING PRESSURE	18.1 MPa (185 kg/Cm <sup>2</sup> )
TYPE OF FUEL	DIESEL FUEL (SAE 2D TYPE)
ELECTRICAL SYSTEM	NEGATIVE GROUNDING SYSTEM, 12V
STARTING AID	SHEATHED TYPE GLOW PLUG
STARTER	12V-2.2kW
ALTERNATOR	12V-50A
DRY WEIGHT	APPROX. 250 kg
DIMENSIONS(L × W × H.mm)	789 × 582 × 781
ENGINE ASM DRAWING NO.	DI1-5531
PERFORMANCE CURVE NO.	SD-6640
WIRING DIAGRAM	TD-10-0140

## ISUZU DIESEL 4JB1T ENGINE SPECIFICATIONS

SPEC. NO. 6581

DATE MAY. '98

### DRESS LEVEL

<u>No.</u>	<u>ITEM</u>	<u>PARTS No.</u>	<u>DESCRIPTION</u>
1	FLYWHEEL ASM; W/RING GEAR	8944314702	
1 -1	FLYWHEEL	8944210041	
2	FLYWHEEL REAR	8941754091	SAE 10" METRIC TYPE SCREW THREAD
3	FLYWHEEL HOUSING	8970789240	SAE #4 METRIC TYPE SCREW THREAD
4	OIL PAN ASM; W/DRAIN PLUG	8943347390	FRONT SUMP TYPE
4 -1	OIL PAN	8943346130	
5	OIL PRESSURE SWITCH	DELETION	
6	GUIDE TUBE ASM	8944685170	INSTALLED ON OIL PAN RH SIDE
7	LEVEL GAUGE ASM	8943423851	INSTALLED ON OIL PAN RH SIDE
8	OIL FILTER ASM	8943272721	WITH OIL COOLER
8 -1	CARTRIDGE ; OIL FILTER	8970497080	SPIN-ON, FULL FLOW TYPE
9	PULLEY; CRANKSHAFT	8944535522	2 GROOVES TYPE, E.D.143mm
10	COOLING FAN ASM	DELETION	
11	PULLEY; FAN	8944273602	E.D. 128 mm
12	SPACER; FAN TO PULLEY	9136420780	T=32mm
13	BELT; COOLING FAN	8941293870	
14	WATER PUMP ASM	8971233290	CENTRIFUGAL VENT; HIGH FLOW TYPE,
15	THERMOSTAT	8942149620	OPEN 82 °C, FULL OPEN 95 °C
16	THERMOSTAT HOUSING	8941258513	WITH HEATER JOINT & CAP
17	WATER OUTLET PIPE	8941525950	LH SIDEWARD
18	WATER INLET PIPE	8971801700	
19	OVERHEAT WARNING SWITCH	DELETION	
20	INLET MANIFOLD	8970114881	CENTER UPWARD
21	AIR DUCT; TURBO TO INLET	8970177820	
22	EXHAUST MANIFOLD	8970394733	
23	TURBOCHARGER ASM	8972004340	IHI RHB52

# ISUZU DIESEL 4JB1T ENGINE SPECIFICATIONS

SPEC. NO. 6581

DATE MAY. '98

## DRESS LEVEL

<u>No.</u>	<u>ITEM</u>	<u>PARTS No.</u>	<u>DESCRIPTION</u>
24	INJECTION PUMP	8971903760	WITH TAMPER RESISTANCE
25	INJ. NOZZLE ASM	8944422241	
25 -1	INJ. NOZZLE	8944424020	MULTI-HOLE TYPE
26	FUEL FILTER ASM	LOOSE PARTS	
27	FOOT; ENGINE RH	8944350861	L-TYPE
28	FOOT; ENGINE LH	8944350871	L-TYPE
29	ALTERNATOR ASM	5812003470	12V-50A WITH REGULATOR
30	STRTER ASM	8970848770	12V-2.2kW (HITACHI)
31	GLOW PLUG	5814100235	RATING 10.5V
32	NUT; EXHAUST PIPE FIX	8941704860	QTY 4, TEMPORARILY FIXED
33	NUT; STARTER	9091114080	QTY 1, TEMPORARILY FIXED
34	WASHER; STARTER	9091505080	QTY 1, TEMPORARILY FIXED

## LOOSE PARTS

<u>No.</u>	<u>ITEM</u>	<u>PARTS No.</u>	<u>QTY</u>	<u>DESCRIPTION</u>
			1	
2	CONTROL RESISTANCE	9825300410	1	
4	STARTER SWITCH ASM	8944025000	1	
5	FUEL FILTER ASM	8972112730	1	
5 -1	CARTRIDGE ; FUEL FILTER	8972134720	1	

# ISUZU

## PERFORMANCE CURVE

### 4JB1TPK-01/02

APPLICATION : INDUSTRIAL  
CONDITION : SAE J1995  
COOLING FAN : None  
INLET AND EXHAUST RESTRICTION : None  
INLET : None  
EXHAUST : None

RATED OUTPUT : 83.0 HP / 3000 rpm  
MAXIMUM TORQUE : 172 lb·ft / 2000 rpm

