

ISUZU MOTORS AMERICA, LLC PowerTrain Division	MODEL ISZJ SPEC NO. DWG NO./DATE	4LE1TYBW01 IS-08-019-0 E3-1037-080-1, 3/6/2008
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BASIC ENGINE DESCRIPTION	2.2L, 4CYL, 4 STROKE, WTR COOLED, OHV, I/L, INDIRECT INJECTED, TURBOCHARGED DIESEL B=85mm, S=96mm, CR=21.5:1, GLOW PLUG ASSISTED START, COOLED EGR				
ENGINE CONFIGURATION	INDUSTRIAL TURBO GEARCASE PTO (SAE "A" PAD) F/F 12V  US EPA (Interim Tier 4) & EC (Stage 3A) CERTIFIED  REARWARD EXH TURBO REARWARD EXH ADAPTOR	ENGINE PERFORMANCE*	60±3% BHP @ 2500 RPM 132±5% FT-LB @ 1800 RPM LOW IDLE SPEED: 1100±25 RPM HIGH IDLE SPEED: 2750±25 RPM		
SPECIFIC OEM INFORMATION	ISZA STD	DATE OF ISSUE:	3/28/2011 ISZA	DATE RELEASED:	10/6/2008 ISZA
				PREVIOUS ISSUE DATE:	4/14/2010 ISZA

**SPECIFICATION INFORMATION**

PART NAME	PART NUMBER	TYPE	PART DESCRIPTION
FLYWHEEL HOUSING	8-97257-333-1	HSG	SAE #4 w/METRIC THDS w/FLT SD MT PADS-158mm DEEP, w/TACH PORT 3/4"-16 @ APPROX. 2 O'CLOCK
OIL PAN	8-98079-863-0	ASM	≈10.3L MAX, ≈8.0L MIN, 30° INCLINATION ALL DIR, FLAT TYPE, w/DRAIN PLUG
DIP STICK	8-94422-595-0		INSTALLED ON RH CYL BLOCK
FLYWHEEL	8-97252-438-2 8-97252-439-3 5-12339-003-1	ASM BASIC BRG HOLDER	SAE 10" OVER CTR CLUTCH w/PILOT BRG BORE w/DRIVE RING Z=108
CRANK PULLEY	8-98094-099-1		EFF DIA=132mm, SINGLE GROOVE, w/PTO PROVISION, FOR A-TYPE BELT
OIL FILTER	SHIPPED LOOSE		
FUEL FILTER	SHIPPED LOOSE		
WATER PUMP	8-98119-522-1	ASM	CENTRIFUGAL VANE TYPE-WATER HRZ INLET TWD RH SD OD=34mm HIGH FLOW
WATER OUTLET PIPE	8-97258-479-2		SIDEWARD, LOC LH SD, OD=32mm HIGH FLOW
WATER INLET PIPE	N/A		SIDEWARD, LOC RH SD, OD=34mm, INTEGRAL PART OF WATER PUMP
COOLING FAN	SHIPPED LOOSE		
FAN PULLEY	8-98004-453-0		1-GROOVE EFF DIA=128mm RATIO=1.03:1, FOR A-TYPE BELT
FAN SPACER	SHIPPED LOOSE		
OIL COOLER	8-97102-320-0	ASM	MOUNTS BETWEEN OIL FILTER ADAPTER & CYL BLK @ ENGINE RR RH SD
INLET MANIFOLD	N/A		CTR INL LOC LH SD
AIR INLET PIPE	N/A		INTEGRAL PART OF TURBO, LH SD FACING FORWARD, OD=39mm

\*Rating: SAE J1349 NET without Fan

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PART NAME	PART NUMBER	TYPE	PART DESCRIPTION
EXHAUST MANIFOLD	8-98030-566-0		LH SD CTR OUTL TO TURBO
TURBOCHARGER	8-98074-766-0	ASM	IHI RHF3, OIL-COOLED TYPE, wo/WASTE GATE, LOC LH SD, REARWARD EXH
EXHAUST ADAPTOR	8-98048-962-0		FACING REARWARD
MOUNTS	N/A		NONE
INJECTION PUMPS	8-98074-774-0	ASM	BOSCH/ZEXEL, IN-LINE PFR1KX TYPE, EACH CYL HAS ITS OWN PUMP
GOVERNOR	N/A	ASM	INTEGRAL PART OF ENGINE, VARIABLE SPEED TYPE, 10% REGULATION
STARTER	8-97112-865-2	ASM	DENSO 12V-2.0kW GEAR REDUCTION TYPE
ALTERNATOR	8-97228-318-0	ASM	HITACHI 12V-50A BUILT-IN REGULATOR NO TACH PROVISION, FOR A-TYPE BELT
GLOW PLUG	8-97106-549-4		QOS-III FOR 12V ELECTRIC
SHUT DOWN SOLENOID	8-97329-568-0	ASM	12V ENERGIZED TO RUN, wo/INT CIRC BRKR, wo/DIAGNOSTIC LEAD
FUEL FEED PUMP	SHIPPED LOOSE		
COOLANT TEMP SW	8-97125-600-1		PT 3/8 THD, T < 105°C (221°F) = OPEN, 1 POLE
OIL PRESSURE SW	1-82410-008-2		P > 4 PSI = OPEN, 1 POLE
TACHOMETER DRIVE	N/A	ASM	
PTO DRIVE, GEAR SHAFT	8-97169-889-0	ASM	SAE 5/8" SPLINE (9-TOOTH, 16/32" DIAMETRICAL PITCH) MAX DRIVE TORQUE = 65 FT-LB, RATIO = 1.23:1, ROTATION = CW (VIEWED FROM FRONT) LH SD SAE "A" PAD FACING REARWARD
EGR COOLER	8-98030-525-2	ASM	LOC TOP RR
EMISSION LABEL	EPA ENGINE FAMILY NO. BSZXL02.2UTA EC TYPE APPROVAL NO. e4*97/68JA*2004/26* 0189*00	EPA & EC (COMB)	EPA & EC COMBINED LABEL FOR ENGINE HEAD COVER; FOR Y2011, EPA (Interim Tier 4) & EC (Stage 3A)
<b>SPECIFICATION INFORMATION FOR SHIP LOOSE ITEMS</b>			
OIL FILTER	8-98075-671-0 8-98075-676-0	ASM ELEM	FULL FLOW PAPER ELEM TYPE
START SW	N/A	ASM	3 POS SW: PRE-HEAT RUN/ACC START
CONTROL RESISTOR	N/A	ASM	FOR QOS-III GLOW PLUGS
VOLTAGE REGULATOR	N/A		INTERNAL IN ALTERNATOR
CONNECTOR, ALT	N/A		PIG TAIL FROM ALTERNATOR
RELAY; STARTER	5-82550-029-0	ASM	SAFETY, PREVENTS ENGAGEMENT w/ENGINE RUNNING & TIMER
Engine Model Specification continued on the following page.			

This is a continuation of the engine specifications from the preceding page.

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PART NAME	PART NUMBER	TYPE	PART DESCRIPTION
<b>SPECIFICATION INFORMATION FOR SHIP LOOSE ITEMS (continued)</b>			
STARTER SAFETY	8-97068-778-1		SAFETY, PREVENTS ENGAGEMENT w/ENGINE RUNNING & TIMER
FUEL FEED PUMP	8-97240-675-0		ELEC.
FUEL FILTER	8-94415-077-3	ASM	PAPER ELEM TYPE
WATER SEDIMENTER	8-97311-254-2	ASM	
CONTROLLER; EGR CUT	8-98098-603-0		
RELAY; EGR CUT	5-82550-029-0		
TIMER; GLOW PLUG	8-97201-331-0		
GASKET, EXH	8-97367-918-0		TEMPORARILY ATTACHED TO EXH MANIF OUTLET
COOLING FAN	8-97205-123-1		430mm PLASTIC 8-BLADE SUCTION TYPE
FAN SPACER	8-97063-400-3 9-13642-078-0		STEEL L=4.5mm (TEMPORARILY ATTACHED TO ENGINE) ALUMINUM L=32mm (TEMPORARILY ATTACHED TO ENGINE)
BOLTS, FAN FIXING	8-97027-257-0		QTY 4, M6 x 1.0 x 55mm (TEMPORARILY ATTACHED TO ENGINE)
WASHER, FAN FIXING	0-91610-706-0		QTY 4 (TEMPORARILY ATTACHED TO ENGINE)
OWNER'S MANUAL	IDE-6260		
EMISSION LABEL	EPA ENGINE FAMILY NO. BSZXL02.2UTA EC TYPE APPROVAL NO. e4*97/68JA*2004/26* 0189*00	EPA & EC (COMB)	EPA & EC COMBINED SUPPLEMENTAL LABEL FOR MACHINE; FOR Y2011, EPA (Interim Tier 4) & EC (Stage 3A)
FUEL TANK FILL LOCATION LABEL	8-98106-491-0	EPA	INDICATES "LOW SULFUR OR ULTRA LOW SULFUR DIESEL FUEL ONLY" (TEMPORARILY ATTACHED TO ENGINE)
<b>SPECIFIC INFORMATION FOR OPTIONAL BULK SHIP LOOSE ITEMS (MUST BE PURCHASED SEPARATELY)</b>			
MATING CONNECTOR PARTS FOR ALL ELECTRICAL COMPONENTS ON ENGINE	(REFER TO <a href="#">0 4LE1T mating connector parts chart and hyperlinks.xls</a> )		
<b>ADDITIONAL INFORMATION</b>			
FIRING ORDER: 1-3-4-2			
COOLANT CAPACITY: ≈2.8L			
INJ TIMING: 12±1° BTDC			
INJ NOZZLE OPENING PRESSURE: 14.7MPa (150 kg/cm <sup>2</sup> )			
ENGINE DRY WEIGHT: ≈190kg (419 lbs)			

NOTE: Part numbers are subject to change without notice.