

ISUZU MOTORS AMERICA, LLC PowerTrain Division	MODEL ISZJ SPEC NO. DWG NO./DATE	4LE1NYBW03 IS-07-094-0 E3-1037-075-0, 1/23/2008
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BASIC ENGINE DESCRIPTION	2.2L, 4CYL, 4 STROKE, WTR COOLED, OHV, I/L, INDIRECT INJECTED, NATURALLY ASPIRATED DIESEL B=85mm, S=96mm, CR=21.5:1, GLOW PLUG ASSISTED START				
ENGINE CONFIGURATION	INDUSTRIAL GEARCASE PTO (SAE "A" PAD) F/F, 12V US EPA (Interim Tier 4) & EC (Stage 3A) CERTIFIED	ENGINE PERFORMANCE*	48.1±3% BHP @ 2600 RPM 103±5% FT-LB @ ≈1800 RPM LOW IDLE SPEED: 1100±25 RPM HIGH IDLE SPEED: 2860±25 RPM		
SPECIFIC OEM INFORMATION	ISZA STD	DATE OF ISSUE:	3/28/2011 ISZA	DATE RELEASED: PREVIOUS ISSUE DATE:	6/25/2008 ISZA 4/14/2010 ISZA

SPECIFICATION INFORMATION

PART NAME	PART NUMBER	TYPE	PART DESCRIPTION
FLYWHEEL HOUSING	8-97264-961-0	HSG	SAE #5 w/METRIC THDS w/FLAT SD MT PADS-100mm DEEP, w/TACH PORT 3/4"-16 @ APPROX. 2 O'CLOCK
STUDS, FLYWHEEL HSG	1-09302-107-0		QTY 2 (INSTALLED), L=145mm TOTAL (130mm PROTRUDING)
OIL PAN	8-97171-126-0 8-97171-127-0	ASM BASIC	FULL SUMP, 8.4L MAX, 5.9L MIN, 30° INCLINATION ALL DIR, HIGH SPEED TYPE
DIP STICK	8-97088-814-0		LOC RH SD MID MT
FLYWHEEL	8-97164-530-0 8-97164-532-1	ASM BASIC	SEMI-SAE 7.5" OVER CTR CLUTCH w/PILOT BEARING BORE w/DRIVE RING Z=108
CRANKSHAFT PULLEY	8-97226-830-1		EFF DIA=123mm, SINGLE GROOVE, w/PTO PROVISION, FOR A-TYPE BELT, w/DAMPER
OIL FILTER	N/A 8-94456-741-2	ASM ELEM	SYSTEM; FULL FLOW w/REPLACEABLE SPIN-ON PAPER ELEM TYPE FILTER @ ENG RR RH SD
FUEL FILTER	8-97014-204-1 8-97172-549-1	ASM ELEM	REPLACEABLE SPIN-ON PAPER ELEM TYPE FILTER @ ENG LWR CTR RH SD
WATER PUMP	8-98098-662-0	ASM	CENTRIFUGAL VANE TYPE-WATER HRZ INLET TWD RH SD OD=34mm HIGH FLOW
WATER OUTLET PIPE	8-97258-479-2		SIDEWARD TWD LH SD OD=32mm HIGH FLOW
WATER INLET PIPE	8-97102-308-0		SIDEWARD, RH SD, OD=34mm
COOLING FAN	SHIPPED LOOSE		
FAN PULLEY	8-97226-855-0		1-GROOVE EFF DIA=110mm RATIO=1.12:1, FOR A-TYPE BELT
FAN SPACER	SHIPPED LOOSE		
BOLTS, FAN FIXING	SHIPPED LOOSE		
OIL COOLER	8-97102-320-0	ASM	MOUNTS BETWEEN OIL FILTER ADAPTER & OIL FILTER @ ENGINE RR RH SD
INLET MANIFOLD	N/A		INTEGRAL PART OF CYL HEAD COVER
AIR INLET PIPE	8-97227-603-0		90° ELBOW, RRWD ANGLED UPWD (CAN BE RE-ORIENTED TO VERTICAL SLIGHTLY FORWARD POSITION)
*Rating: SAE J1349 NET without Fan	Engine Model Specification continued on the following page.		

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PART NAME	PART NUMBER	TYPE	PART DESCRIPTION
EXHAUST MANIFOLD	8-97117-590-1		SD OUTLET 4 M8x1.25mm STUD FLANGE LOC ENG LH SD 50mm SQ BOLT PTN
GASKET, EXHAUST	SHIPPED LOOSE		
TURBOCHARGER	N/A	ASM	
EXHAUST ADAPTOR	N/A		
MOUNTS	N/A		NONE
INJECTION PUMPS	8-97147-580-1	ASM	BOSCH/ZEXEL, IN-LINE PFR TYPE, EACH CYL HAS ITS OWN PUMP
GOVERNOR	N/A	MAIN	INTEGRAL PART OF ENGINE, VARIABLE SPEED TYPE, 10% REGULATION
STARTER	8-97112-865-2	ASM	DENSO 12V-2.0kW GEAR REDUCTION TYPE
ALTERNATOR	8-97225-117-0	ASM	DENSO 12V-35A 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	8-97183-013-0	ASM	ELECTRIC 12V MOUNTED @ ENG RH SD WATERPROOF
COOLANT TEMP SW	DELETE		PT 3/8 THREAD, T < 105° C (221° F) = OPEN, 1 POLE
OIL PRESSURE SW	9-82720-069-0		1 POLE, P > 14 PSI = OPEN
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
EMISSION LABEL	EPA ENGINE FAMILY NO. BSZXL02.2VNA EC TYPE APPROVAL NO. e4*97/68KA*2004/26* 0194*00	EPA & EC (COMB)	EPA & EC COMBINED LABEL FOR ENGINE HEAD COVER; FOR Y2011, EPA (Interim Tier 4), EC (Stage 3A)
SPECIFICATION INFORMATION FOR SHIP LOOSE ITEMS			
START SW	N/A	ASM	3 POS SW: PRE-HEAT RUN/ACC START
CONTROL RESISTOR	8-94173-948-0	ASM	FOR QOS-III GLOW PLUGS
VOLTAGE REGULATOR	N/A		INTERNAL IN ALTERNATOR
CONNECTOR, ALT	8-97091-540-0		PIG TAIL FROM ALTERNATOR
COOLING FAN	5-13660-304-1	ASM	400mm PLASTIC 6-BLADE SUCTION TYPE
FAN SPACER	8-97063-400-3		STEEL, L=4.5mm (TEMPORARILY ATTACHED TO ENGINE)
	9-13642-078-0		ALUMINUM, L=32mm (TEMPORARILY ATTACHED TO ENGINE)
Engine Model Specification continued on the following page.			

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PART NAME	PART NUMBER	TYPE	PART DESCRIPTION
SPECIFICATION INFORMATION FOR SHIP LOOSE ITEMS (continued)			
BOLT, FAN FIXING	0-28050-850-0		QTY 4, M8 X 50mm (TEMPORARILY ATTACHED TO ENGINE)
STARTER SAFETY	8-97068-778-1		SAFETY, PREVENTS ENGAGEMENT w/ENGINE RUNNING & TIMER
RELAY; STARTER	5-82550-029-0	ASM	SAFETY, PREVENTS ENGAGEMENT w/ENGINE RUNNING & TIMER
GASKET, EXH	8-97042-028-0		TEMPORARILY ATTACHED TO EXH MANIFOLD OUTLET
OWNER'S MANUAL	IDE-6260		
EMISSION LABEL	EPA ENGINE FAMILY NO. BSZXL02.2VNA EC TYPE APPROVAL NO. e4*97/68KA*2004/26* 0194*00	EPA & EC (COMB)	EPA & EC COMBINED SUPPLEMENTAL LABEL FOR MACHINE; FOR Y2011, EPA (Interim Tier 4), EC (Stage 3A) (TEMPORARILY ATTACHED TO ENGINE)
FUEL TANK FILL LOCATION LABEL	8-98106-491-0	EPA	INDICATES "LOW SULFUR OR ULTRA LOW SULFUR DIESEL FUEL ONLY" (TEMPORARILY ATTACHED TO ENGINE)
ADDITIONAL INFORMATION			
FIRING ORDER: 1-3-4-2			
COOLANT CAPACITY: ≈2.8L			
INJ TIMING: 13±1° BTDC			
INJ NOZZLE OPENING PRESSURE: 14.7MPa (150 kg/cm ²)			
ENGINE DRY WEIGHT: 168kg (370 lbs)			

NOTE: Part numbers are subject to change without notice.