

ISUZU MOTORS AMERICA, LLC PowerTrain Division	MODEL ISZJ SPEC NO. DWG NO./DATE	4LE2PW12 8460 (7/2002) E3-1038-021-0, 6/16/2003
--	--	---

BASIC ENGINE DESCRIPTION	2.2L, 4CYL, 4 STROKE, WTR COOLED, OHV, I/L, DIRECT INJECTED, NATURALLY ASPIRATED DIESEL B=85mm, S=96mm, CR=18.8:1, GLOW PLUG ASSISTED START				
ENGINE CONFIGURATION	INDUSTRIAL GEARCASE PTO (SAE "A" PAD) F/F US EPA (Tier 2) & EC (Stage 2) CERTIFIED	ENGINE PERFORMANCE*	52 BHP @ 3000 RPM 105 FT-LB @ 2250 RPM LOW IDLE SPEED: 1000 RPM HIGH IDLE SPEED: 3300 RPM		
SPECIFIC OEM INFORMATION	ISZA STD	DATE OF ISSUE:	10/25/2011 ISZA	DATE RELEASED:	6/12/2003
				PREVIOUS ISSUE DATE:	10/20/2005 ISZA

SPECIFICATION INFORMATION

PART NAME	PART NUMBER	TYPE	PART DESCRIPTION
FLYWHEEL HSG	8-97257-333-2	HSG	SAE #4 w/METRIC THREADS w/FLAT SD MT PADS-158mm DEEP, w/TACH PORT 3/4"-16 @ APPROX. 2 O'CLOCK
STUD, FLYWHEEL HSG	9-04731-080-0		QTY 2 (INSTALLED), L=95mm TOTAL (80mm 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
DIPSTICK	8-94422-595-0		INSTALLED ON RH CYL BLK
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	8-97226-830-1		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 FRT RH SD
WATER PUMP	8-97254-148-3	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	N/A		T-PIPE FOR OIL COOLER CONN 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		
OIL COOLER	N/A	ASM	MOUNTS BETWEEN OIL FILTER ADAPTER & OIL FILTER @ ENG RR RH SD
INLET MANIFOLD	N/A		INTEGRAL PART OF CYL HD COVER
AIR INLET PIPE	8-97227-603-0		90° ELBOW, RRWD ANGLED UPWD (CAN BE RE-ORIENTED TO VERTICAL SLIGHTLY FORWARD POSITION)

*Rating: SAE J1995

Engine Model Specification continued on the following page.

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

MODEL:

4LE2PW12

PART NAME	PART NUMBER	TYPE	PART DESCRIPTION
EXHAUST MANIFOLD	8-97117-590-1		SD OUTLET 4 M8x1.25mm STUD FLG LOC ENG LH SD 50mm SQ BOLT PTN
TURBOCHARGER	N/A	ASM	
EXHAUST ADAPTOR	N/A		
MOUNTS	N/A		NONE
INJECTION PUMPS	8-97351-985-0	ASM	BOSCH/ZEXEL, IN-LINE PFR TYPE, EACH CYL HAS ITS OWN PUMP
GOVERNOR	8-97363-269-0	ASM	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	8-97364-128-1		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 PUMP	8-97183-013-0	ASM	ELECTRIC 12V MOUNTED @ ENG RH SD WATERPROOF
COOLANT TEMP SW	N/A		
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 FRT) LH SD SAE "A" PAD FACING RWD
EMISSION LABEL	EPA ENGINE FAMILY NO. 7SZXL02.2GNA EC TYPE APPROVAL NO. e4*97/68GA*2001/63* 0079*00	EPA EC	LOC ENG RH SD; FOR Y2007, EPA (Tier 2) & EC (Stage 2)
SPECIFICATION INFORMATION FOR SHIP LOOSE ITEMS			
START SW	8-94402-500-0	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
OWNER'S MANUAL	IDE-6034		SPEC. TO 4LE2-SERIES
CONNECTOR, ALT	8-97091-540-0		PIG TAIL FROM ALTERNATOR
BOLT, FAN FIXING	0-28050-850-0		QTY 4, M8 x 50mm
STARTER SAFETY	8-97068-778-1		SAFETY, PREVENTS ENGAGEMENT w/ENGINE RUNNING & TIMER
COOLING FAN	5-13660-304-1		400mm PLASTIC 6-BLADE SUCTION TYPE
Engine Model Specification continued on the following page.			

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

MODEL:

4LE2PW12

FAN SPACER	8-97063-400-3 9-13642-078-0		STEEL L=4.5mm (TEMPORARILY ATTACHED TO ENG) ALUMINUM L=32mm (TEMPORARILY ATTACHED TO ENG)
RELAY; STARTER	5-82550-029-0	ASM	SAFETY, PREVENTS ENGAGEMENT w/ENGINE RUNNING & TIMER
GASKET, EXHAUST	8-97042-028-0		TEMPORARILY FIXED TO EXH MANIF OUTLET
EMISSION LABEL	EPA ENGINE FAMILY NO. 7SZXL02.2GNA EC TYPE APPROVAL NO. e4*97/68GA*2001/63* 0079*00	EPA EC	SUPPLEMENTAL LABEL FOR MACHINE; FOR Y2007, EPA (Tier 2) & EC (Stage 2)
ADDITIONAL INFORMATION			
FIRING ORDER: 1-3-4-2			
COOLANT CAPACITY: 2.8L			
INJ TIMING: 8.4±1° BTDC			
INJ NOZZLE OPENING PRESSURE: 16.7MPa (170 kg/cm ²), 25.0MPa (255 kg/cm ²) (2-SPRING NOZZLE)			
ENGINE DRY WEIGHT: 166.5kg (367 lbs)			

NOTE: Part numbers are subject to change without notice.