

Messrs. _____

L-0 model

Sebango code: AZ	MH	PT
Assy / B1:		
TB / C1:		
Pack / F1:		
Prod.Eng:		
Data:		

Drawing No.	G2-14120-0010(1/3)
DATE	Nov. 16th, 2005
Revision No.	
Revision Date	
Design model ID	714120B
Product. model ID	114120A

Engine Specification

For L48N6CA1T1AA

(Standard for General use : Starting motor)

Contents		
Engine specifications		G2-14120-0010(2/3)
Engine performance		G2-14120-0010(2/3)
Details of specifications		G2-14120-0010(3/3)
Attached	Outline	B2-14120-0010
	Labels	G2-14120-2010
	Performance curve	
	Tools	C2-14110-0010
	Wiring	E2-14110-0010



Revision	(Nov.16th.2005)Registered by YITILU050091 After finishing Test in YJ, we will reissue with Spring Position & Performance Curve etc.
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YANMAR CO.,LTD.

YI Engineering Dept.		
Manager	Checked	Drawn
J. Same	J. Nishimura	J. Nishimura

Revision No.			
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G2-14120-0010 (2/3)

1.Engine Specification

Model name			L48N6CA1T1AA
Type			4-stroke,vertical-cyl,air-cooled diesel
Combustion system			Direct injection
No. of cyl.-bore × stroke		mm	1- φ 70 × 57
Displacement		liter	0.219
Output	Continuous	kW/min ⁻¹	* 3.1 (4.2PS ,4.2HP) / 3600
	Maximum	kW/min ⁻¹	* 3.5 (4.7PS ,4.7HP) / 3600
PTO Shaft	PTO position		Crankshaft
	Direction of rotation		Counterclockwise viewed from PTO side
Injection Timing (FIC-air)		deg.	bTDC.16.5 ± 1.0
Fuel	Oil selection		Diesel fuel
	Tank capacity	liter	2.4
Lubricating	Oil selection		SAE 10W30,API grade CD or higher
	Oil capacity	liter	0.8 (effective,0.25)
Cooling system			Forced air cooling by flywheel fan
Starting system			Starter motor with re-coil starter
Governor			All speed type, mechanical
Balancer shaft			Single balancer shaft
Air cleaner			Wet type paper element filter
Exhaust silencer			Expansion silencer with cover
Generator (at 3600min ⁻¹)			Flywheel dynamo :12V-15A
Dimensions		mm	Indication in outline drawing
Dry weight		kg	Approx. 32.0

* Output is given for normal atmosphere conditions and Specs, which are defined as follows:

- Atmospheric pressure: 100 kPa (750mmHg)
- Atmospheric temperature: 25°C
- Relative humidity: 30%

2.Engine performance

Speed at no load	Minimum	min ⁻¹	1200 or more	PTO Shaft (Without minimum idling speed adjust bolt. Adjustable figure by your end.)
	Maximum		3800 ± 30	
Governor regulation	Instantaneous speed difference	%	8 or less	
	Permanent speed change		5 or less	
	Recovery time	sec.	5 or less	
	Speed fluctuation	min ⁻¹	30 or less	
Permissible angle of inclination	Continuous	deg.	20	Operation of up to 3 minutes
	Intermittent		30	
Lowest start temperature	Re-coil starting	°C	0	Without starting aid agent
	Electric starting		-10	

Revision No.			
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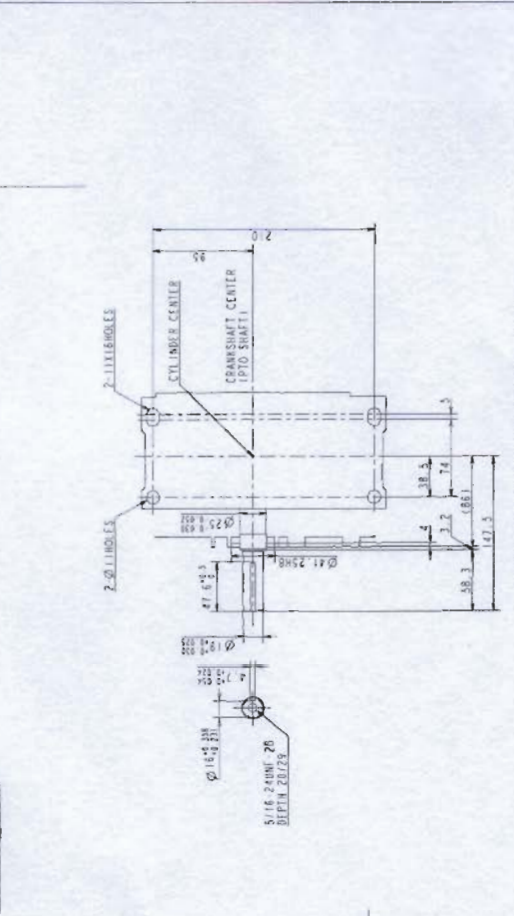
G2-14120-0010 (3/3)

3.Details of specifications (STD SPEC. L48N6CA1T1AA)

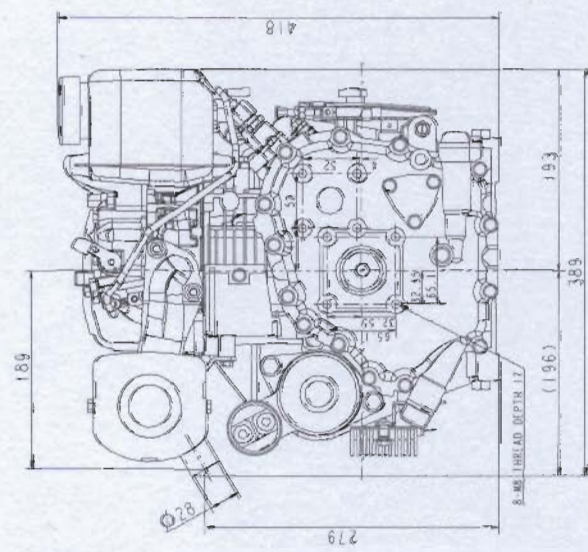
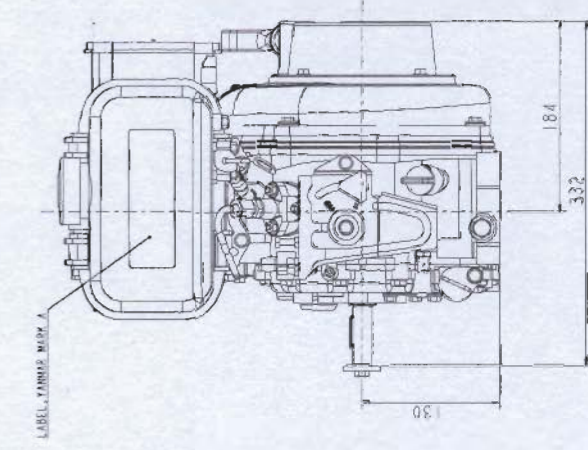
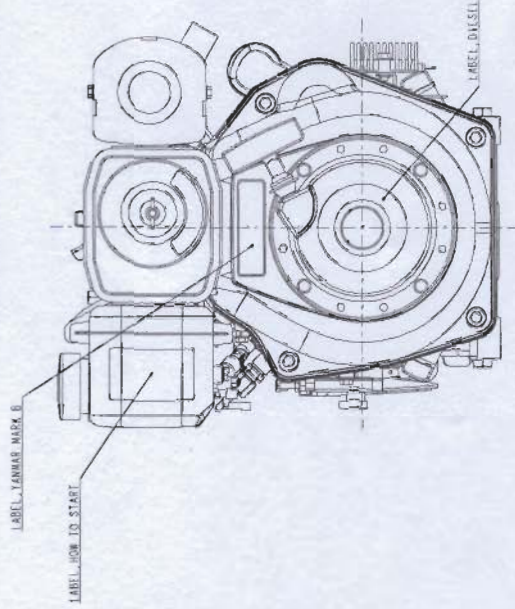
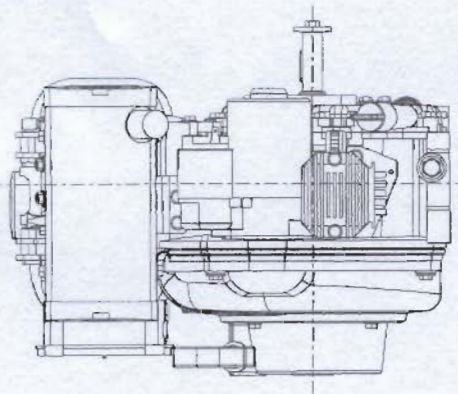
System	Part name	Code	STD Spec.	Specification	Remarks
Fuel System	Fuel tank	Bm-a	3	same as STD.	Color : Yanmar Black
	Tank stay (A)		114299-55210	same as STD.	
	Tank stay (B)		114299-55230	same as STD.	
	Nozzle, Fuel injection		714120-53100	same as STD.	
Lubricating System	Oil pressure switch	Cm-a	NA	same as STD.	
Cooling System	Flywheel	Dm-a	1	same as STD.	DE Type
	Fan case	Dm-b	1	same as STD.	Color : Gold Silver
Electric System	Electric Regulator & Harness, wire	-	114399-77550	same as STD.	For 12V-15A
	Dynamo Assy.	-	114399-78260	same as STD.	
	Air heater	Em-a	NA	same as STD.	
PTO&Flange	Crankshaft	Fm-a	9	same as STD.	E-D type
	Crank case cover	-	114299-01450	same as STD.	D type
Intake and Exhaust System	Air cleaner	Gm-a	5	same as STD.	Lower Intake type
	Intake bend	Gm-b	114771-12010	same as STD.	
	Silencer	Gm-c	5	same as STD.	
Starting System	Recoil starter Assy.	Hm-a	3	same as STD.	
	Starting motor	Hm-b	114362-77011	same as STD.	
Speed Control System	Control device Assy.	Im-a	1	same as STD.	General type
	Governor lever Assy.	-	114295-61170	same as STD.	2 lever type
	Fuel limiter Assy.	-	114211-66600	same as STD.	Torque limiter type
Decomp system	Bonnet	Lm-a	5	same as STD.	
Remarks	Fuel oil limiter : Locked by wire High idle adjust bolt : Locked by wire Lubricating Oil : Not provided Regulator Spring Position : Fuel Pump Model : N2A Recoil Angle: R1				
Loose parts	Key switch panel CMP		114351-77500	same as STD.	
	Connector		NA	same as STD.	
	Deflector		114299-13800	same as STD.	
	Tools		114299-92590	same as STD.	

STAMP		GT CODE		O AND X RADIAL	
10 W/3 2/8EL	10 10				
15 W/3 2/8EL	15 10				
17.5 W/3 2/8EL	17.5 10				
19 W/3 2/8EL	19 10				
20.5 W/3 2/8EL	20.5 10				
22 W/3 2/8EL	22 10				
23.5 W/3 2/8EL	23.5 10				
25 W/3 2/8EL	25 10				
26.5 W/3 2/8EL	26.5 10				
28 W/3 2/8EL	28 10				
30 W/3 2/8EL	30 10				
31.5 W/3 2/8EL	31.5 10				
33 W/3 2/8EL	33 10				
34.5 W/3 2/8EL	34.5 10				
36 W/3 2/8EL	36 10				
37.5 W/3 2/8EL	37.5 10				
39 W/3 2/8EL	39 10				
40.5 W/3 2/8EL	40.5 10				
42 W/3 2/8EL	42 10				
43.5 W/3 2/8EL	43.5 10				
45 W/3 2/8EL	45 10				
46.5 W/3 2/8EL	46.5 10				
48 W/3 2/8EL	48 10				
49.5 W/3 2/8EL	49.5 10				
51 W/3 2/8EL	51 10				
52.5 W/3 2/8EL	52.5 10				
54 W/3 2/8EL	54 10				
55.5 W/3 2/8EL	55.5 10				
57 W/3 2/8EL	57 10				
58.5 W/3 2/8EL	58.5 10				
60 W/3 2/8EL	60 10				

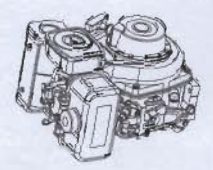
OEN FOR	SMT ASS	REQ	MOUNTING	FOR APPROVAL		DELIVERY	DRIVING	INSTRUMENT	STANDARD	OK PROCESS	
				5	10					15	20
5	10	15	20	25	30	35	40	45	50	55	60
65	70	75	80	85	90	95	100	105	110	115	120
125	130	135	140	145	150	155	160	165	170	175	180
185	190	195	200	205	210	215	220	225	230	235	240
245	250	255	260	265	270	275	280	285	290	295	300
305	310	315	320	325	330	335	340	345	350	355	360
365	370	375	380	385	390	395	400	405	410	415	420
425	430	435	440	445	450	455	460	465	470	475	480
485	490	495	500	505	510	515	520	525	530	535	540
545	550	555	560	565	570	575	580	585	590	595	600



ENGINE MOUNTING PLATE AND PTO SHAFT
SEEN THROUGH FROM THE TOP OF THIS ENGINE



W/LOG	YAS	YAM	YEN	YOS	YON	YOO	YOP	YOS	YON	YOO	YOP
WT LOG	WT LOG	WT LOG	WT LOG	WT LOG	WT LOG	WT LOG	WT LOG	WT LOG	WT LOG	WT LOG	WT LOG
(CONT.)	(CONT.)	(CONT.)	(CONT.)	(CONT.)	(CONT.)	(CONT.)	(CONT.)	(CONT.)	(CONT.)	(CONT.)	(CONT.)
CHECKED	SPECIMENIST	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
DESIGNED	DRAWN	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
S. NISHIMURA	H. GOSAWA	15 MAR 1965									



WORKER	DATE	REVISION	DESCRIPTION
J. SAND			

SIC	WANGER	MOBEL	J. SAND	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE

YAMAR CO., LTD. ENGINE PRODUCT OPERATIONS DIV.
B2-1470-0010

LABELS

G2-14120-2010

No.	L A B E L S	P L A C E	C O N T E N T S
1	LABEL, ENGINE NAME	COVER (CYLINDER	—————
2	LABEL, YANMAR MARK (A	F. O. TANK	THE FOLLOWING DETAILS
3	LABEL, CAUTION	F. O. TANK	//
4	LABEL, HOW TO START	F. O. TANK	//
5	LABEL, YANMAR MARK (B	FANCASE, COOLING	//
6	LABEL, DIESEL	RECOIL STARTER	//

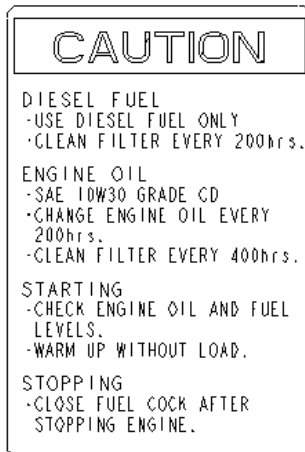
② LABEL, YANMAR MARK (A



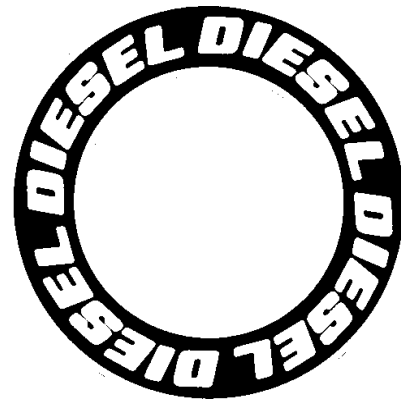
⑤ LABEL, YANMAR MARK (B



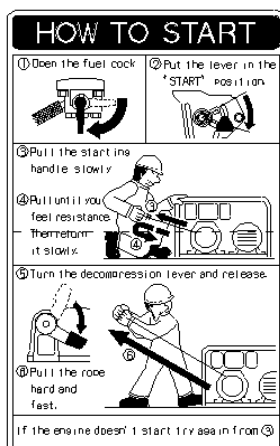
③ LABEL, CAUTION



⑥ LABEL, DIESEL

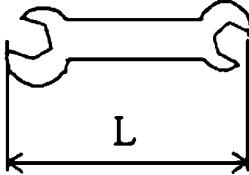
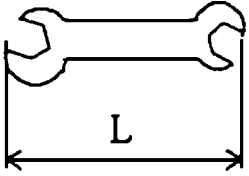
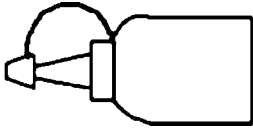
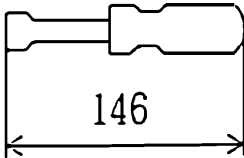
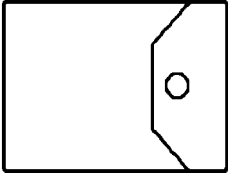


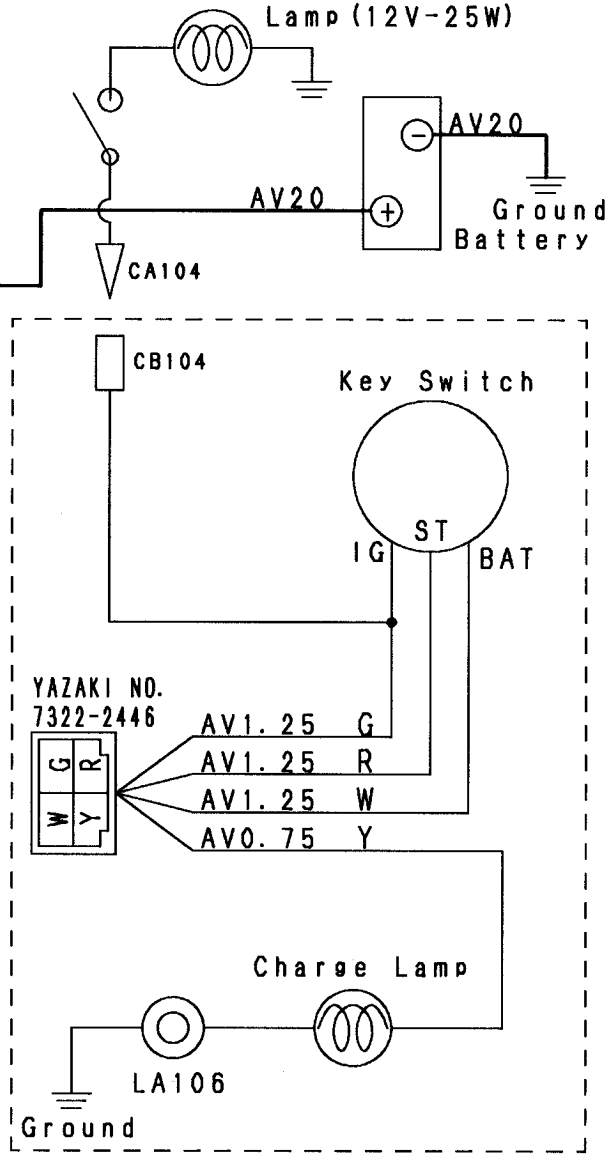
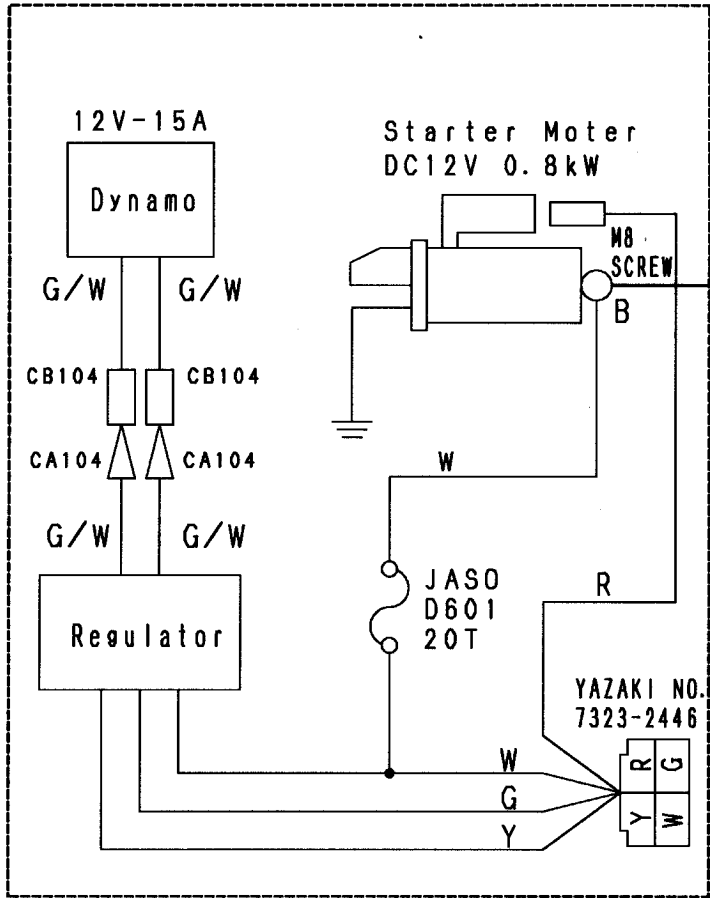
④ LABEL, HOW TO START



標準工具 TOOLS

C2-14110-0010

区分 ITEM	名称 DESCRIPTION	部品コード及び略図 PART NUMBER	材質 MATERIAL	個数 Q'ty	備考 NOTES
1	両口スパナ WRENCH 14×17	114299-92720 	UNI EN 10083/1 C40	1	L=163
2	両口スパナ WRENCH 10×12	114299-92710 	UNI EN 10083/1 C40	1	L=128
3	油さし FEEDER, OIL	114299-92740 	合成樹脂 POLYETHYRENE	1	
4	+-ねじまわし SCREWDRIVER	114299-92730 	UNI EN 10083/1 C40 & 合成樹脂 PVC	1	
5	工具袋 BAG, TOOL	114299-92600 	黒色ビニール PVC	1	



How Key Switch Function

	IG	BAT	ST	NOTE
OFF				
1	○—○			AUTO
2	○—○—○			↑

* G:Green
W:White
Y:Yellow
R:Red

NOTE:

1. Be sure to ground both engine and engine-driven machine
2. Section enclosed with dotted square is pre-wired at Yanmar factory.
Section enclosed with alternate long and short dash line is the section included in engine packing.
For this section, purchaser is expected to:
 - 1) connect 4P coupler.
 - 2) secure charge lamp ground (LA106) with bolt (M6)
 - 3) Receptacle of pin-type terminal (CB104) outputs up to 12V/25W.
3. Locally procure
 - 1 battery (24AH-36AH)
 - 2 battery cable (AV20)
 - 3 lamp (12V-25W), switch and cable (AV1.25)