



YANMAR CO.,LTD.

Messrs: BCS	Solution No.				
	Rev. No.	M1			
	Drawing No.		G2-14320-0540		
	Revision		(05/NOV/08)Registered by YDSL-08116.		
	M1(18/MAR/10)The specifications are changed as follows. (1)According to the EC Machinery Directive, we changed label. (YDSL-10011)				

Engine Specification

Model name	L100N6FJ1P1AAFT (Design model ID : 714322D) (Production model ID : 114326E)
Type	4-stroke, vertical-cylinder, air-cooled diesel
Use for	Motor Cultivator , Starting motor
Dev. Request No.	YI DEVREQ-082-2007

05 NOV. 2008

YANMAR CO.,LTD.

Sending to	
YI Engineering	1

Rev. No.	M1			
Drawing No.			G2-14320-0540	

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Remarks :

Sebango Code:	MH	PT
Assy / B1:		
TB / C1:		
PACK / F1:		
Prod. Eng:		
Date:		

Power System Operations Division Engine Development Dept.		
Application Engineering Dept.		
Manager	Checked	Drawn
<i>R. Harker</i>	<i>T. Sasaki</i>	<i>Yamashita</i>
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#.ogawa

Rev. No.	M1			
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1. Engine Specification

Model name			L100N6FJ1P1AAFT
Combustion system			Direct injection
No. of cylinder-bore × stroke		mm	1-φ 86×75
Displacement		liter	0.435
Output	Continuous	kW/min ⁻¹	* 6.6 (9.0PS, 8.9HP) / 3600
	Maximum	kW/min ⁻¹	* 7.4 (10.0PS, 9.9HP) / 3600
PTO Shaft	PTO position		Crankshaft
	Direction of rotation		Counterclockwise viewed from PTO side
Injection Timing (FIC-air)		deg.	13.0±1.0 bTDC
Fuel	Oil selection		Diesel fuel
	Tank capacity	liter	5.4
Lubricating system			Forced lubricating system
Lubricating	Oil capacity	liter	1.6 (effective, 0.6)
	Oil selection		SAE 10W30, API grade CD or higher
Cooling system			Forced air cooling by flywheel fan
Starting system			Starter motor with recoil starter
Governor			All speed type, mechanical
Balancer shaft			Single balancer shaft
Air cleaner			Dry 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. 54.0

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

- Atmospheric pressure : 100kPa (750mmHg)
- Atmospheric temperature : 25°C (298K)
- Relative humidity : 30%

[Notice] Spec of air cleaner is without pre-cleaner and pipe.

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	at continuous output
	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	
Noise level at continuous rating output (Mean of five direction)		dB(A)	95.0	at continuous output distance : 1m height : 0.5m with STD silencer on

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3. Details of specifications Base model : L100N6FJ1P1AA

System	Part Name	STD Spec.	Specification	Remarks
Fuel System	Pump, Fuel Injection	714339-51200	←	1NS, Left40° (Made in Yanmar FIE)
	Nozzle, Fuel Injection	714339-53200	←	Made in Yanmar FIE
	Fuel oil tank	11431C-55010	←	(Bm-a-1) 5.4L, Color:Yanmar Black
	Tank stay (A)	114210-55210	←	
	Tank stay (B)	114310-55230	←	
	Fuel oil filter	NA	←	
	Fuel oil pipe, Return	114339-59300	←	For Yanmar FIE
	Fuel oil pipe, Pump	114780-59010	←	
	Fuel injection pipe	114310-59800	←	
	Cut-valve, Fuel oil	NA	←	
Lubricating System	Cap Assy., Lo supply	114699-01760	←	Cap assy. X1, PlugX1(speed control device side)
	Cover, Lub. Oil pump	114299-32070	←	
	Filter, Lub. Oil	114299-35110	←	
	Oil pressure switch	NA	←	
Cooling System	Flywheel	114699-21600	←	(Dm-a-3)STD (DE type)
	Engine cover	^① 714310-45100 114320-45200	←	(Dm-c-1)Full cover type, ^① W/ Pictorial label
	Case, Cooling Fan	114310-45100	←	(Dm-b-3)STD, Color:Yanmar Italian gray
Electric System	Electric Regulator & Harness	114399-77560	←	For 12V-15A dynamo
	Air heater	NA	←	
	Dynamo Assy.	114399-78280	←	Output : 12V-15A
PTO & Flange	Crankcase cover	114310-01450	←	STD
	Crank shaft	11431C-21060	←	(Fm-a-15)E-DI type
	Key, Crank shaft	NA	←	
Intake and Exhaust System	Air cleaner	^① 114310-12511 114320-12550	←	(Gm-a-1)STD ^① (W/O Label)
	Pre cleaner	NA	←	
	Intake bend	NA	←	
	Muffler	11431C-13550	←	(Gm-c-1)STD
Starting System	Recoil starter Assy.	114699-76073	←	(Hm-a-1)STD, Recoil angle:R5
	Plunger, Starting	NA	←	
	Starting motor	114362-77011	←	(Hm-b-1)STD, 12V-0.8kW
Speed Control System	Governor lever Assy.	114311-61500	←	2 lever type
	Control device Assy.	714299-66901	←	(Im-a-6)Tiller type
	Spring, Regulator	114320-66010	←	SP: 1-B , Paint mark : Red
	Fuel limiter Assy.	114320-66600	←	For 3600min ⁻¹
Decomp. System	Remote decomp.	NA	←	
	Bonnet	114310-11950	←	(Lm-a-1)STD
Others	Cylinder block	114310-01020	←	
	Cam shaft	114320-14010	←	
	Balancer shaft	114310-28010	←	
	Flange	NA	114399-21960	(Km-a-1)Tiller flange
	Cover, Tiller	NA	←	
Standard Loose Parts	Key switch panel Assy.	NA	←	
	Connector	114351-77520	←	
	Deflector	114699-13800	←	
	Orifice	NA	←	
	Tools	114299-92590	←	
	Operation manual	0ALN0-G00100	←	English
	Label, Hot surface	^① 114220-07130	←	
Remarks	Fuel oil limiter	Locked by wire		
	High idle adjust bolt	Locked by wire		
	Lubricating oil	Not provided		
	Delivery style	Cardboard box		

NEED	PURCHASING SPECIFICATION	REQUEST FOR APPROVAL	DELIVERY DRAWING	INSPECTING STANDARD	QC-PROCESS
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GEN. TOL.	DRAFT ANG.	OUTSIDE	INSIDE	NOMINAL DIM. DIVISION	5 MAX	5 TO 10	10 TO 18	18 TO 30	30 TO 50	L-C-CAST	120 MAX	120 TO 250	250 TO 400	400 TO 800	800 TO 1600	1600 TO 3150	L-CHIP	0.5 TO 6	6 TO 30	30 TO 120	120 TO 400	10 MAX	10 TO 50	50 TO 120	120 TO 400	400 MIN
一般公差	縮尺角配	2/100	3/100	CAS MALL THICK	±1.0	±1.5	±2.0	±3.0	±3.5	±1.0	±1.5	±2.0	±3.0	±4.0	±5.0	±7.0	±1.0	±1.5	±2.0	±3.0	±4.0	±0.8	±1.2	±2.0MIN	±10MIN	±5MIN

0.5 TO 6	6 TO 30	30 TO 120	120 TO 400	400 TO 800	800 TO 1600	1600 TO 3150
±0.1	±0.2	±0.3	±0.4	±0.5	±0.6	±0.8

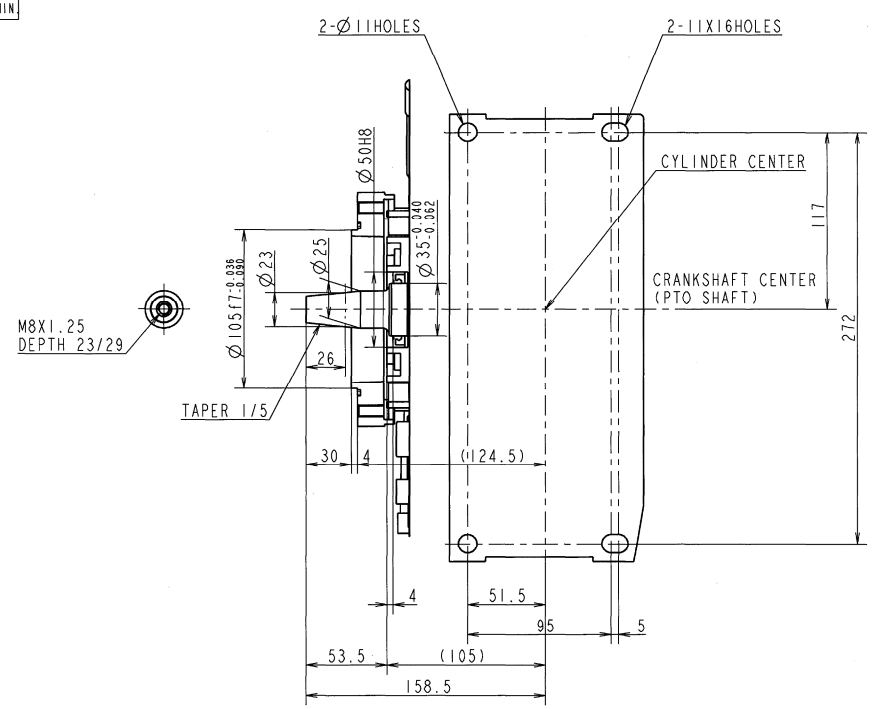
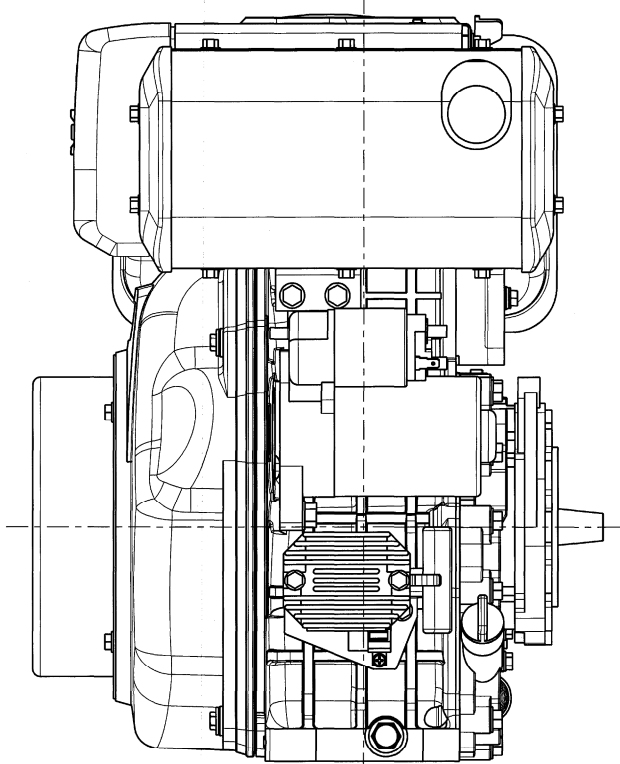
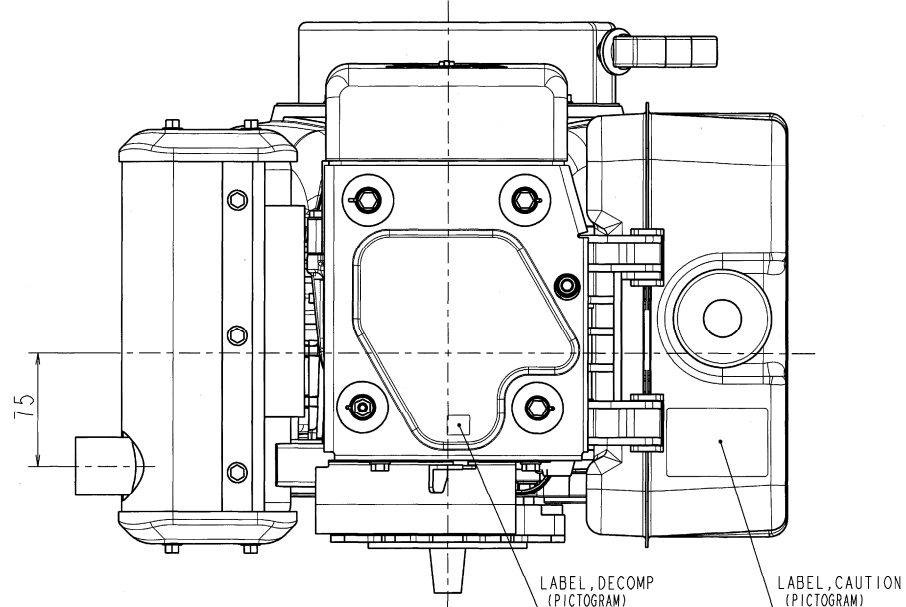
10 MAX	10 TO 50	50 TO 120	120 TO 400
±1 DEG.	±30MIN	±20MIN	±10MIN

10 MAX	10 TO 50	50 TO 120	120 TO 400	400 MIN
±1 DEG.	±30MIN	±20MIN	±10MIN	±5MIN

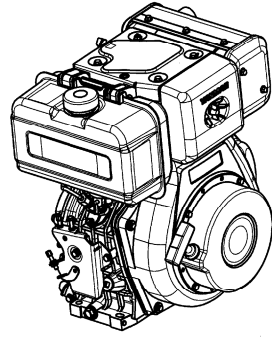
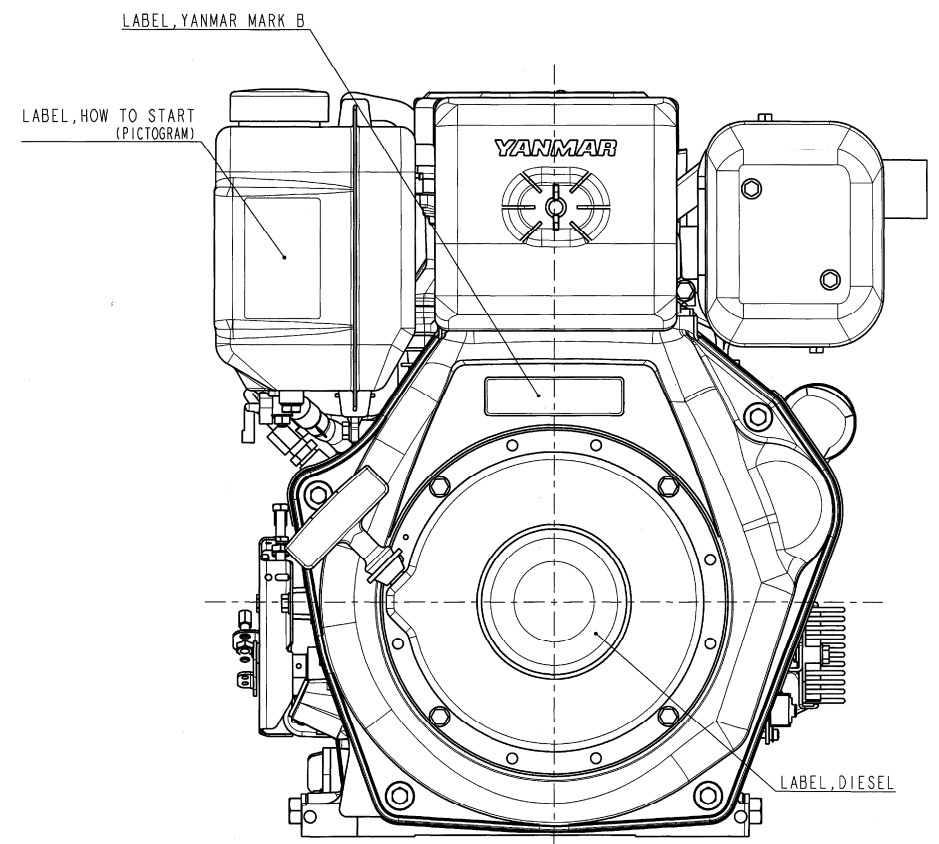
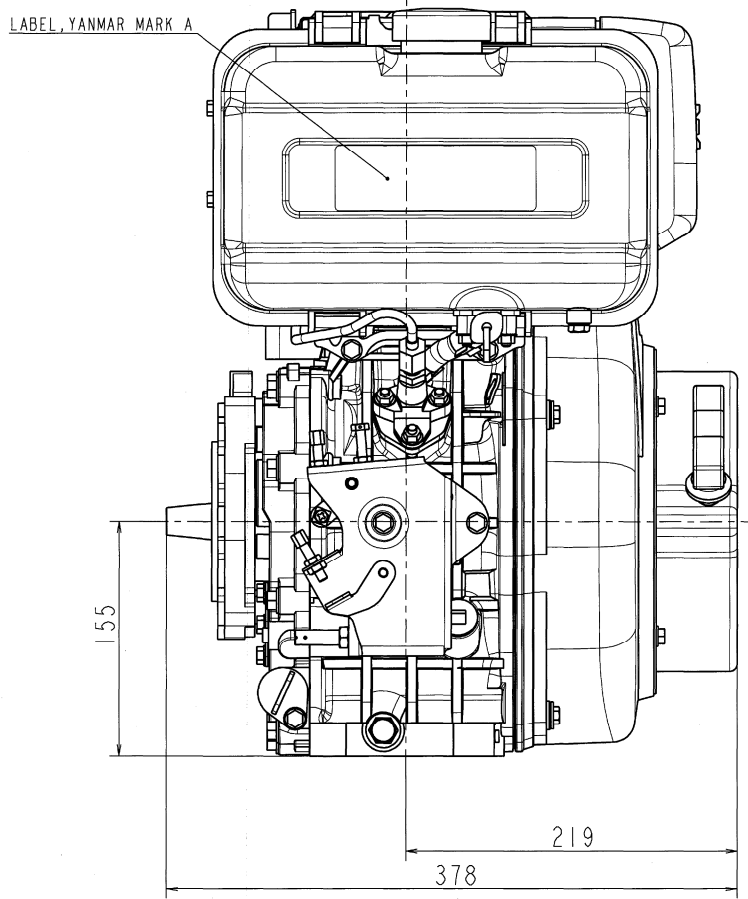
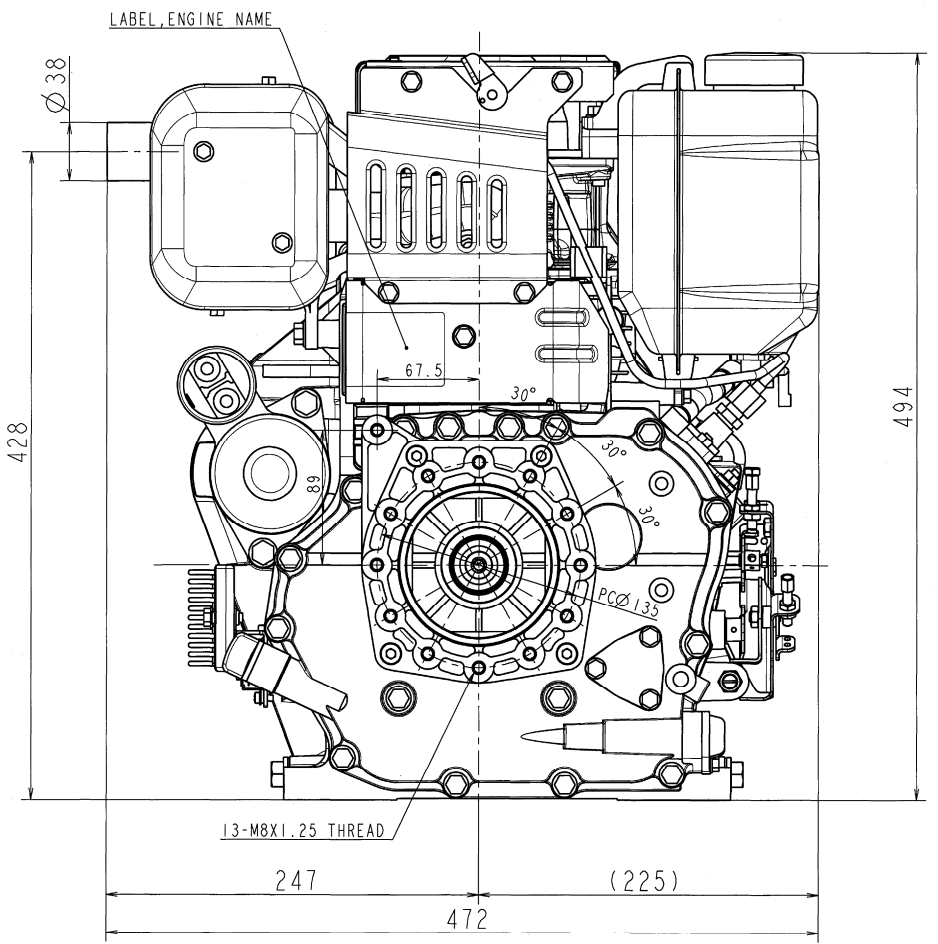
FIGURE DIMENSION	GT.CODE
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CAREER

MI(18/MAR/10) ACCORDING TO THE EC MACHINERY DIRECTIVE, WE CHANGED LABEL. (YDSL-10011)(YDSL-10029)



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



With respect to the use of environmentally hazardous substances for its parts, the substances in use shall conform to the requirements specified in YIS V-0001J. "Restrictions of use for Environmentally Hazardous Substances".

3D-CAD

NOTICE	SYMBOL
GEOMETRICAL TOLERANCE	
KIND OF TOLERANCE	
STRAIGHTNESS TOLERANCE	
CIRCULARITY TOLERANCE	
PROFILE OF LINE TOLERANCE	
PERIODICITY TOLERANCE	
PARALLELISM TOLERANCE	
PERPENDICULARITY TOLERANCE	
REGULARITY TOLERANCE	
POSITIONAL TOLERANCE	
COAXIALITY OR CONCENTRICITY TOLERANCE	
STAMPING TOLERANCE	
CHECKING TOLERANCE	
RAW SURFACE TOLERANCE	
FINISHING TOLERANCE	

WEIGHT (RAW)	(±)	kg	C. MANAGER	S. MANAGER
WEIGHT (CALC.)	(±)	kg		
S. ENGINEER	MANAGER	MODEL	SCALE	FREE
CHECKED	SPECIALIST	QTY	MATERIAL	
DESIGNED	DATE: Y.M.D	NAME	OUTLINE	
R. Numami & Ogawa 05 NOV. 2008 YANMAR			MI	AI
POWER SYSTEM OPERATIONS DIV., YANMAR CO., LTD.			CODE	B2-14320-0540

LABELS

G2-14820-2040

No.	LABELS	PLACE	CONTENTS
1	LABEL, ENGINE NAME	COVER, CYLINDER	-----
2	LABEL, YANMAR MARK (A	FUEL OIL TANK	THE FOLLOWING DETAILS
3	LABEL, CAUTION	FUEL OIL TANK	//
4	LABEL, HOW TO START	FUEL OIL TANK	//
5	LABEL, YANMAR MARK (B	CASE, COOLING FAN	//
6	LABEL, DIESEL	RECOIL STARTER	//
7	LABEL, DECOMP.	COVER, TOP	//
8	LABEL, HOT SURFACE	(LOOSE PART)	//

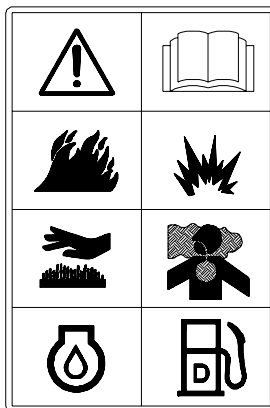
② LABEL, YANMAR MARK (A



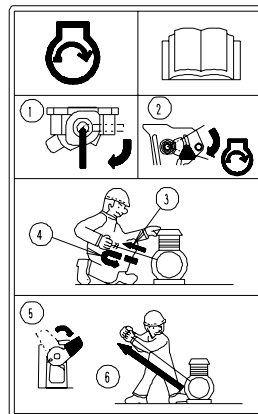
⑤ LABEL, YANMAR MARK (B



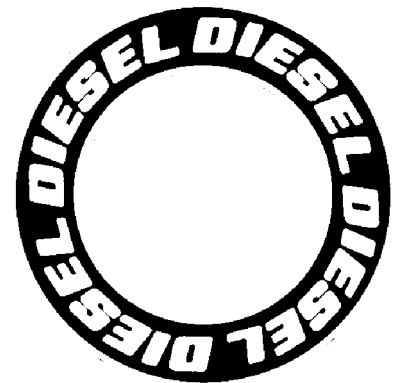
③ LABEL, CAUTION



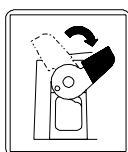
④ LABEL, HOW TO START



⑥ LABEL, DIESEL



⑦ LABEL, DECOMP.

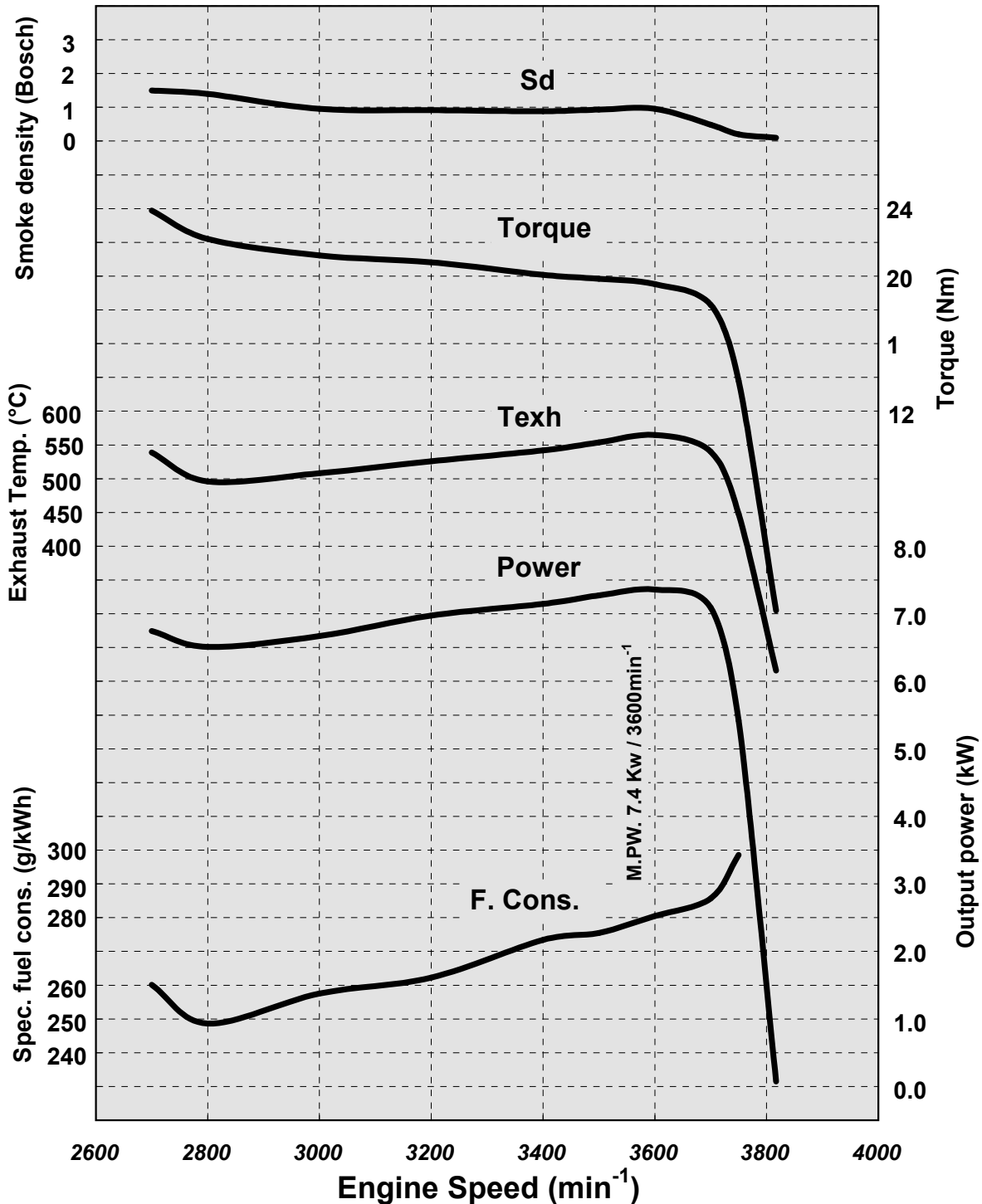


⑧ LABEL, HOT SURFACE(LOOSE PART)



L100N6 Model – Full Load Graph

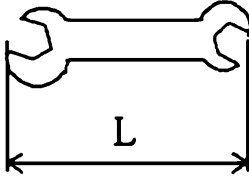
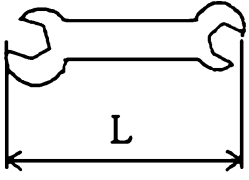
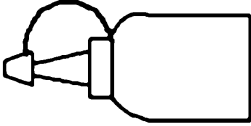
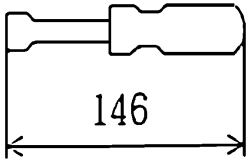
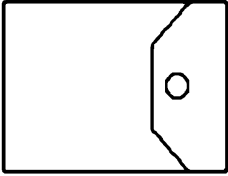
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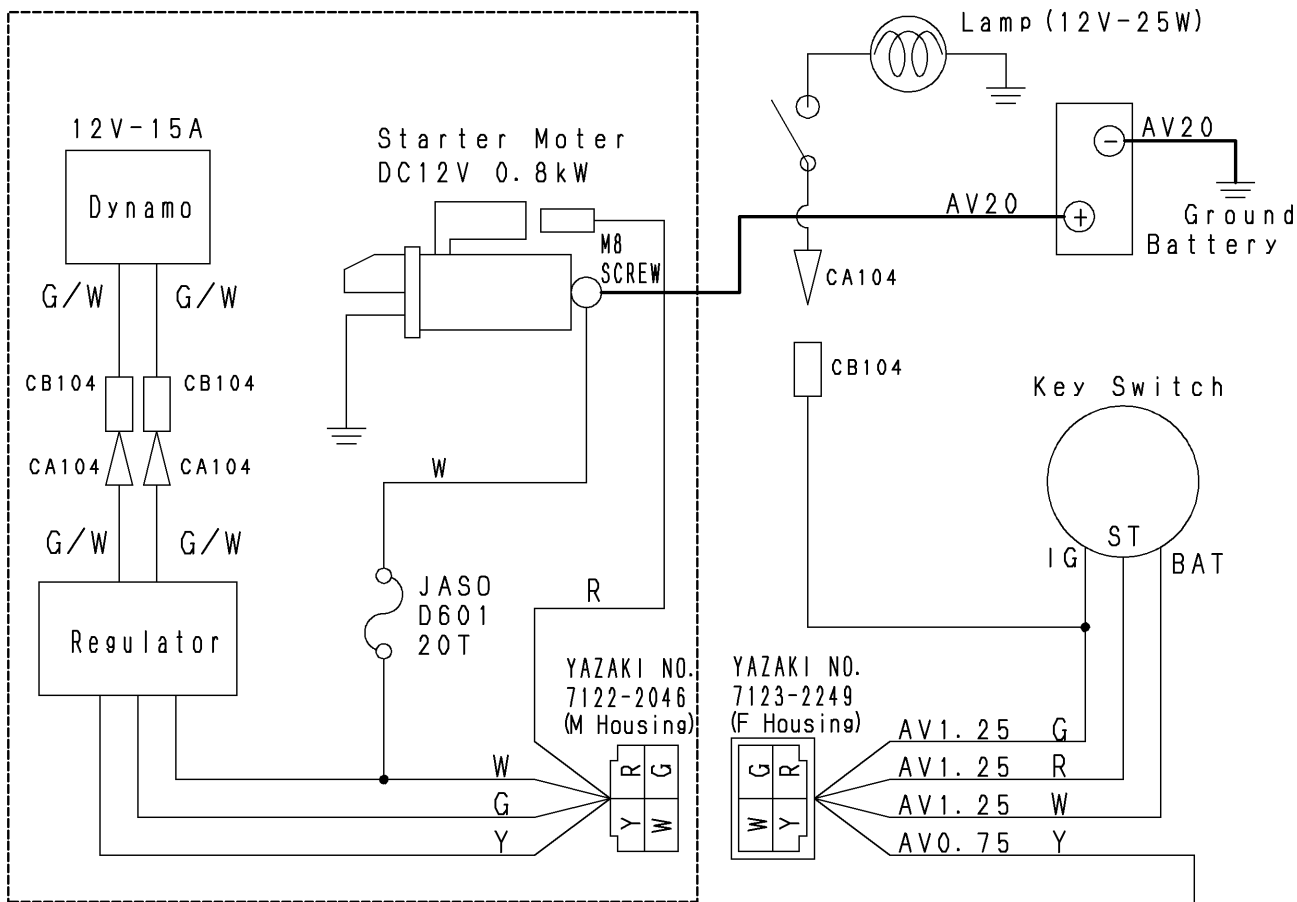


Notes : This performance is under the following condition.
 After 30hrs. initial running
 Atmospheric conditions : Temperature 298K (25°C)
 Pressure 100kPa (750mmHg)
 Humidity 30%

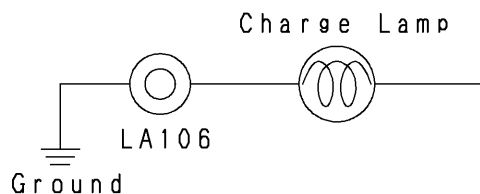
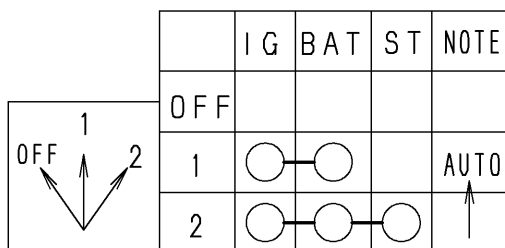
標準工具 TOOLS

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
工	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	
具	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



* 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.
3. Locally procure
 1. key switch, and charge lamp
 2. battery (24Ah-36Ah)
 3. battery cable (AV20)
 4. lamp (12V-25W), switch and cable (AV1.25)