



Solution No.			
Rev. No.	M1		
Drawing No.		G2-14310-0090	
Revision		(15/JUN/2005)Registered by YITILU040004. M1(18/OCT/2012)The specifications are changed as follows. (1)We changed engine specification new format. (2)Corrected to TPEM specification from 2013. (YDSL-12055)	

Messrs: _____

Engine Specification

Model name	L100V6CA1T1AA (Design model ID : 714310A) (Production model ID : 114310A)
Type	4-stroke, vertical-cylinder, air-cooled diesel
Use for	General , Starting motor (STD model)
Dev. Request No.	_____

18 OCT. 2012

YANMAR CO., LTD.

Sending to	
YI Engineering	1

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Drawing No.			G2-14310-0090		

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Remarks :

Applying emission regulations

	Emission Regulations	Application
USA	EPA Tier4 (Final Tier4)	NA Family model name ---
Japan	Voluntary of LEMA (Tier2)	NA
China	Non load (Generator, Tier2)	NA
Europe	Stage V (EU) 2016/1628	○

This engine model can be sold only in the areas where emission regulation like in above table will be applied.

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

Power System Operations Division Engine Development Dept.			
General Engineering Dept.			
Manager	Checked		Drawn
<i>A. Horikawa</i>	<i>Yamashita</i>		<i>R. Murakami</i>

#.ogawa

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1. Engine Specification

Model name			L100V6CA1T1AA
Combustion system			Direct injection
No. of cylinder-bore × stroke		mm	1-φ 86×75
Displacement		liter	0.435
Output	Continuous	kW/min ⁻¹	* 6.2 (8.4PS, 8.3HP) / 3600
	Maximum	kW/min ⁻¹	* 6.8 (9.3PS, 9.1HP) / 3600
PTO Shaft	PTO position		Crankshaft
	Direction of rotation		Counterclockwise viewed from PTO side
Injection Timing (FIC-air)		deg.	①-15.5±0.5 16.5±0.5 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. 53.5

* 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)	97.0	at continuous output distance : 1m height : 0.5m with STD silencer on

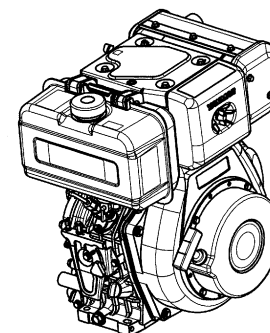
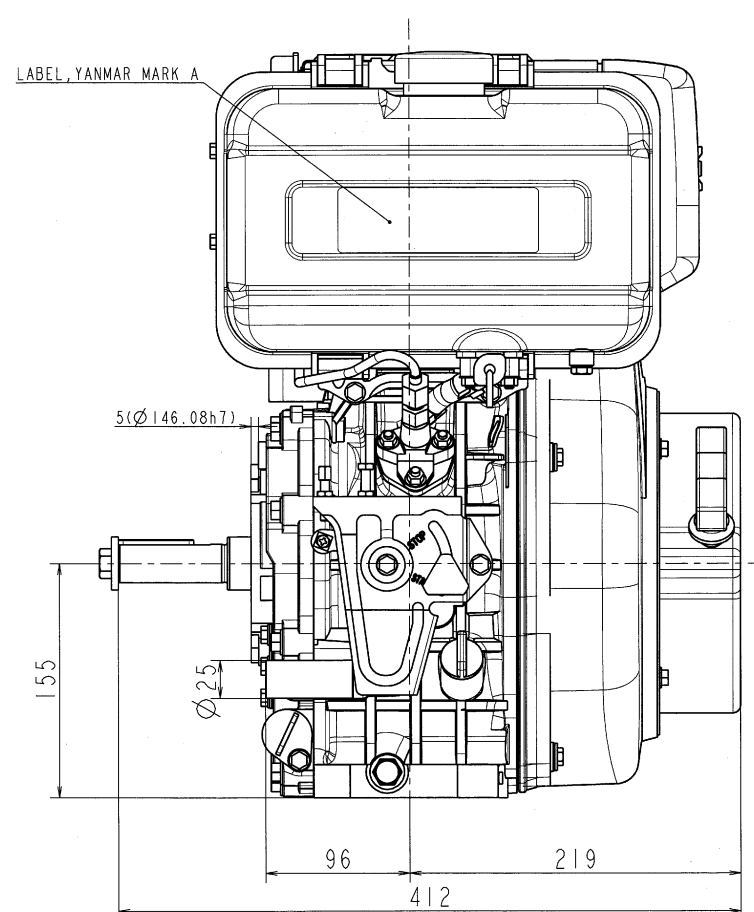
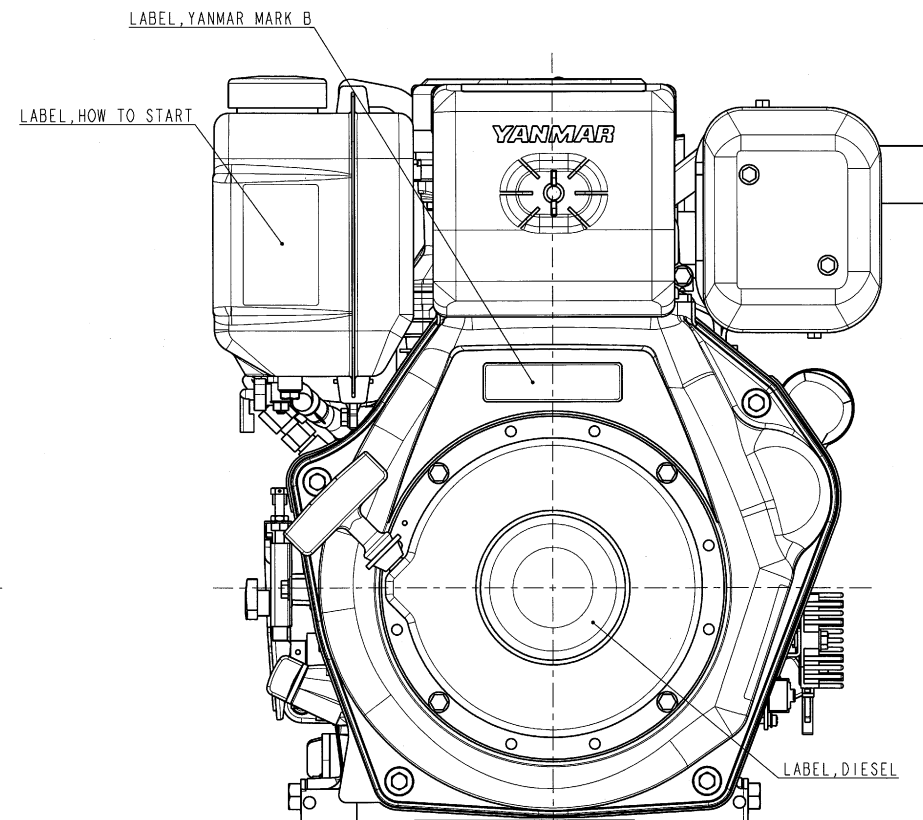
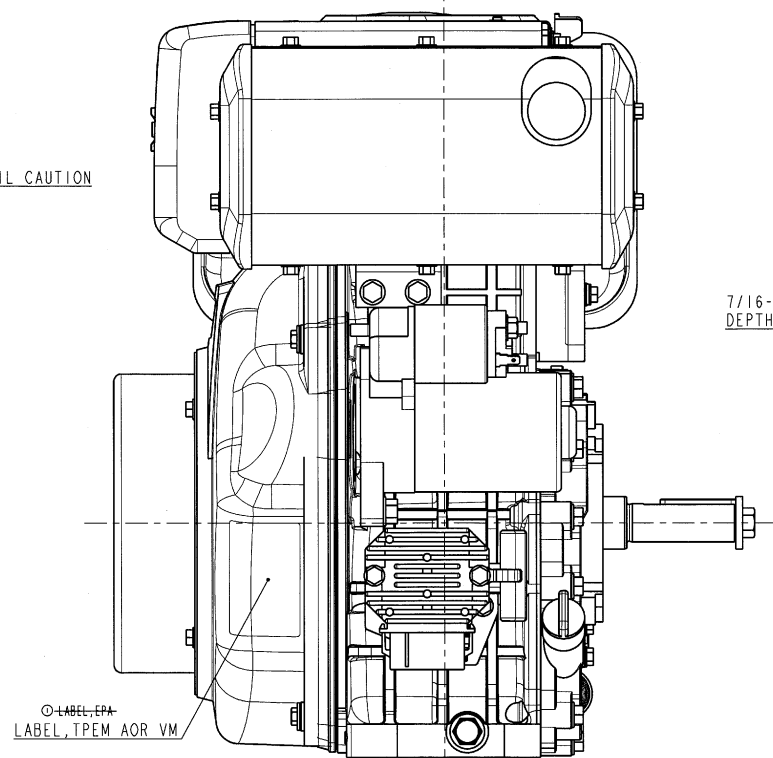
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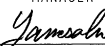
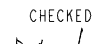
3. Details of specifications Base model : L100V6CA1T1AA

System	Part Name	STD Spec.	Specification	Remarks
Fuel System	Pump, Fuel Injection	714349-51400	←	1VT, Left40° (Made in Yanmar FIE)
	Nozzle, Fuel Injection	714349-53100	←	Made in Yanmar FIE
	Fuel oil tank	11431C-55010	←	(Bm-a-1) 5.4L, Color:Yanmar Black C
	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. X2
	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	114310-45210	←	(Dm-c-1)Full cover type
	Case, Cooling Fan	114310-45150	←	(Dm-b-3)STD, Color:Yanmar Italian gray
Electric System	Electric Regulator & Harness	114399-77550	←	For 12V-15A dynamo
	Air heater	NA	←	
	Dynamo Assy.	114399-78260	←	Output : 12V-15A
PTO & Flange	Crankcase cover	114310-01450	←	STD
	Crank shaft	11431C-21030	←	(Fm-a-1)E-D type
	Key, Crank shaft	160842-21150	←	For E-D type, 6.3X50
Intake and Exhaust System	Air cleaner	114310-12511	←	(Gm-a-1)STD
	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.	114310-61500	←	Paint : Brown
	Control device Assy.	714210-66100	←	(Im-a-1)General type
	Spring, Regulator	114310-66010	←	SP : 1-B , Paint mark : NA
	Fuel limiter Assy.	114771-66600	←	Wax type for 3600min ⁻¹
Decomp. System	Remote decomp.	NA	←	
	Bonnet	114310-11950	←	(Lm-a-1)STD
Others	Cylinder block	11431C-01010	←	
	Cylinder head	114310-11050	←	For Yanmar FIE
	Cam shaft	114310-14010	←	
	Balancer shaft	114310-28010	←	
	Flange	NA	←	
	Cover, Tiller	NA	←	
Standard Loose Parts	Key switch panel Assy.	114351-77500	←	(Hm-c-1)
	Connector	NA	←	
	Deflector	114699-13800	←	
	Orifice	NA	←	
	Tools	114299-92590	←	
	Operation manual	0ALV0-U00101	←	English (Letter size)
	Label, Hot surface	NA	←	
Remarks	Fuel oil limiter	Tamper Proof Protect		
	High idle adjust bolt	Locked by wire		
	Lubricating oil	Not provided		
	Delivery style	Cardboard box		

角座(座)		10 MAX	±1DEG.
	10 TO	= 50	±30MIN
	50 TO	=120	±20MIN
	120 TO	=400	±10MIN

	3RD ANGLE PROJECTION				
C	A	R	E	E	R
MI(18/OCT/2012)OUTLINE IS CORRECTED AS FOLLOWS					



WEIGHT (RAW)		(± %)	kg		形 開 完 部												
WEIGHT (CALC.)		(± %)	kg														
S. ENGINEER		MANAGER		MODEL												SCALE	FREE
																	
CHECKED		SPECIALIST		QTY												MATERIAL	
																	
DESIGNED	DRAWN	DATE: Y. M. D	NAME	OUTLINE													
		12 JAN. 2005		L100V6CAITIAA OUTLINE													
 POWER SYSTEM OPERATIONS DIV., YANMAR CO., LTD.				CODE	MI										DRAW SIZE	AI	
					B2-14310-0090												

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

本品への環境負荷物質の使用に関しては、
 YIS V-0001J(環境負荷物質の
 使用規制)の規格を満足すること。

3D-CAD

NOTICE		
	GEOMETRICAL TOLERANCE	
	KIND OF TOLERANCE	SYMBOL
FORM	STRAIGHTNESS TOLERANCE	—
	CIRCULARITY TOLERANCE	○
	PROFILE OF LINE TOLERANCE	—
	FLATNESS TOLERANCE	▱
	CYLINDRICITY TOLERANCE	⊘
ORIENTATION	PROFILE TOLERANCE OF SURFACE	⌒
	PARALLELISM TOLERANCE	∥
	PERPENDICULARITY TOLERANCE	⊥
LOCATION	ANGULARITY TOLERANCE	∠
	POSITIONAL TOLERANCE	⊕
	COAXIALITY OR POSITIONAL TOLERANCE	⊙
RUN-OUT	SYMMETRY TOLERANCE	≡
	CIRCULAR RUN-OUT TOLERANCE	
	TOTAL RUN-OUT TOLERANCE	

LABELS

G2-14810-2340

No.	LABELS	PLACE	CONTENTS
1	LABEL, ENGINE NAME	COVER, CYLINDER	-----
2	LABEL, YANMAR MARK (A	FUEL OIL TANK	THE FOLLOWING DETAILS
3	LABEL, CAUTION (ENGLISH	FUEL OIL TANK	"
4	LABEL, HOW TO START (ENGLISH	FUEL OIL TANK	"
5	LABEL, YANMAR MARK (B	CASE, COOLING FAN	"
6	LABEL, DIESEL	RECOIL STARTER	"
7	LABEL, AIR CLEANER	AIR CLEANER	"
8	LABEL, TPEM AOR VM	CASE, COOLING FAN	"
9	LABEL, DECOMP.	COVER, TOP	"
10	LABEL, FUEL OIL CAUTION	FUEL OIL TANK	"

② LABEL, YANMAR MARK (A

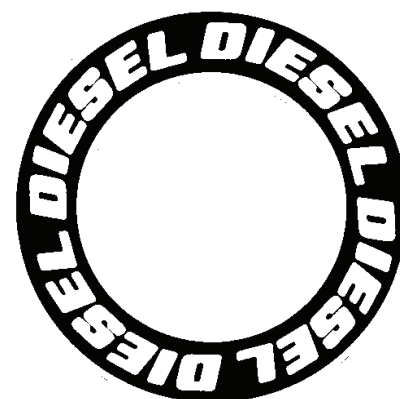
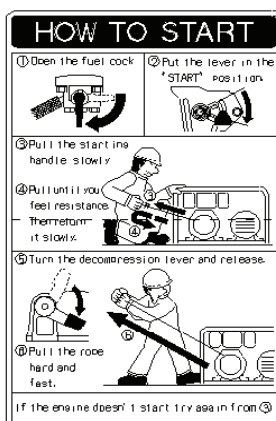
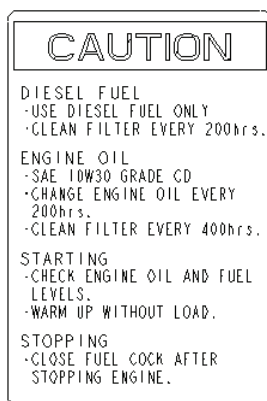
⑤ LABEL, YANMAR MARK (B



③ LABEL, CAUTION

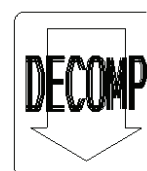
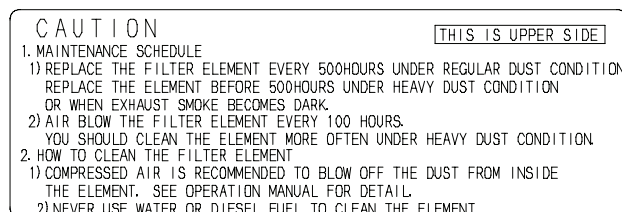
④ LABEL, HOW TO START

⑥ LABEL, DIESEL



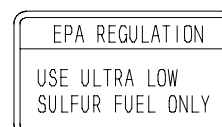
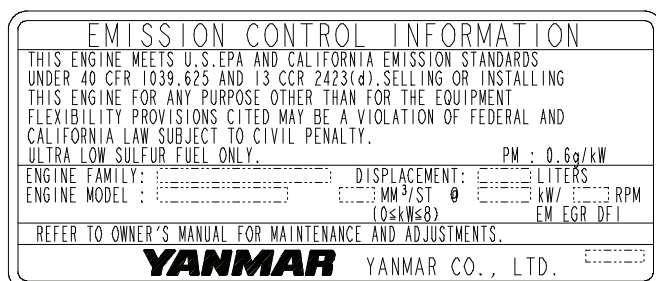
⑦ LABEL, AIR CLEANER

⑨ LABEL, DECOMP.



⑧ LABEL, TPEM AOR VM

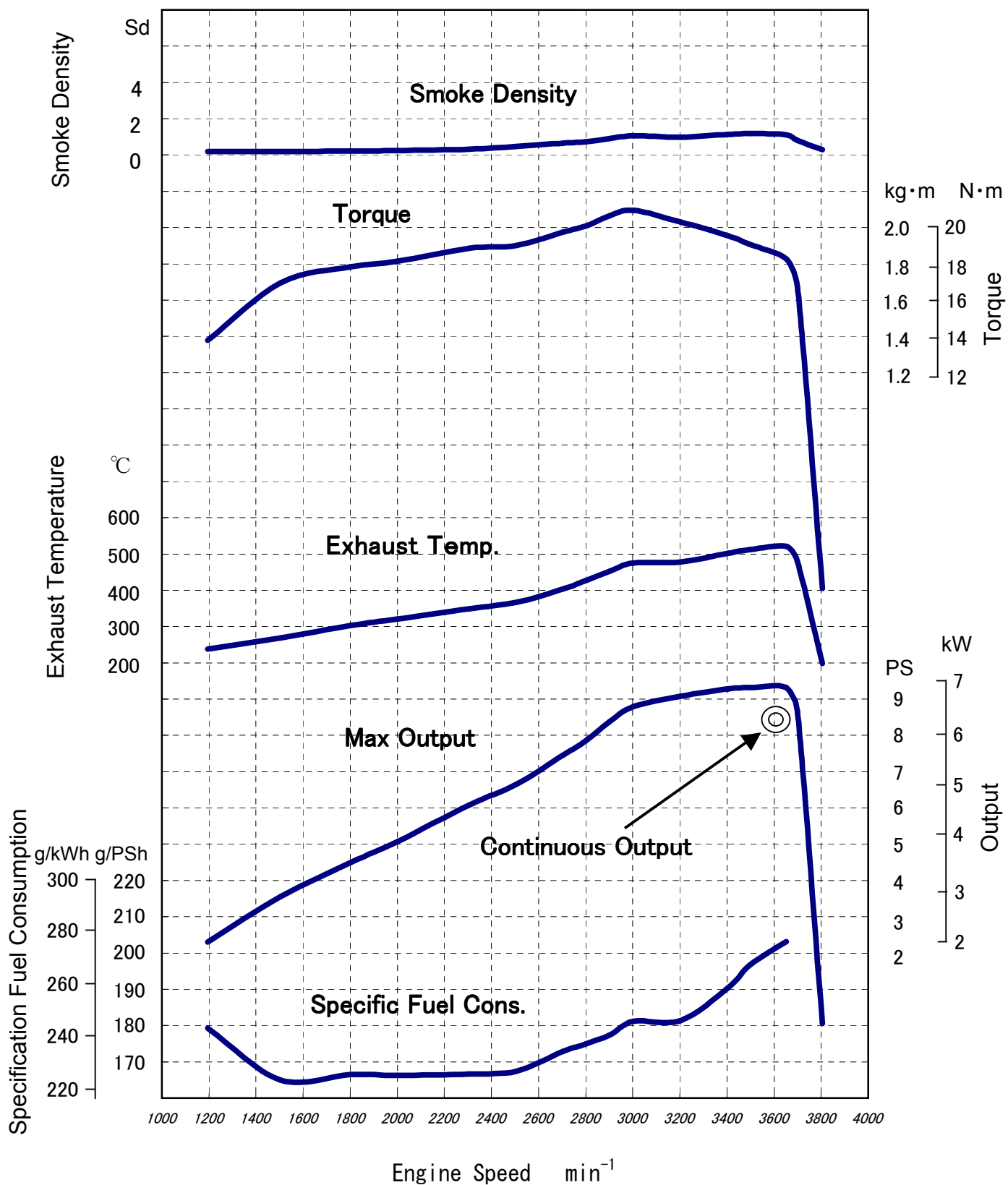
⑩ LABEL, FUEL OIL CAUTION



PERFORMANCE CURVES

G2-14310-1011

L 1 0 0 V 6



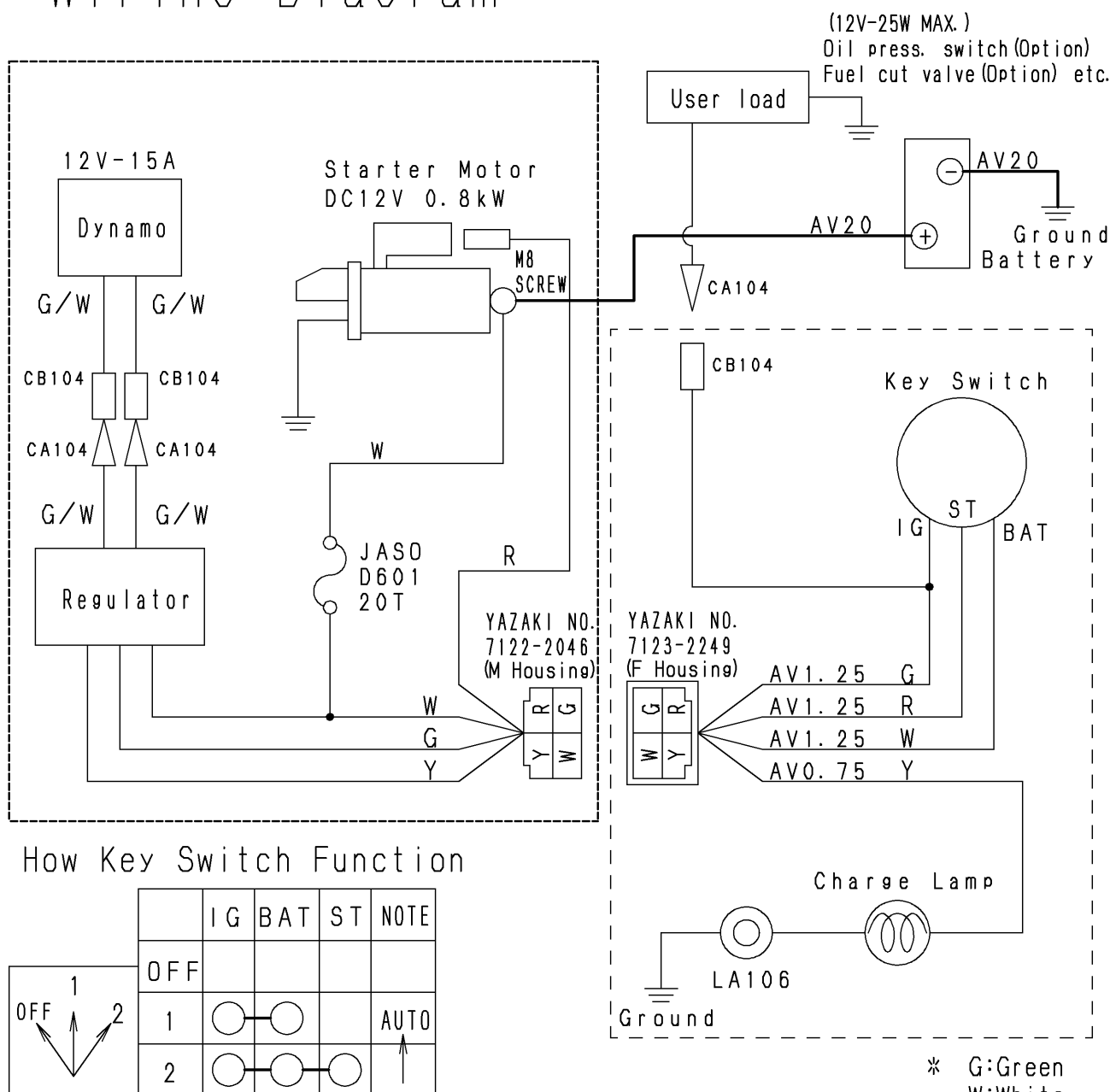
Notes : This performance is under the following condition.

After 30hrs. initial running

Atmospheric conditions : Temperature 298K (25°C)
 Pressure 100kPa (750mmHg)
 Humidity 30%

Wiring Diagram

E2-14110-0011



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)