

Messrs: ITALIAN DEALERS

Rev. No.

Drawing No.

G2-14310-0840

Revision

(25/JULY/2018)Registered by YDSSL-18037.

Engine Specification

Model name	L100V6FA1T1CAID (Design model ID : 714313i) (Production model ID : 114310Y)
Type	4-stroke, vertical-cylinder, air-cooled diesel
Use for	General , Starting motor
Dev. Request No.	YI DEVREQ-106-2017

25 JULY 2018

YANMAR CO., LTD.

Sending to

Rev. No.					
Drawing No.			G2-14310-0840		

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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	O

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

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

Yanmar Italy Operations Division Engineering		
Manager	Checked	Drawn

1. Engine Specification

Model name			L100V6FA1T1CAID
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.	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

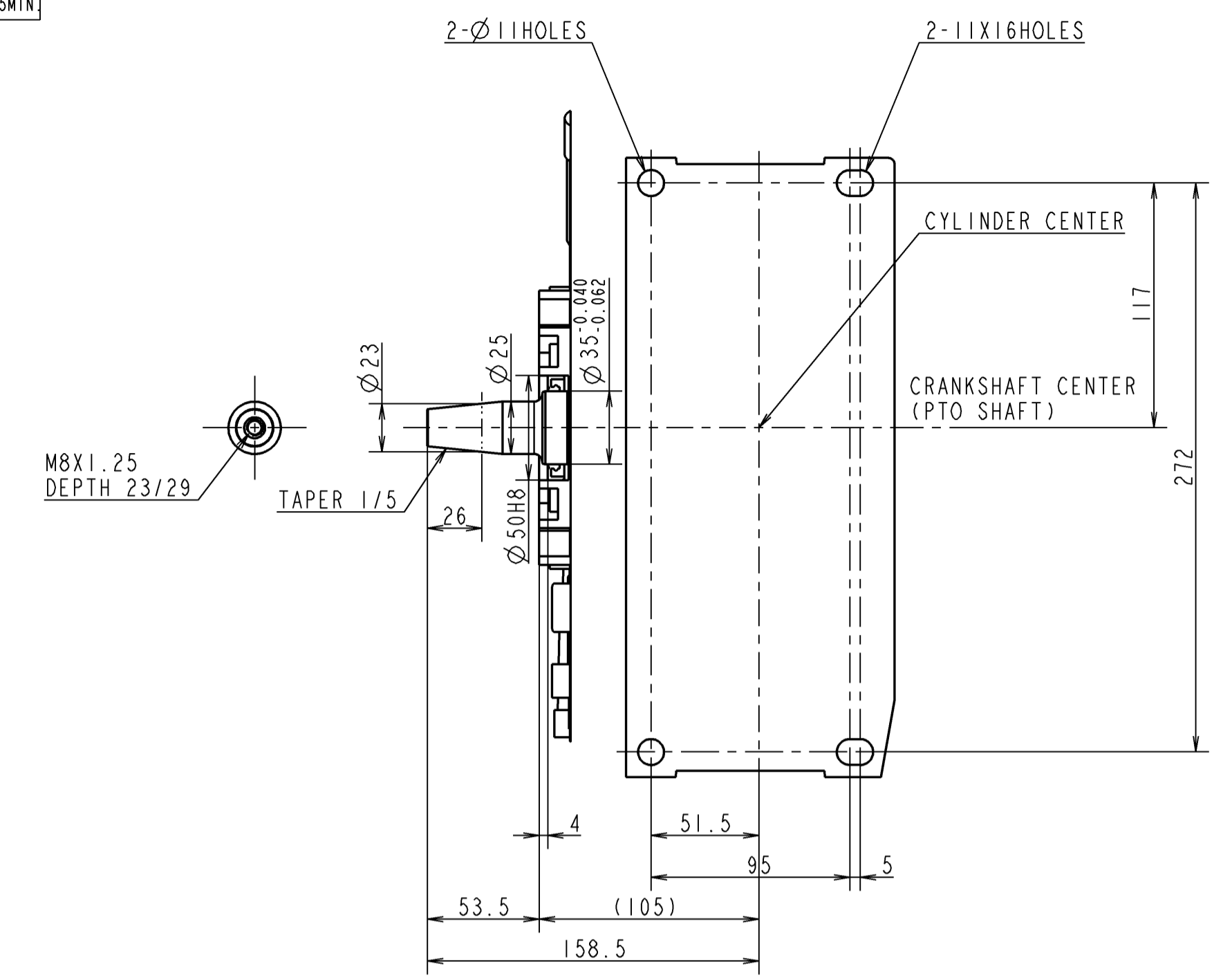
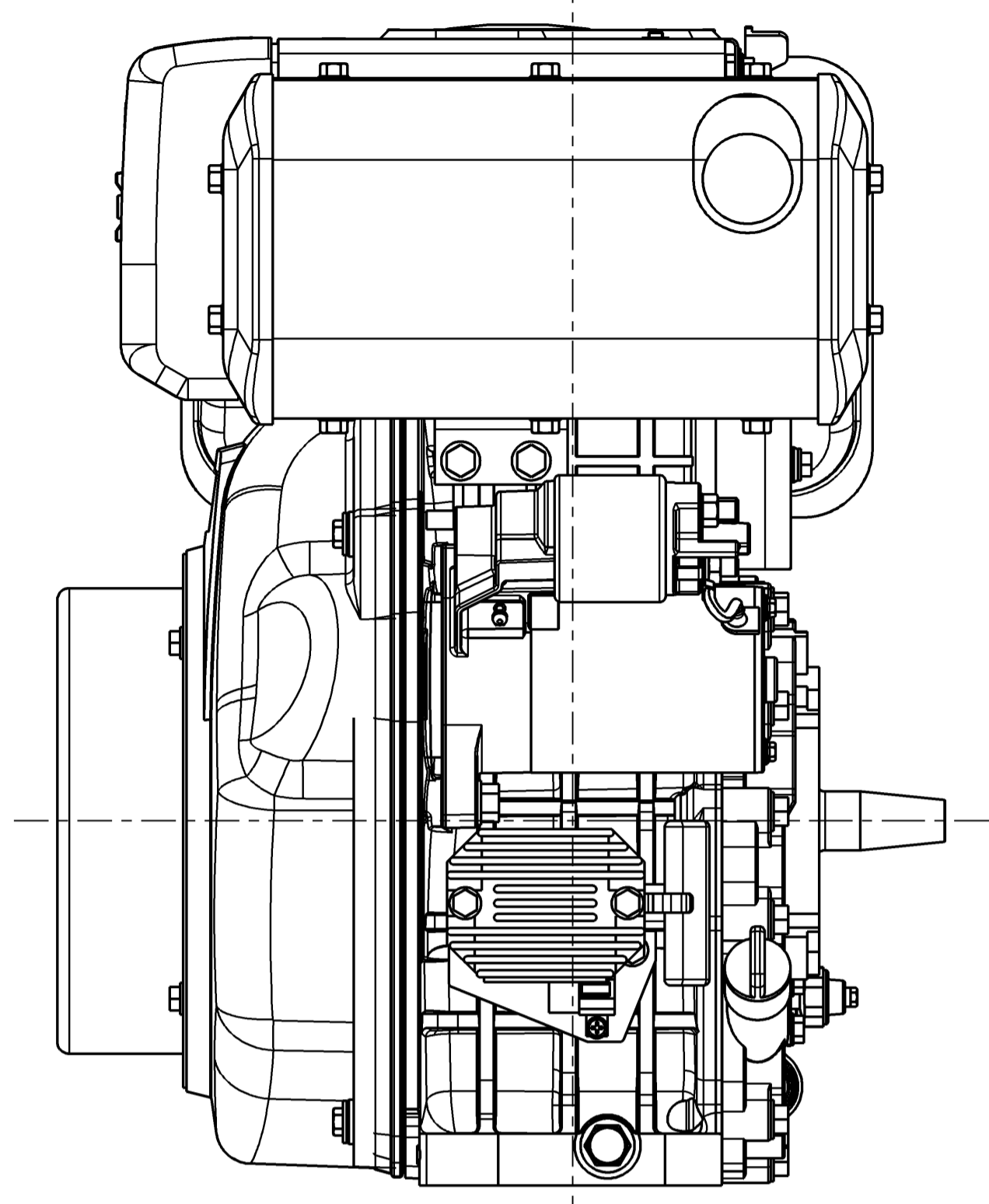
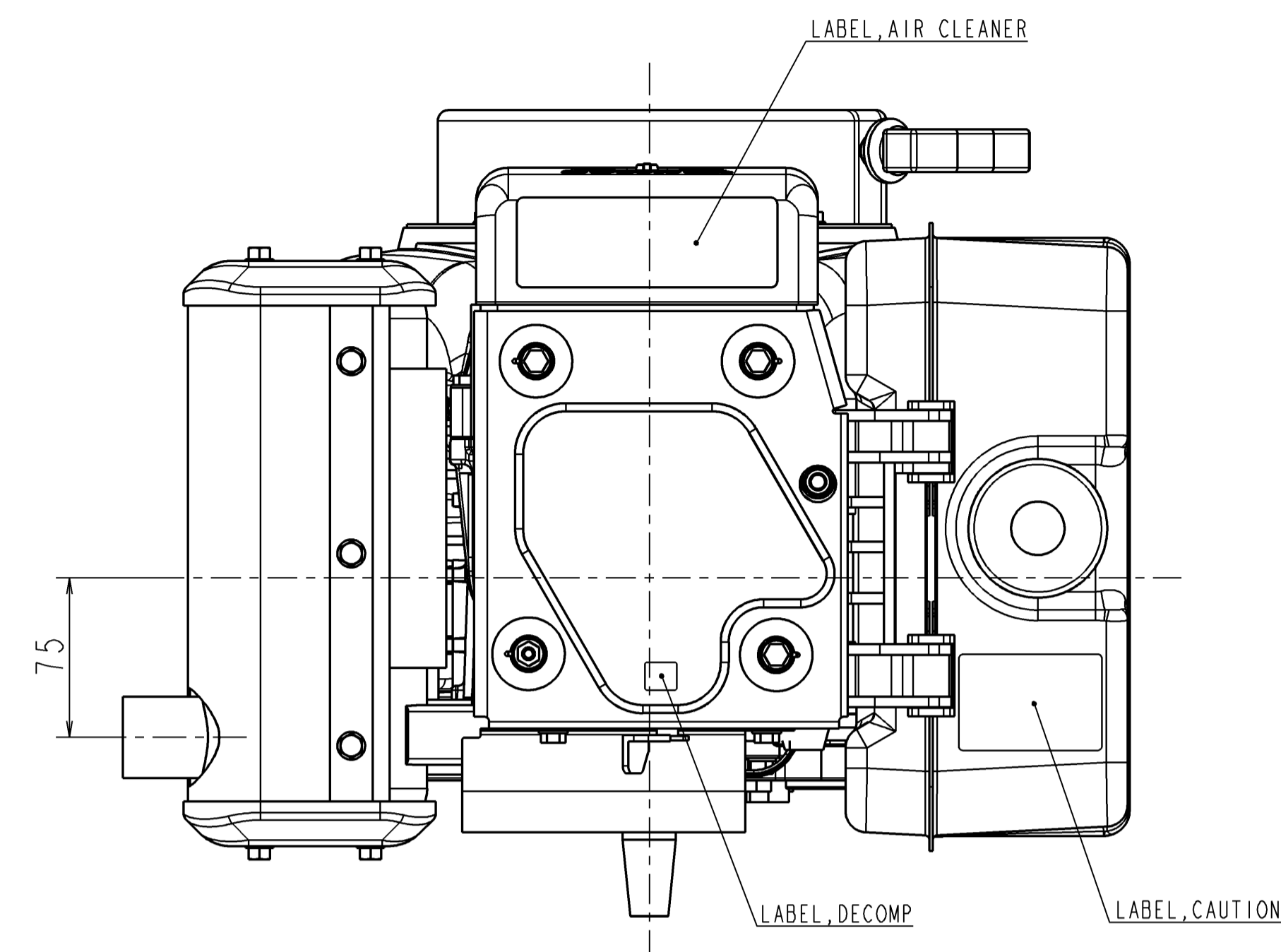
Speed at no load	Minimum	min ⁻¹	1200 or more	PTO Shaft (Without minimum idling speed adjust bolt. Adjustable figure by your end.)
	Maximum		3800±30	
Governor regulation	Instantaneous speed difference	%	8 or less	at continuous output
	Permanent speed change		5 or less	
	Recovery time	sec.	5 or less	
	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)	95.0	at continuous output distance : 1m height : 0.5m with STD silencer on

3. Details of specifications Base model : L100V6CA1T1AA

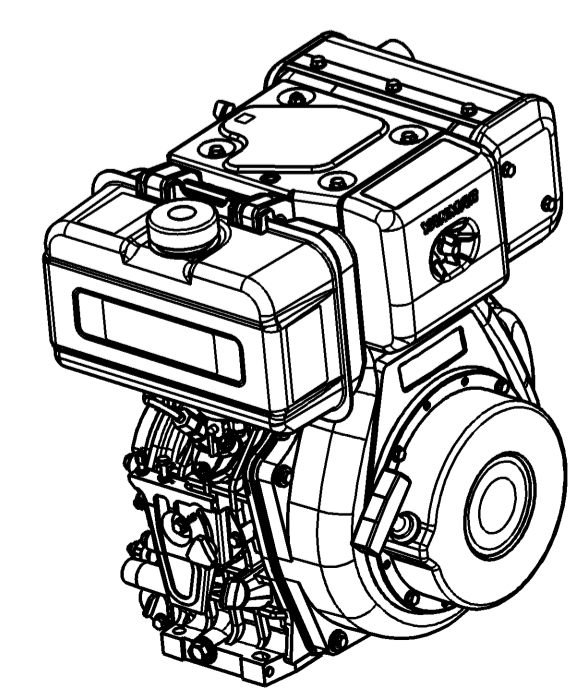
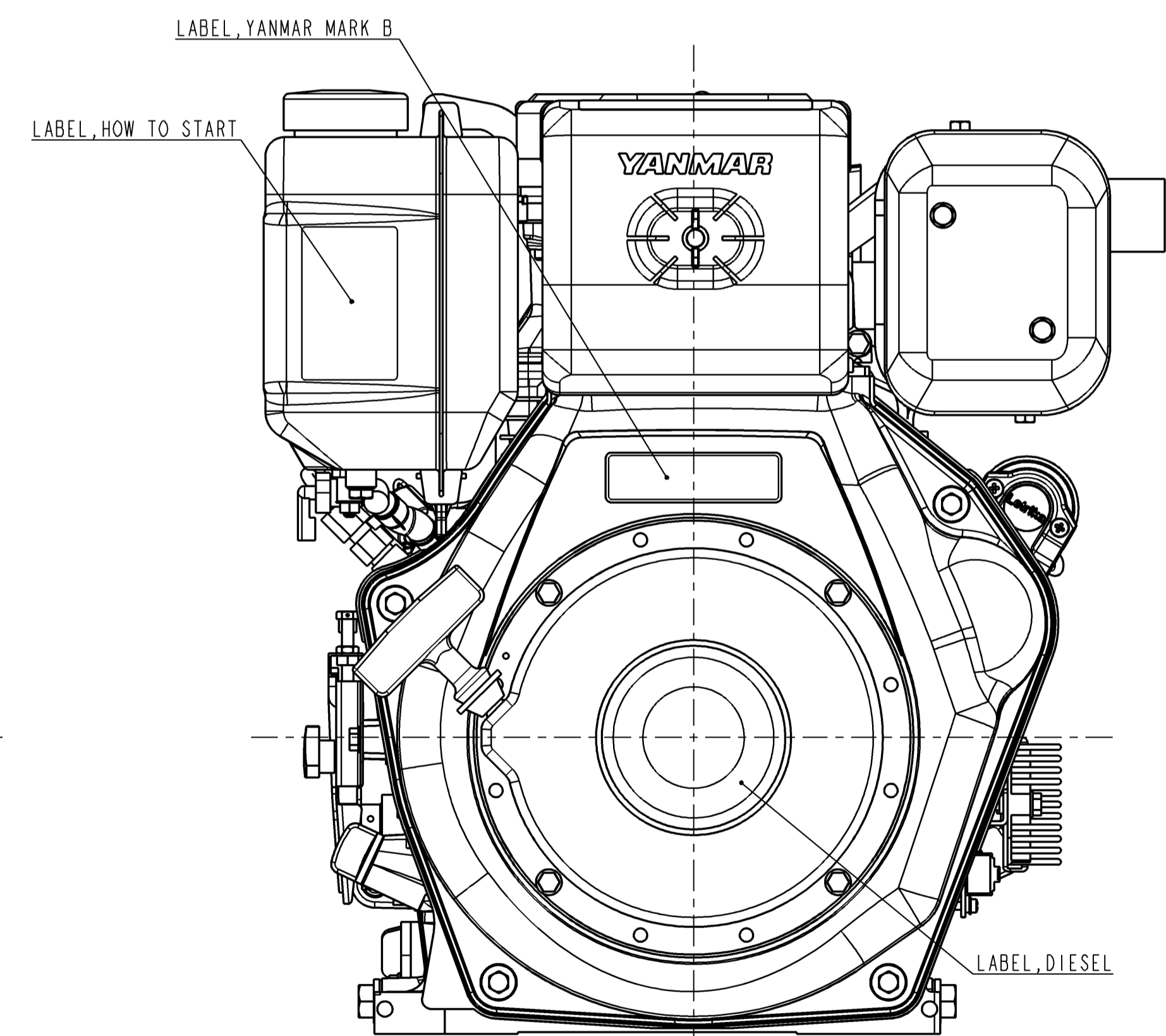
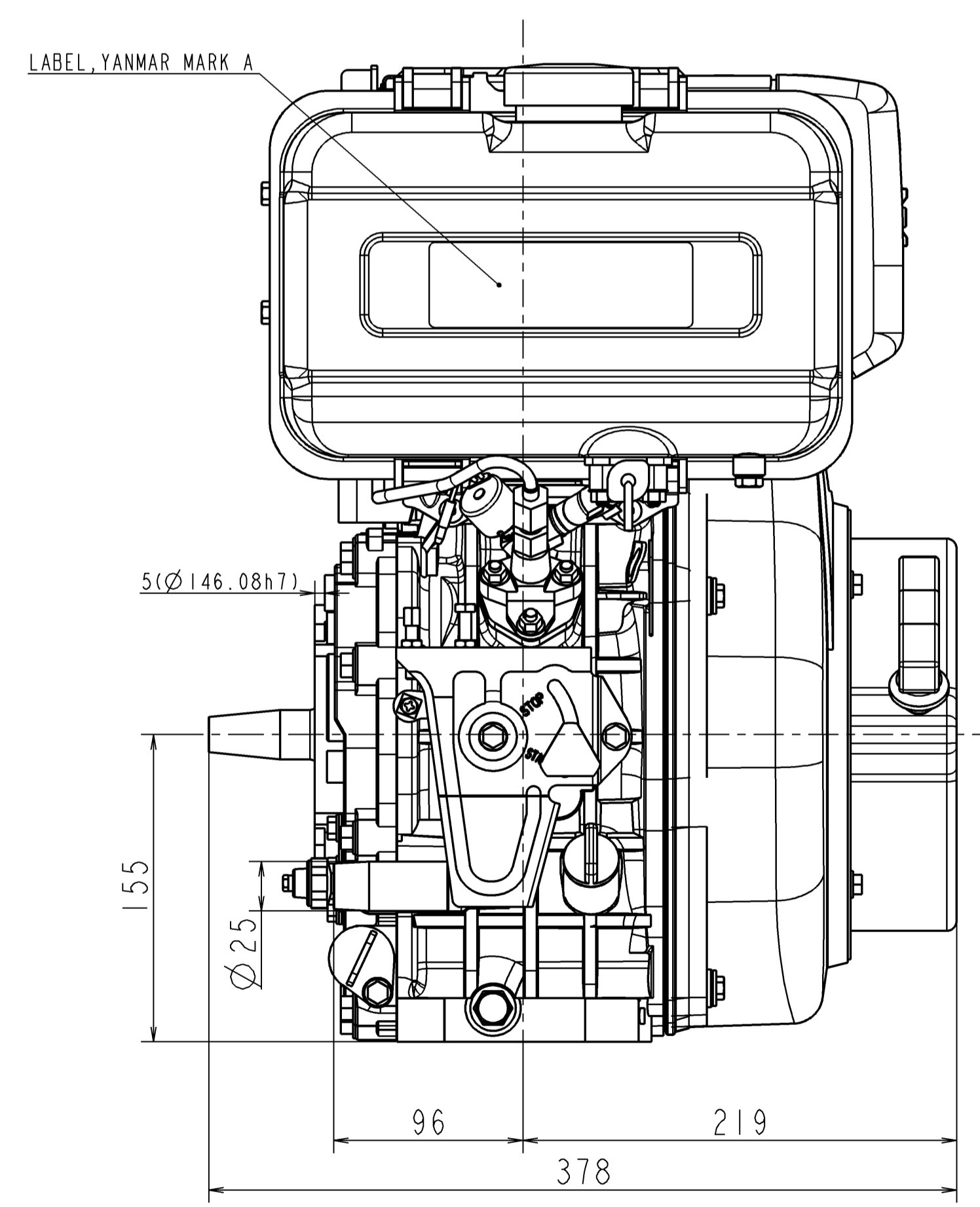
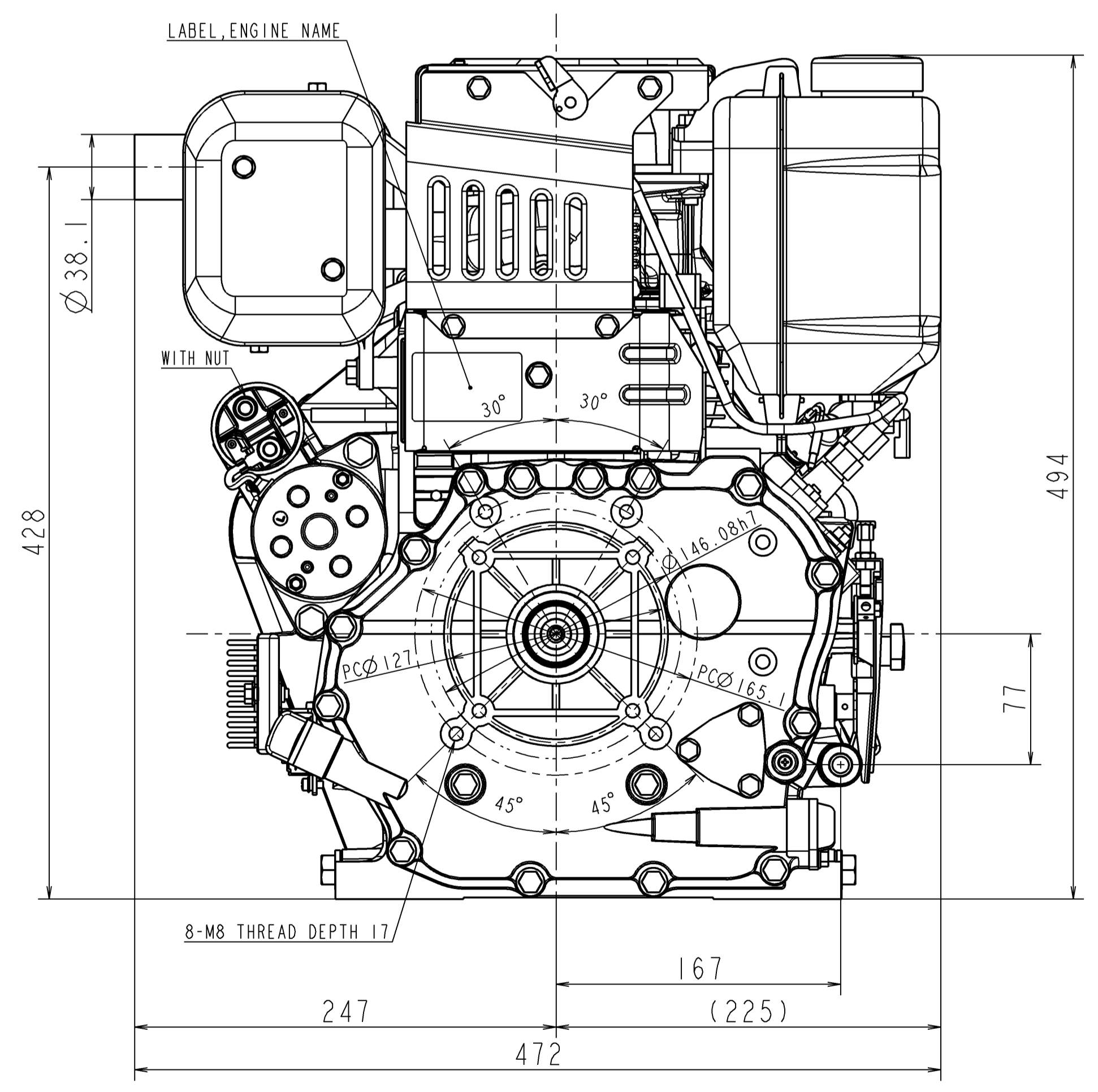
System	Part Name	STD Spec.	Specification	Remarks
Fuel System	Pump, Fuel Injection	714349-51400	714349-51640	1VTD, For WALBRO FO cut valve, (Made in Yanmar FIE
	Nozzle, Fuel Injection	714349-53100	←	Made in Yanmar FIE
	Fuel oil tank	11431C-55010	←	(Bm-a-1) 5.4L, Color:Yanmar Black C
	Tank stay (A	114210-55210	114210-55220	For Walbro FCV
	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	114110-76910	(Bm-b-2)WALBRO
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	183250-39450	(Cm-a-1)0.1MPa
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	114399-77560	For 12V-15A dynamo (INEL)
	Air heater	NA	←	
	Dynamo Assy.	114399-78260	114399-78280	Output : 12V-15A (INEL)
PTO & Flange	Crankcase cover	114310-01450	←	STD
	Crank shaft	11431C-21030	11431C-21060	(Fm-a-15)E-DI type
	Key, Crank shaft	160842-21150	NA	
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	114320-77010	12V-1.0kW Letrika(MAHLE)
Speed Control System	Governor lever Assy.	114310-61500	←	Paint : Brown
	Control device Assy.	714210-66100	←	(Im-a-1)General THAI 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	114310-01010	←	
	Cylinder head	114310-11050	←	For Yanmar FIE
	Cam shaft	114310-14010	114310-14030	Antireverse type
	Balancer shaft	114310-28010	←	
	Flange	NA	←	(Loose part : Km-a-1)
	Cover, Tiller	NA	←	
Standard Loose Parts	Key switch panel Assy.	114351-77500	←	(Hm-c-1)
	Connector	NA	←	
	Deflector	114320-13800	←	
	Orifice	NA	←	
	Tools	114299-92590	←	
	Operation manual	0ALV0-U00102	←	English
	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		

NEED	PURCHASING SPECIFICATION	REQUEST FOR APPROVAL				DELIVERY DRAWING				INSPECTING STANDARD				QC-PROCESS																					
		OUTSIDE	INSIDE	THICKNESS	WALL	5 TO	10 TO	18 TO	30 TO	120 TO	250 TO	400 TO	800 TO	1600 TO	0.5 TO	6 TO	30 TO	120 TO																	
○	2/100	3/100	3/100	CAST	SANDMOLD	±1.0	±1.5	±2.0	±3.0	±1.0	±1.5	±2.0	±3.0	±4.0	±5.0	±6.0	±1.0	±1.5	±2.0	±3.0	±4.0	±5.0	±6.0	0.5 TO = 6 ±0.1	6 TO = 30 ±0.2	30 TO = 120 ±0.3	120 TO = 400 ±0.5	400 TO = 1000 ±0.8	1000 TO = 2000 ±1.2	2000 TO = 4000 ±2.0	10 MAX ±1DEG.	10 TO = 50 ±30MIN	50 TO = 120 ±20MIN	120 TO = 400 ±10MIN	400 MIN ±5MIN

FIGURE DIMENSION	GT. CODE	○ AND √: RADIAL
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ENGINE MOUNTING PLATE AND PTO SHAFT SEEN THROUGH FROM THE TOP OF THIS ENGINE



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-0001. (Environmentally Hazardous Substances).
 本製品の環境負荷低減の観点からは、YIS V-0001 (環境負荷低減の観点) の規定を遵守してください。

3D-CAD

NOTICE

GEOMETRICAL TOLERANCE

KIND OF TOLERANCE

SYMBOL

FORM

ORIENTATION

LOCATION

FINISH

WEIGHT (RAW)	(± 2)	kg	S. ENGINEER	MANAGER	MODEL	SCALE	FREE
WEIGHT (CALC.)	(± 2)	kg					
CHECKED	R. Hara	SPECIALIST	QTY			MATERIAL	
DESIGNED	R. Hara	DATE: Y.M.D	24 JUL 2018	OUTLINE			
DRAWN: <i>[Signature]</i> NAME: L100V6FAITICAID OUTLINE							
POWER SYSTEM OPERATIONS DIV., YANMAR CO., LTD.							
CODE: B2-14310-0840							DRAW SIZE: A1

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, DECOMP.	COVER, TOP	"

② LABEL, YANMAR MARK (A

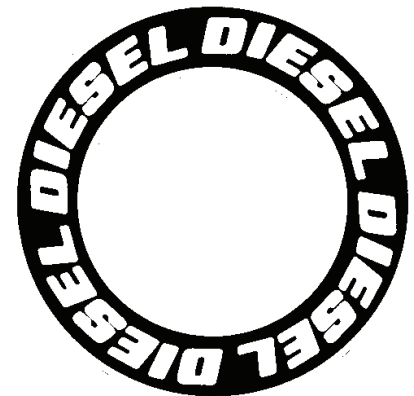
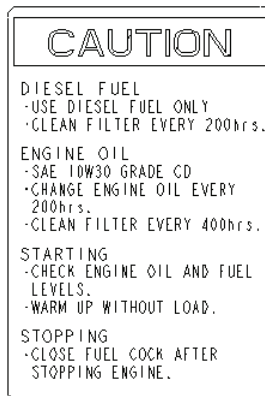
⑤ LABEL, YANMAR MARK (B



③ LABEL, CAUTION

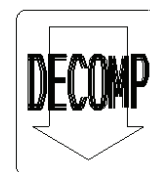
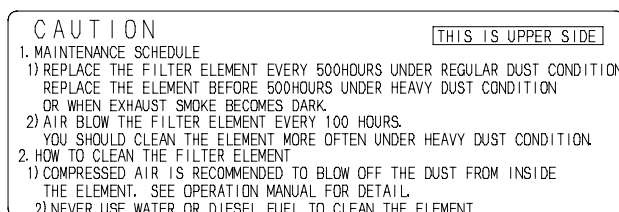
④ LABEL, HOW TO START

⑥ LABEL, DIESEL



⑦ LABEL, AIR CLEANER

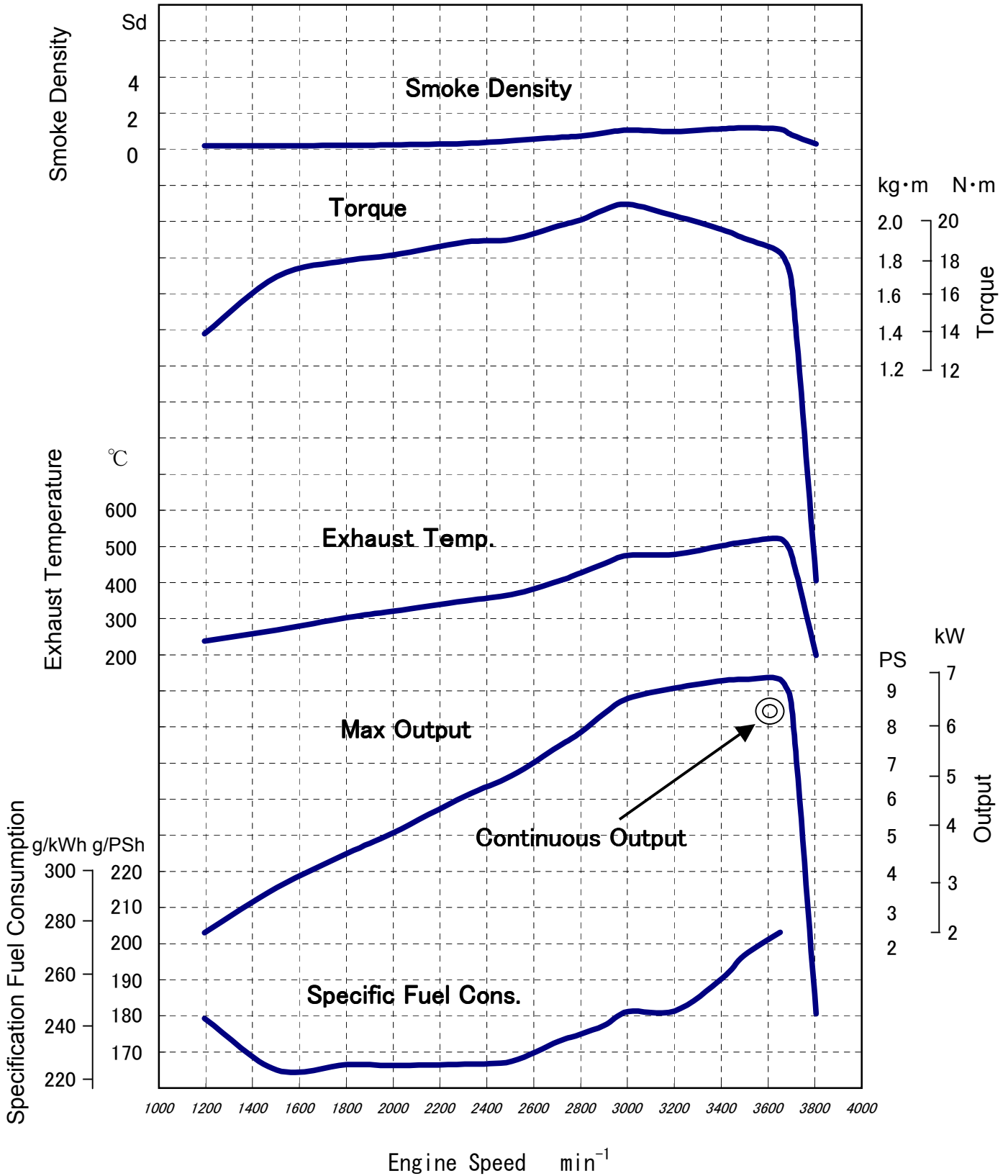
⑧ LABEL, DECOMP.



PERFORMANCE CURVES

G2-14310-1011

L 1 0 0 V 6



Notes : This performance is under the following condition.
After 30hrs. initial running

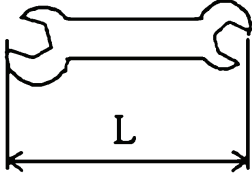
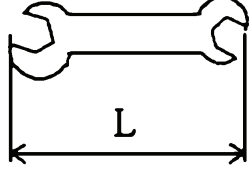
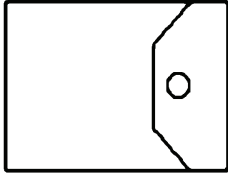
Atmospheric conditions : Temperature 298K (25°C)

Pressure 100kPa (750mmHg)

Humidity 30%

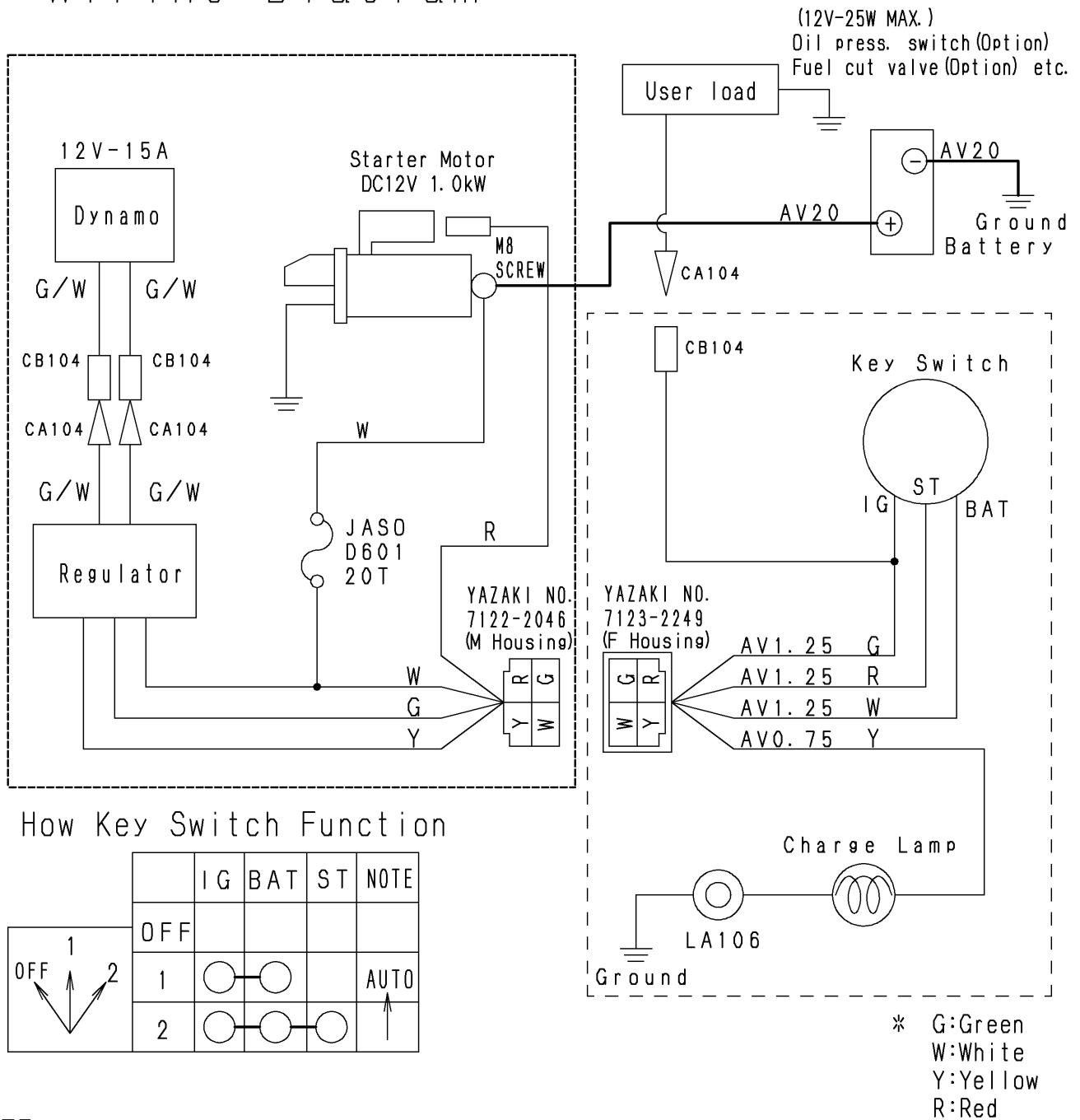
C2-14110-0011

標準工具 TOOLS

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 具	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 工具袋 BAG, TOOL	114299-92600 	黒色ビニール PVC	1	

Wiring Diagram

E2-14320-0010



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)