

MARK	COLOR
B	Black
W	White
R	Red
L	Blue
G	Green
Y	Yellow
Br	Brown
Lg	Light Green
Sb	Sky blue
O	Orange
P	Pink
Gr	Gray
R/W	Red/White

	B	R1	R2	ACC	C	BR
PRE-HEATING	○	○	○	○		
OFF	○					
ON	○			○	○	○
START	○	○	○	○	○	○

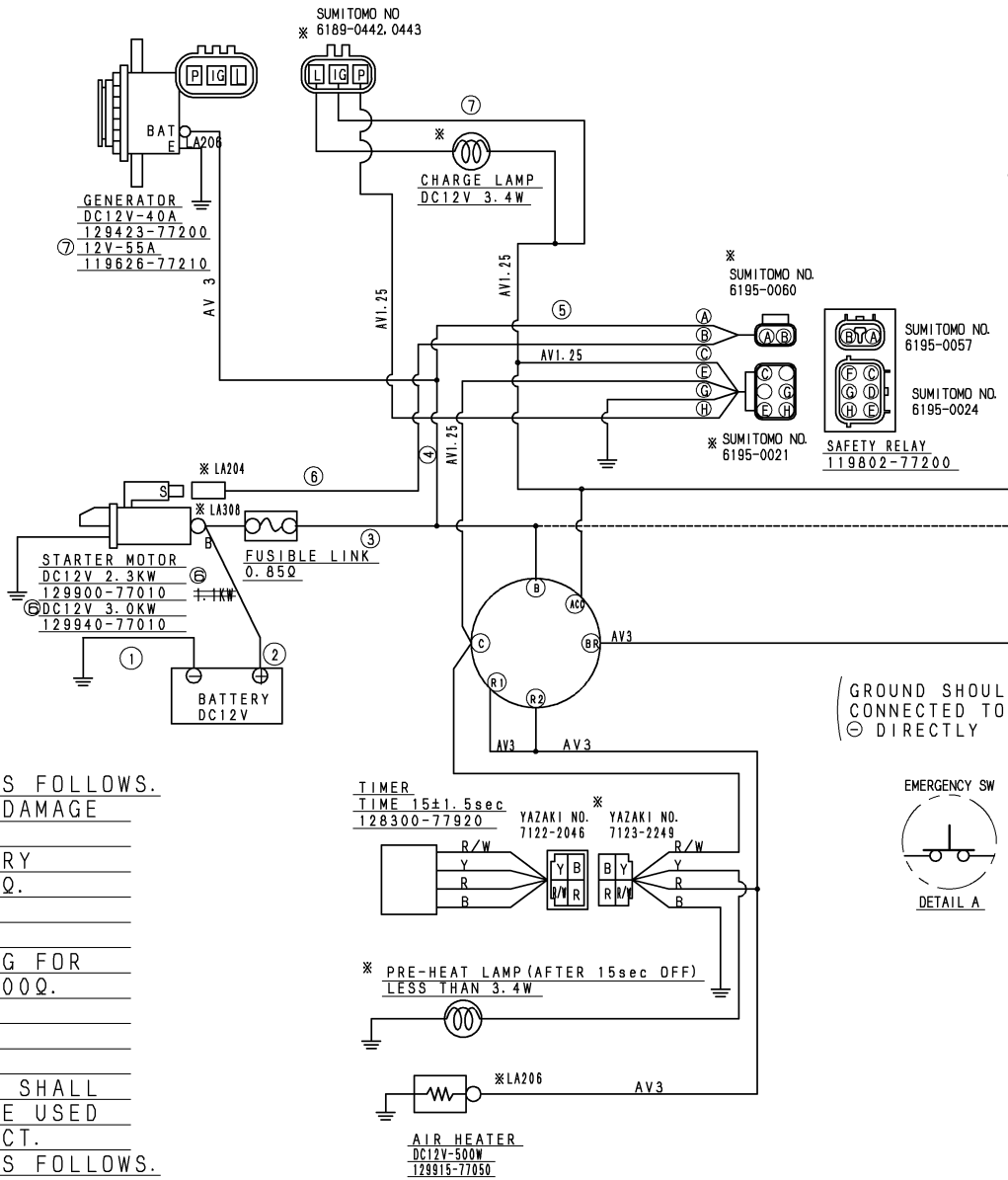
KEY SW. DIAGRAM

NOTES

1. WIRING OF STARTER MUST BE OBSERVED AS FOLLOWS. OTHERWISE IT CAUSES MISS STARTING OR DAMAGE OF STARTERMOTOR.
1-1. TOTAL ELECTRIC RESISTANCE OF BATTERY CABLE (①+②) SHOULD BE LESS THAN 2/1000Ω.
REFERENCE: AV15:≦1.4m, AV20:≦2.2m
AV30:≦3.8m, AV40:≦4.6m
1-2. TOTAL ELECTRIC RESISTANCE OF WIRING FOR STARTER (③~⑥) SHOULD BE LESS THAN 5/100Ω.
REFERENCE OF TERMINAL RESISTANCE : 15/1000Ω PER COUPLER
0Ω PER SCREW SETTING
1-3. BATTERY EARTH CABLE (①) CONNECTION SHALL BE ENSURED. PAINTED SURFACE MAY NOT BE USED (FOR EARTHING) AVOIDING THE MISS CONTACT.
2. BATTERY TREATMENT MUST BE OBSERVED AS FOLLOWS. OTHERWISE IT MAY CAUSE BURNING OF ELECTRIC EQUIPMENTS OR COMPONENTS. ALTERNATOR (DIODES) BURNING CAUSED BY BATTERY CABLE CONNECTION REVERSELY IS NOT WARRANTED.
2-1. BATTERY SHOULD BE FIXED BY FITTING. (NOT TO MOVE)
2-2. BATTERY CABLE LENGTH SHOULD BE ADJUSTED PROPERLY AND CLAMPED NOT TO BE CONNECTED REVERSELY.
2-3. NOT LOOSE THE BATTERY CABLE TERMINAL, NOR TURN THE BATTERY SWITCH OFF DURING THE ENGINE RUNNING.
3. ONLY THE SPECIFIED LOAD SHOULD BE APPLIED ON THE ALTERNATOR "L" AND "P" LINE.
IT IS NOT ALLOWED TO CONNECT ANY LOAD UNSPECIFIED WITHOUT YANMAR APPROVAL.
4. CHECK ANY SURGE CURRENT OR VOLTAGE OCCURED UNDER NORMAL OPERATIONS AND EXPECTIVE ERRONEOUS OPERATIONS, AND CONFIRM THE CIRCUIT NO SURGE OCCURS.
ESPECIALLY PROVIDE THE FLYWHEEL DIODE FOR "C-LOAD" AND DIODE FOR "L-LOAD".

REMARKS

1. * MARKED PARTS ARE NOT PROVIDED BY YANMAR.



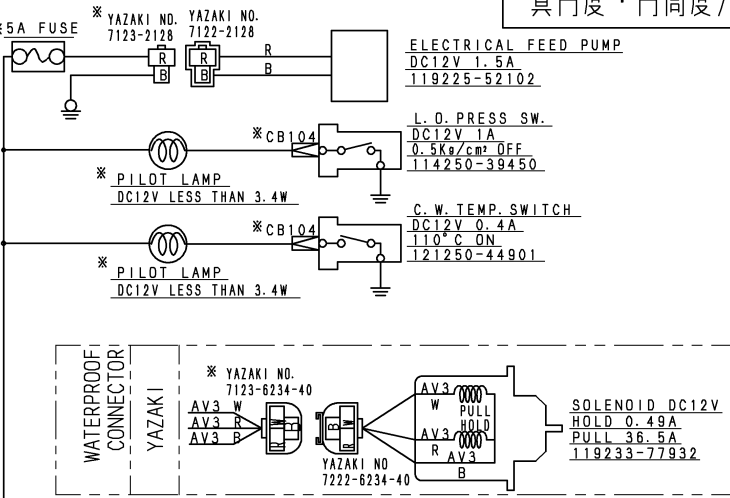
NOTES FOR ENGINE STOP SOLENOID

1. PERMISSIBLE RESISTANCE OF SOLENOID CIRCUIT SHOULD BE LESS THAN 0.07Ω TO GUARANTEE PERMISSIBLE LOWEST VOLTAGE 9V TO WORK SOLENOID (PULL COIL).
(TERMINAL RESISTANCE : 15/1000Ω PER COUPLER.
0Ω PER SCREW SETTING.)
COUPLER RESISTANCE OF SOLENOID DOESN'T NEED TO BE COUNTED)
REFERENCE : AV2 (0.0088Ω/m) : ≦8.0m...WITHOUT TERMINAL RESISTANCE
AV3 (0.0056Ω/m) : ≦12.5m...SAME AS ABOVE
WHEN YOU EXCEED PERMISSIBLE RESISTANCE, ADOPT THE CIRCUIT IMPRESSED FROM THE POWER SUPPLY TO THE SOLENOID DIRECTLY USING A RELAY ...REFER TO #
2. HIGH TEMPERATURE PARTS, SUCH AS AN EXHAUST PIPE, SHOULD NOT APPROACH FOR THE PULL POWER FALL OF SOLENOID, AND HEATING PREVENTION OF INNER COIL TEMPERATURE. (PERMISSIBLE AMBIENT TEMPERATURE: -30~100°C)
3. INSTALL FUSE TO PROTECT THE HARNESS AGAINST TROUBLES SUCH AS SHORT CIRCUIT OR CONTINUOUS DRIVE OF PULL-COIL.
4. THE POWER SUPPLY OF SOLENOID MAY NOT BE COMMON WITH THE LINE OF ALTERNATOR INITIAL EXCITATOR AS SHOWN IN THIS DRAWING. (OTHERWISE, SOLENOID MAY LOOSE STOP FUNCTION DUE TO THE POWER SUPPLY FROM ALTERNATOR "L" TERMINAL.)
5. IN CASE OF WATERPROOF CONNECT OR APPLICATION, CONNECTOR SHOULD BE FIXED BY FITTING TO PREVENT LEAD WIRE BREAK.
6. IN CASE OF EMERGENCY STOP OF MACHINE FOR SAFETY WILL BE APPLIED, SWITCH LOCATION SHOULD BE SHOWN AS A.
7. IN CASE OF THE SOLENOID CIRCUIT RESISTANCE WOULD BE LIMIT, # WIRING IS APPLICABLE.

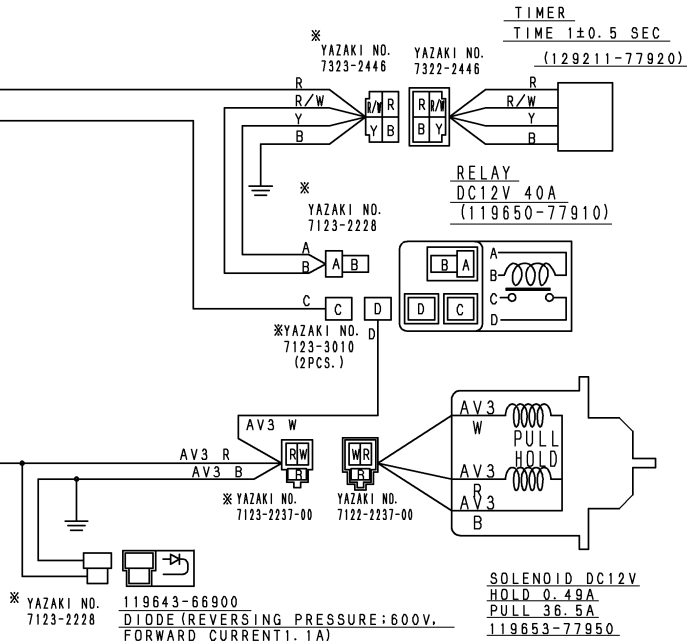
形状寸法コード GT.CODE 真円度・円筒度八、半径法

面 来 歴
CAREER

- Rev. 1 (30May. 2002)
○CHANGE THE NOTES FOR ENGINE STOP SOLENOID
○ADD ELECTRICAL FEED PUMP (TE-02136)
- Rev. 2 (20. Sep. 2002)
ADD DIODE FOR RELAY
- Rev. 3 (24. Dec. 2002)
CHANGE SOLENOID
ADD RELAY AND TIMER
- Rev. 4 (14. Jan. 2003)
Delete Relay (119646-77900)
- Rev. 5 (5. Jun. 2003)
CHANGE FUSE 20A+30A
- Rev. 6 (21. Apr. 2005)
ADD 129940-77010 STARTER (YDSTX-05034)
- Rev. 7 (20th Feb. 2006)
Added alternator. 119626-77210. (YDSTX-06017)



(GROUND SHOULD BE CONNECTED TO BATTERY) DIRECTLY

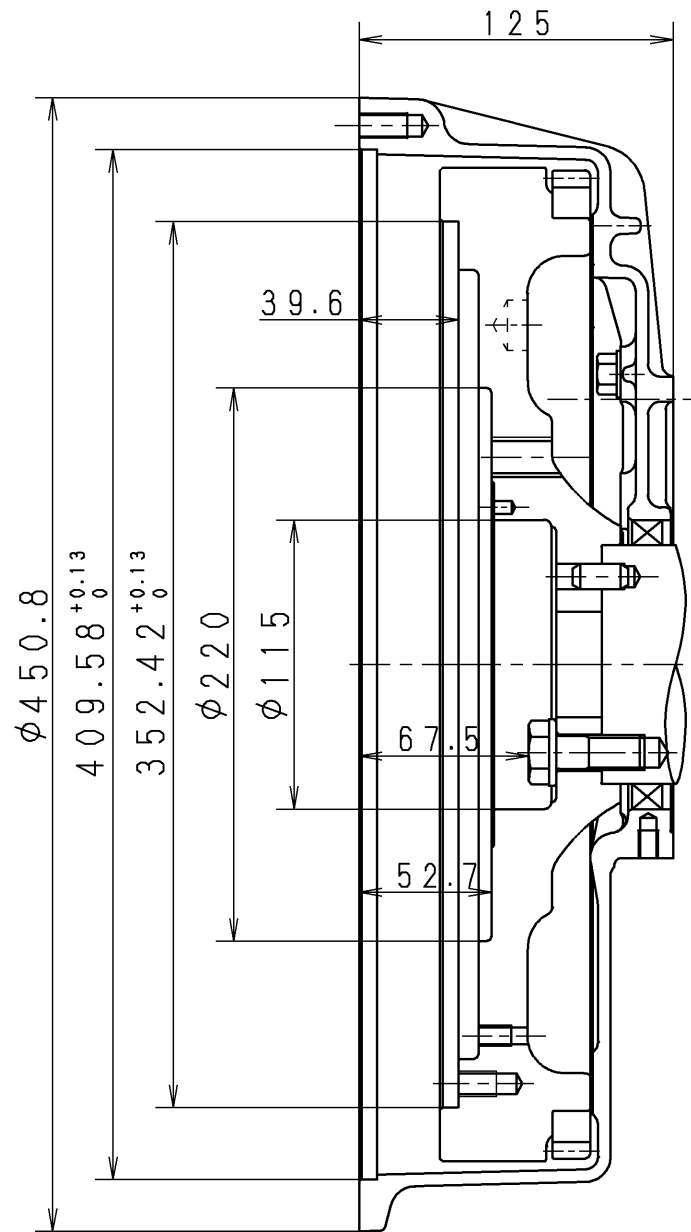
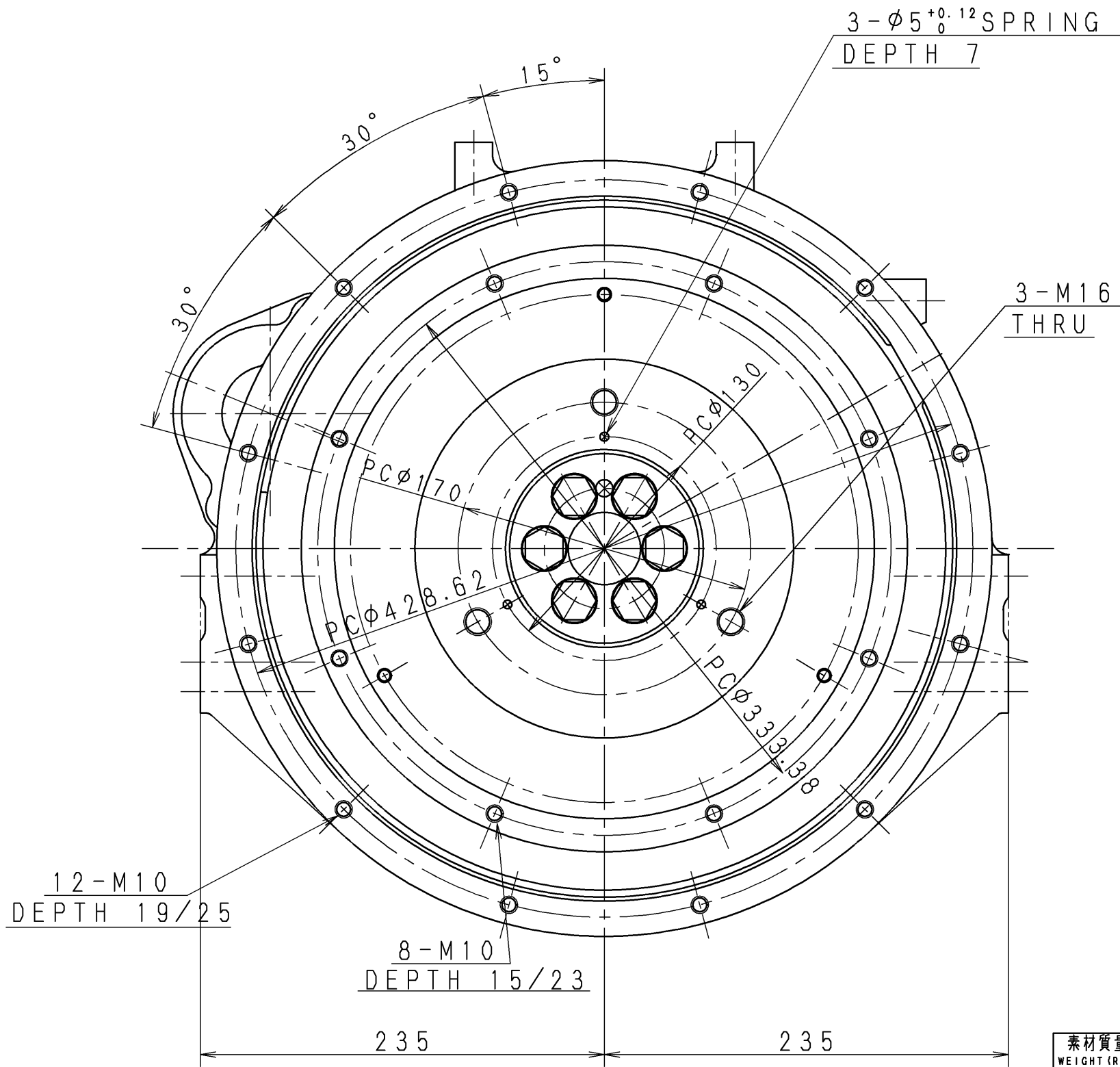


素材質量 WEIGHT (RAW)	(± %)	水圧試験 HYDRAULIC TEST	MPa (kg/cm²)	小形工 開発部	部長 G. MANAGER	技部長 MANAGER
完成質量 WEIGHT (精度%)	(± %)	空圧試験 PNEUMATIC TEST	MPa (kg/cm²)	J. Makiida		
主 席	長 SEC. MANAGER K. Yamada	機 種 MODEL	4TN V94	4TN V98 (T)	尺 度 SCALE	SCALE OUT
検 図 CHECKED	機能担当者 SPECIALIST	個 数 QTY.	材 質 MATERIAL			
設 計 DESIGNED	製 図 DRAWN	年 月 日 DATE	名 称 NAME			
K. Yokoi	K. Shimizu	2002 1. 29	WIRING DIAGRAM			
YANMAR CO., LTD.			WIRING DIGLAM			
ENGINE PRODUCT OPERATIONS DIV.			コード CODE			
			E3-29906-0010			
			Rev. 6 Rev. 7			
			図面 サイズ			
			A2 (C)			

形状寸法コード

G.T.CODE M

真円度・円筒度ハ、半径法



MODEL: 4TNE94/98
4TNV94L/98 (T)

Flywheel Housing	129915-01610
Flywheel CMP	129920-21580
Flywheel	129920-21410
Ring Gear	127410-21480

素材質量 WEIGHT (RAW)	(± %)
完成質量 WEIGHT (製造%)	(± %)

長 SEC. MANAGER <i>A. Kosaka</i>	来歴 CAREER Rev. 1 (04.3.3) Add TNV DI (YDSTX-04025)
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検 CHECKED <i>H. Nomura</i>	機能担当者 SPECIALIST
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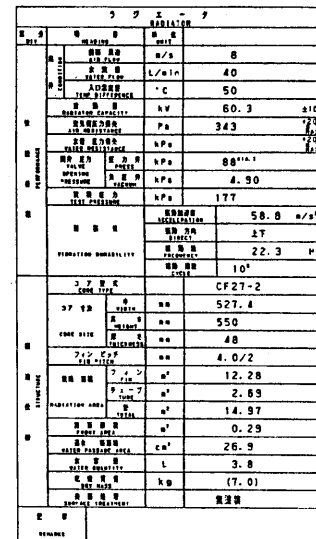
設計 DESIGNED <i>S. Iwata</i>	製図 DRAWN <i>M. Umemoto</i>
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年月日 DATE 1997 12. 4

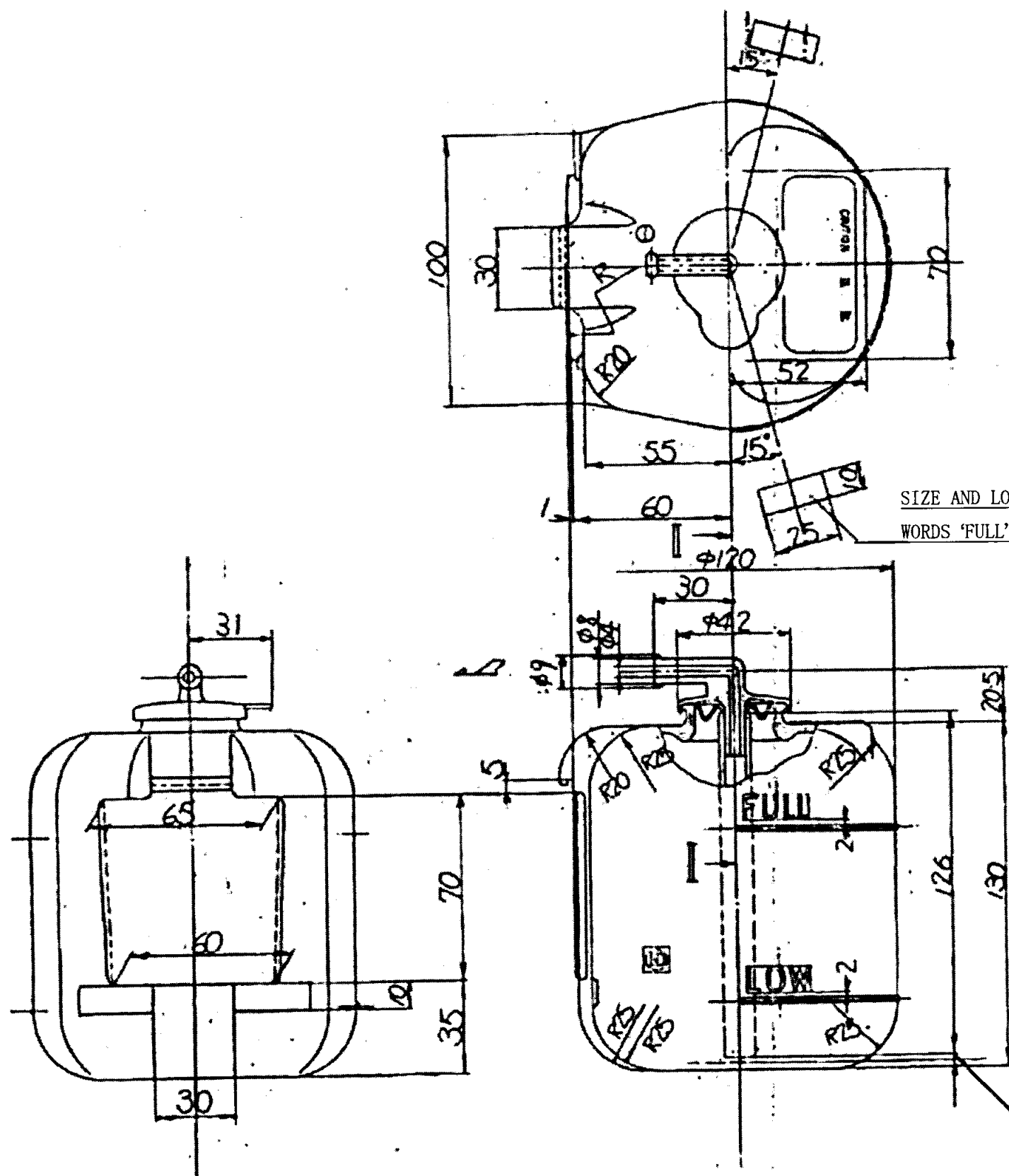
YANMAR DIESEL ENGINE CO., LTD.
ENGINE DEVELOPMENT DEPT.

水圧試験 HYDRAULIC TEST (	MPa kg/cm ²)	エンジン開発部	部長 MANAGER	一技長 MANAGER <i>M. Hamano</i>
空圧試験 PNEUMATIC TEST (	MPa kg/cm ²)	機種 MODEL	TNE DI	TNV DI
数量 QTY.	1	1		
名称 NAME	直結部詳細図 (SAE #3)			
	COUPLING DIMENSIONS			
コード CODE	Rev. 1			
	23-29915-0500			
				図面サイズ A3 (B)

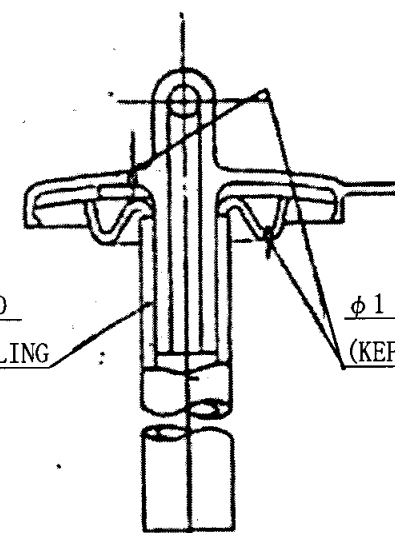
重要チェックポイント	形状公差	姿勢公差	位置公差	振れ公差
精度ノ種類ト記号	種類	記号		
真直度	—			
真円度	○			
線形	⌒			
平面度	▭			
円筒度	⊙			
面形	⌒			
平行度	//			
垂直度	⊥			
傾斜度	∠			
位置度	⊕			
同軸度	◎			
対称度	≡			
振れ公差	↗			
全振れ公差	↗			



ヤンマー株式会社	
適用名称	
適用機種	
部品名称	ラジエータ ASY
部品コード	129940-44500

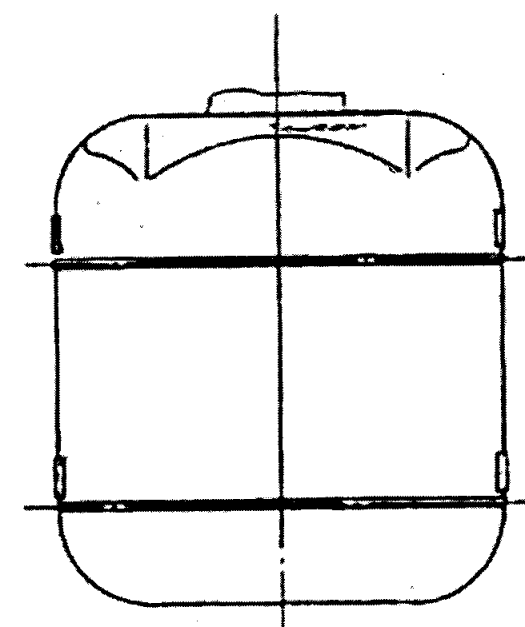


APPLY BOND
ON ASSEMBLING



$\phi 1$ HOLE FOR BREATHING
(KEPT $\geq 90^\circ$ APART FROM EACH OTHER)

SIZE AND LOCATION OF
WORDS 'FULL' AND 'LOW'



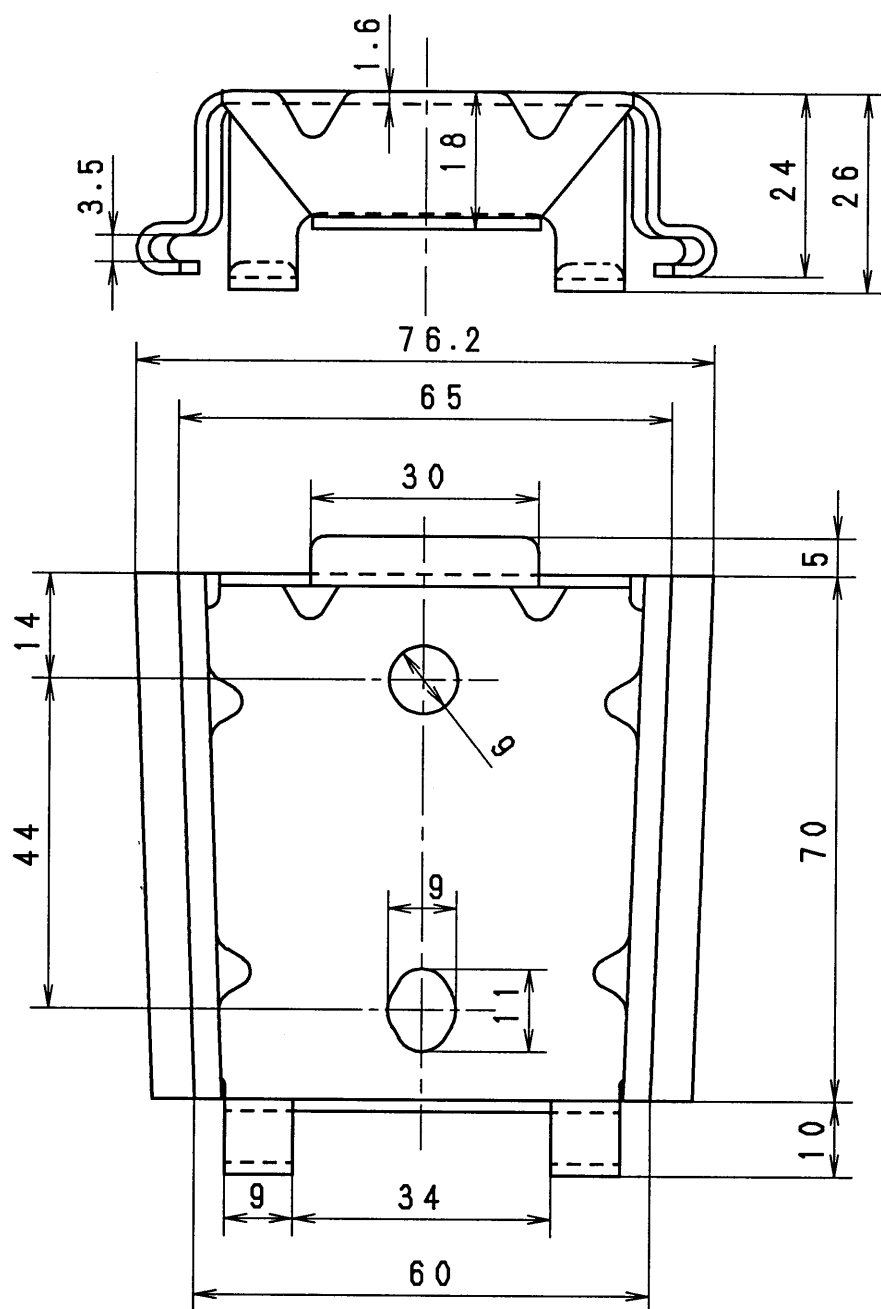
REMARK

1. Volume ≥ 1.25 l LEVEL 'FULL': APPROX. 0.8 l
'LOW': APPROX. 0.2 l
2. TANK MATERIAL: P. P. (HEAT RESISTANCE)
3. VIBRATION PROOF: $3G \times 10^6$ CYCLES (VERTICAL)
4. HEAT RESISTANCE: 110°C

ヤンマーディーゼル株式会社
適用名称

適用機種	
部品名称	SUB TANK
部品コード	120445 - 44530

YANMAR DIESEL ENGINE CO., LTD.



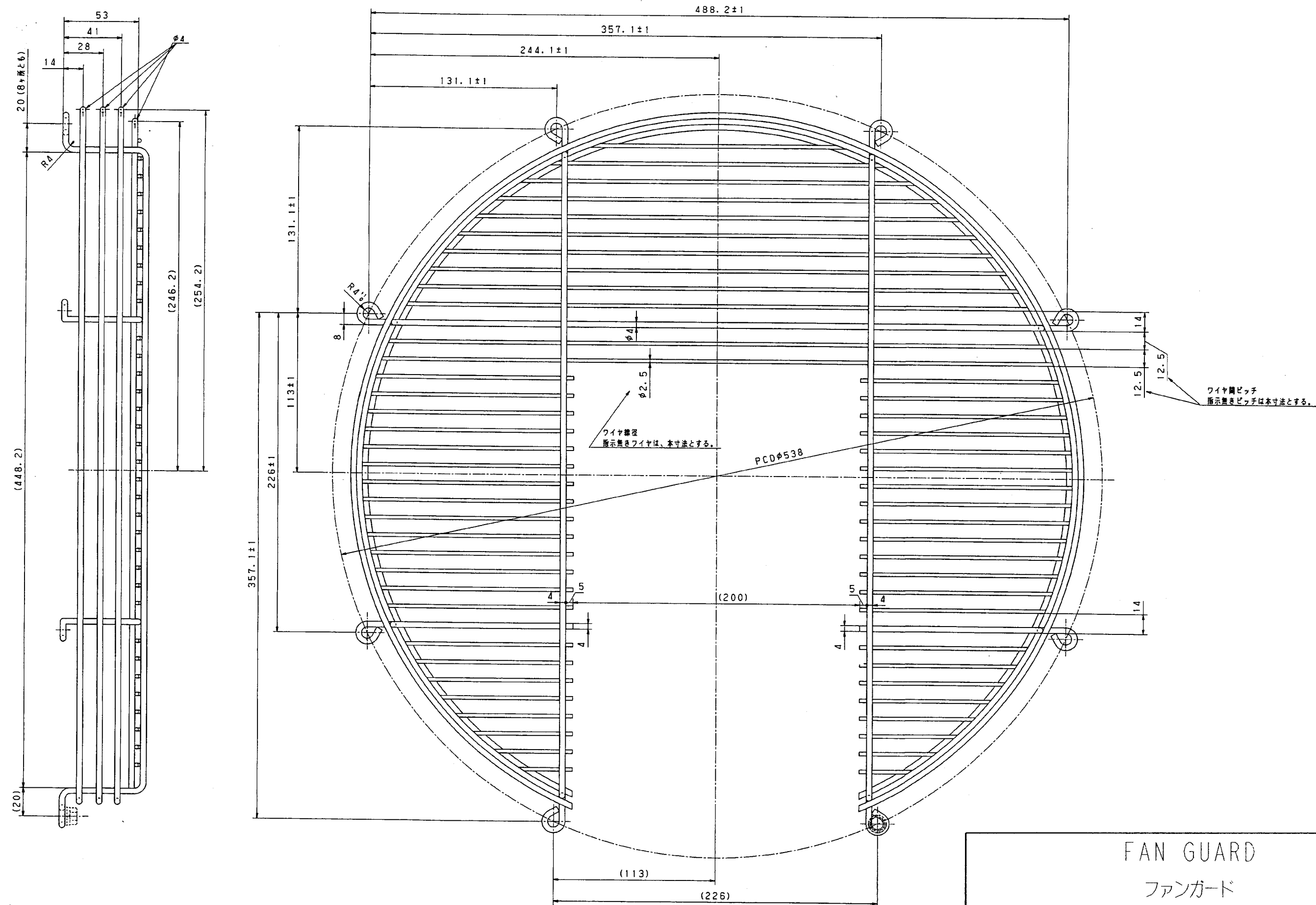
ブラケット (サブタンク)

ヤンマーディーゼル株式会社
YANMAR DIESEL ENGINE CO., LTD.

DWG. NO.

部品コード

120445-44540



FAN GUARD

ファンガード

YANMAR

ENGINE PRODUCT OPERATIONS DIV., YANMAR CO., LTD.

DWG.
CODE
NO.

129907-44560

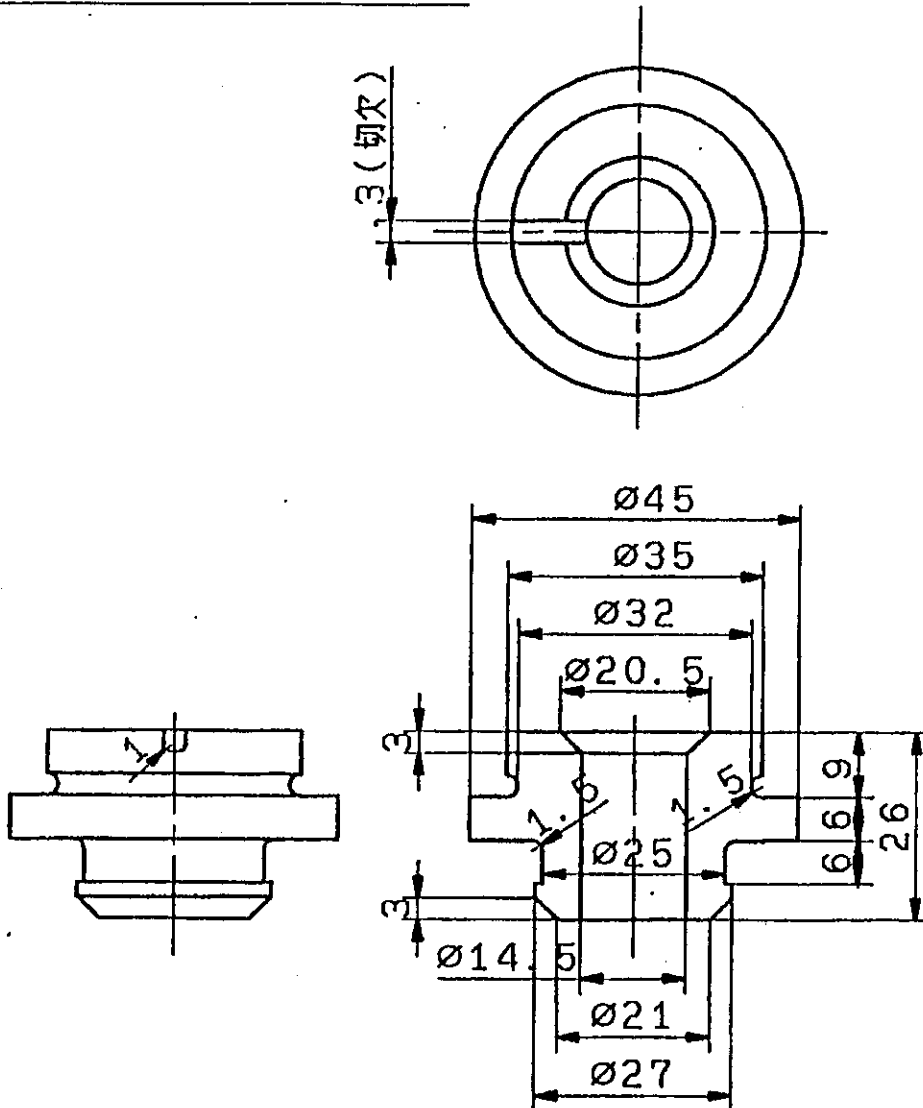
備考

1. 材質: CR, J4 硬度 $70^{\circ} \pm 5^{\circ}$

Note

material: CR

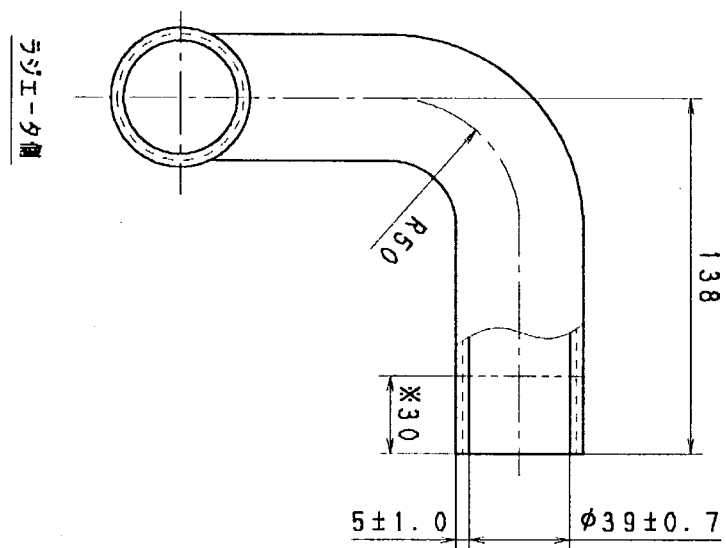
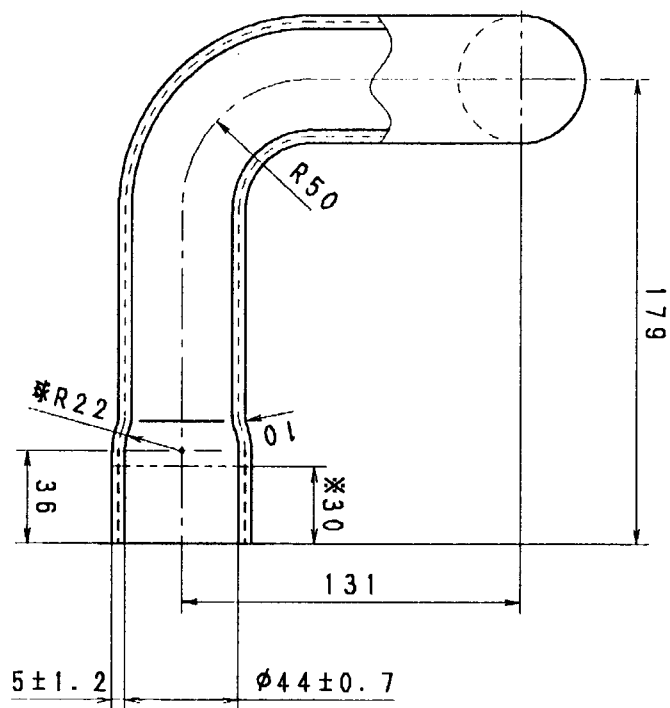
rubber hardness: $70^{\circ} \pm 5^{\circ}$



Dumper

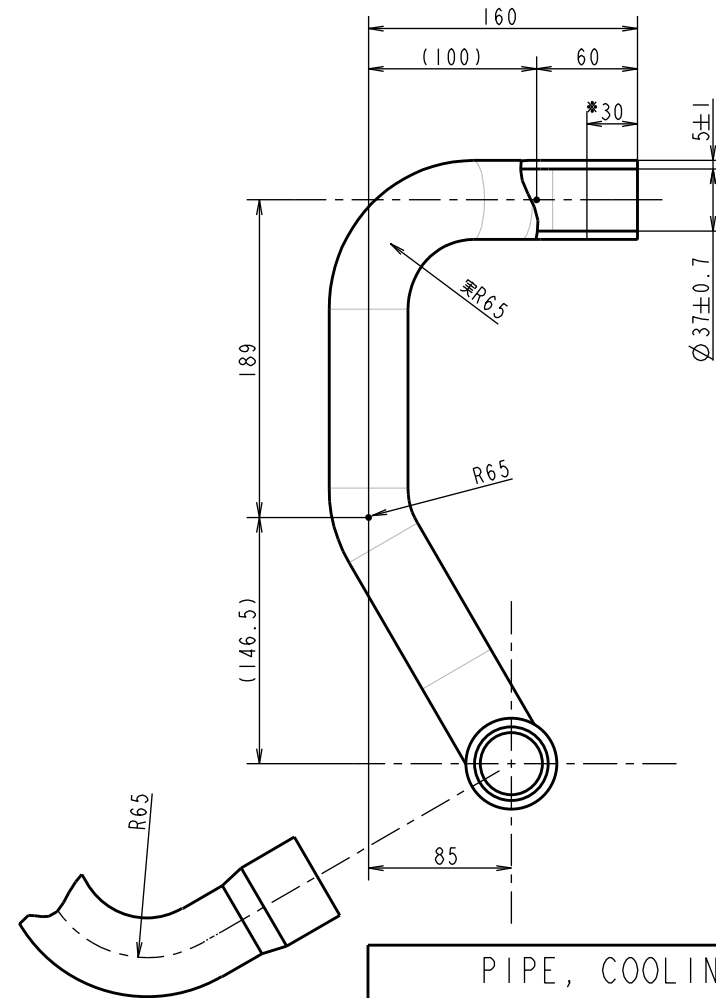
Silent blocks

ヤンマーディーゼル株式会社	
適用名称	
適用機種	
部品名称	円板ゴムクッション
部品コード	119255-44660



CWP 側

YANMAR DIESEL ENGINE CO., LTD	
部品名称 PART NAME	CW-T (A) 冷却水管 (A)
PART No.	129981-49050



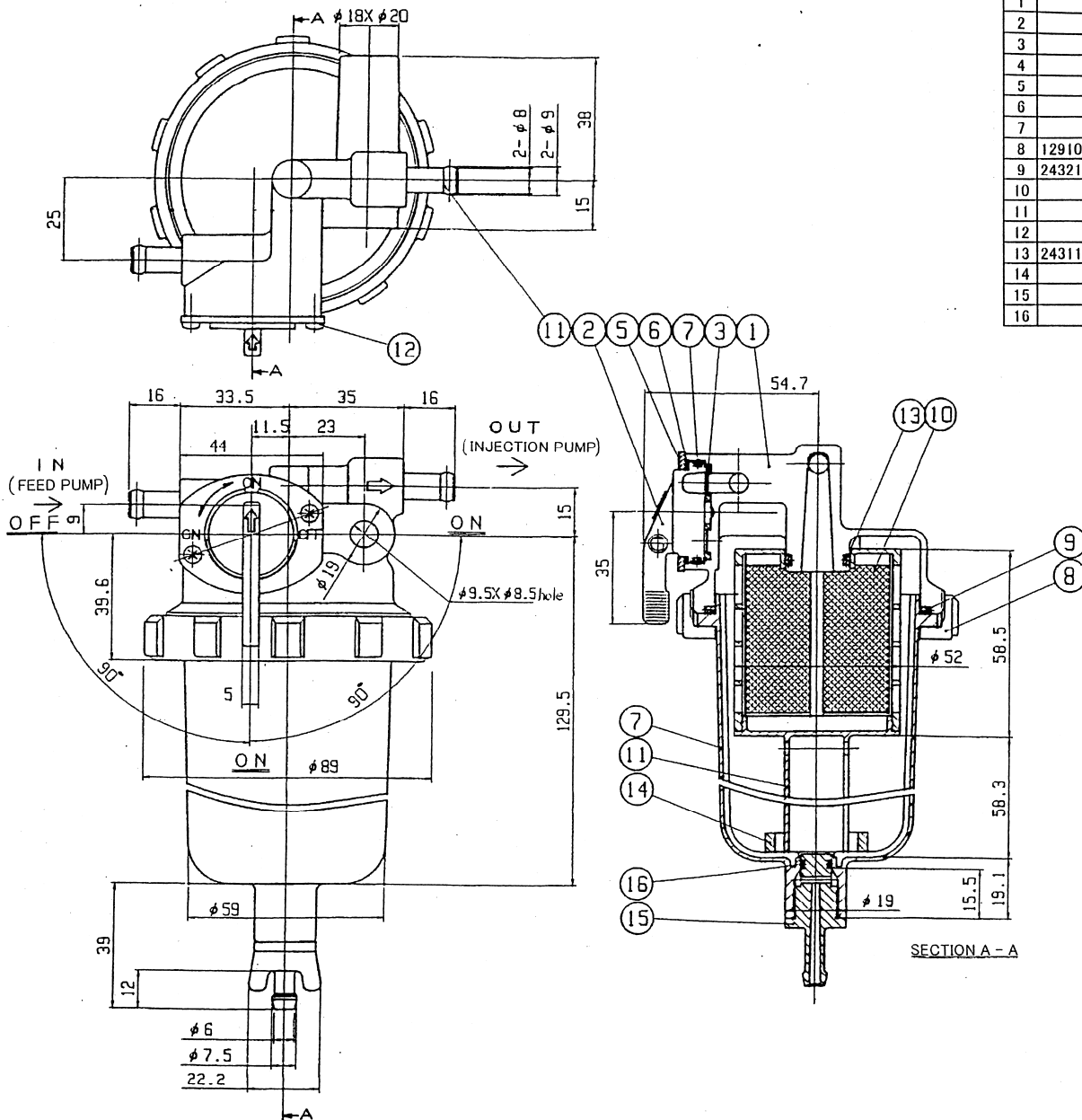
PIPE, COOLING WATER
CW-T(B)

YANMAR

CODE	129981-49062
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ENGINE PRODUCT OPERATIONS DIV., YANMAR CO., LTD.

ENG.MODEL	??????
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NO.	YANMAR CODE	SUPPLIER CODE	MODEL NAME	MATERIAL	QUANTITY	NOTES
1		YD-259-1	BODY	ADC12	1	
2		DI-2a	LEVER	ZDC2	1	WHITE CHROMATE
3		OK-3a	VALVE PACKING	NBR	1	
4		KTO-2-4	WAVE WASHER	SKS	1	
5		DI-5a	PLATE	SPCC	1	MFZn2
6		YMO-1-26	O RING	NBR	1	S-29
7		YD-259-7	CUP	12 NYLON	1	SEMI-TRANSPARENT
8	129100-55690	IA-8	RING NUT	ZDC2	1	WHITE CHROMATE
9	24321-000650	IA-9	O RING	NBR	1	G65
10		YD-259-10	ELEMENT	66 NYLON	1	108 MESH
11		S12-08	JOINT	C2700T	2	
12		ZSR-30-13	SCREW	S25C	2	MFZn2-C
13	24311-000160	YM-5-6	O RING	NBR	1	P16
14		JB-14-12	FLOAT	P.P	1	RED
15		JB-13-18	DRAIN PLUG	PCM	1	
16		KG-6	O RING	NBR	1	P7

SPECIFICATION		
ITEM	CONDITION	STANDARD
AIRTIGHTNESS	AIR PRESSURE(100kPa)(1.0kg/cm ²)	NO LEAKAGE
FLOW RATE		
LEVER OPERATION TORQUE	AFTER OPERATING A FEW TIMES	LESS THAN 0.7N·m (7kg·cm)
ADAPTIVE FUEL		LIGHT OIL, YANMAR HEAVY OIL
ADAPTIVE TEMPERATURE RANGE		-20°C ~ 80°C
LEVER OPERATION DURABILITY	OPERATION SPEED 15±5	1X103 REPRODUCTION
	REPRODUCTION/min	

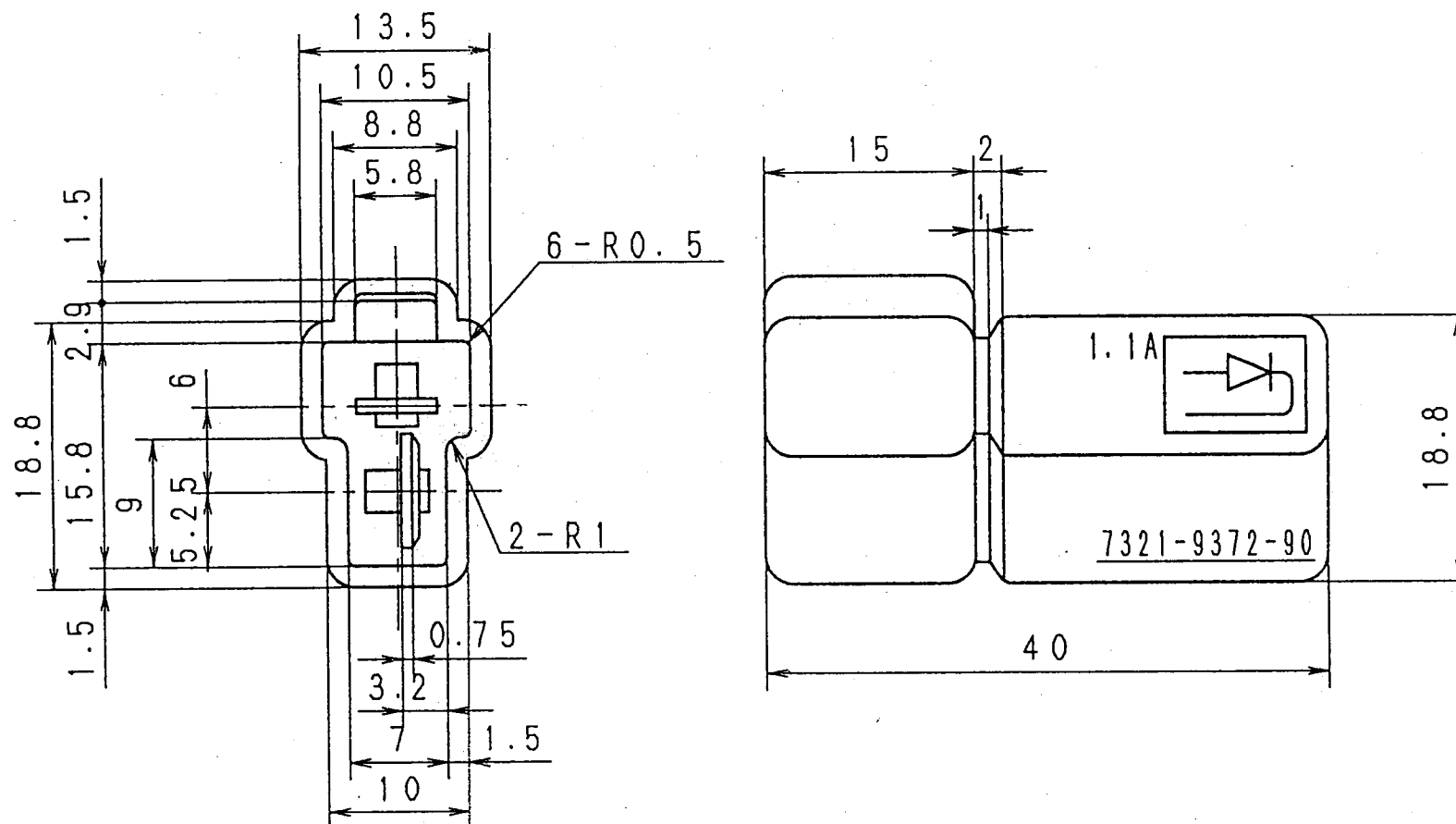
NOTE

1. ⑤ ASSEMBLE AND APPLY DIAMOND GREASE TO RING NUT SCREW.
TIGHTNING TORQUE: 15⁺⁵ N·m (150+50 kg·cm)
2. ⑪ FORCE FIT AFTER APPLYING ADHESIVE (THREE BOND 1303) TO JOINT.
DRAFT LOAD: MORE THAN 4 N·m (40kg)
3. ⑩ ELEMENT SPECIFICATIONS
FILTRAION AREA: MORE THAN 57cm²
OPENING: 152 μ
4. COUNTER VIBRATION: 8G, 50Hz
5. CAPACITY OF WATER-OIL SEPARTOR: MORE THAN 150cc
6. TO BE FREE FROM FOREIGN MATTERS AND BARRIS IN FUEL LINE.
7. INDICATED DETAIL OF DATE OF MANUFACTURE (ex.) 2001.5.14 [N15]

DAY 1-26, 27, 28, 29, 30, 31 YEAR 0-9 MONTH 1-9, 10, 11, 12
(A-Z) (a) (b) (d) (e) (f) THE END OF NUMBER OF THE YE/ (1~9)(O) (N) (D)

YANMAR DIESEL

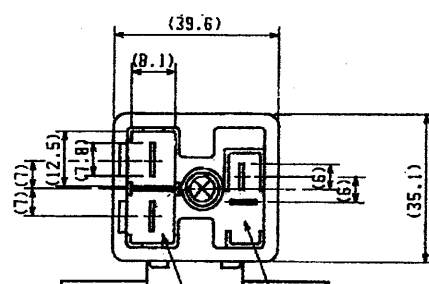
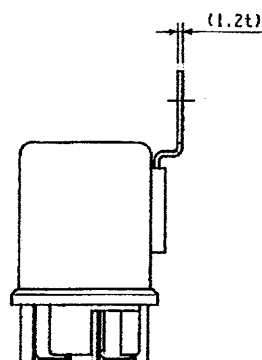
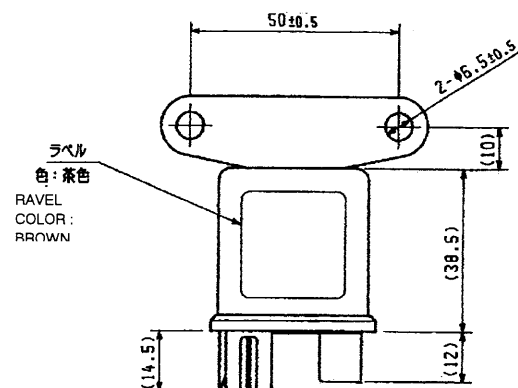
PARTS NAME	WATER-OIL SEPARATOR
PARTS CODE	119802-55700



Mate coupler : 7123-2228

Mate terminal : 7116-2090

DIODE ダイオード		
YANMAR ENGINE PRODUCT OPERATIONS DIV., YANMAR CO., LTD.	CODE	119643-66900



相手コネクタ: 7323-2228 (矢崎)
CONNECTOR: YAZAKI 7323-2228

相手コネクタ: 7323-3010 (矢崎)
CONNECTOR: YAZAKI 7323-3010

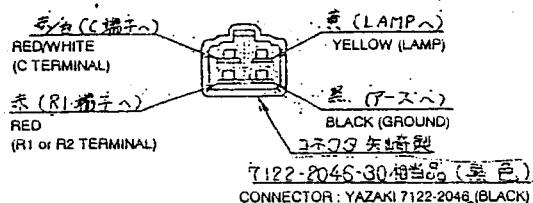
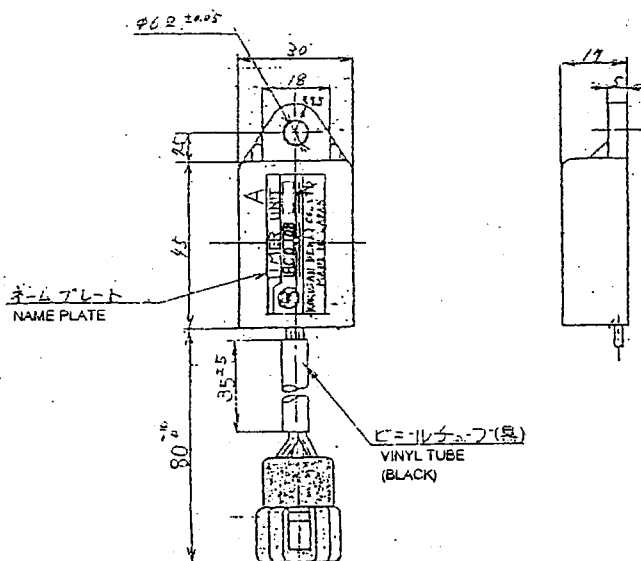
仕様

1. 定格電圧 : DC12V
2. 連続定格 : 10 MIN.
3. コイル抵抗値 : 37Ω
4. インダクタンス : 66mH (at 1kHz)

SPECIFICATIONS

1. RATED VOLTAGE : DC12V
2. MAXMUM OPERATING TIME : 10 MIN.
3. COILE RESISTANCE : 37 ohm
4. INDUCTANCE : 66mH (at 1kHz)

YANMAR DIESEL ENGINE CO., LTD. ENGINE DEVELOPMENT DEPT.	
MODEL	TNE SERIESE
部品名称	グローリレー
NAME	GLOW RELAY
PART No.	119650-77910



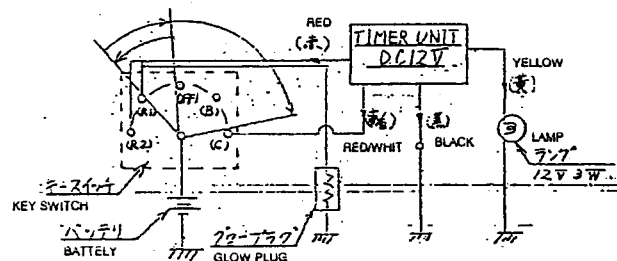
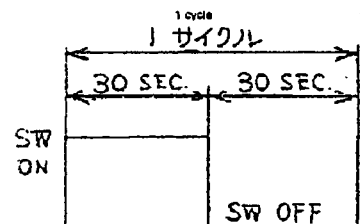
-30-

仕様

- リレーON時間 : 15±3 (sec.)
- 使用温度範囲 : -25℃~+80℃
- 保存温度範囲 : -25℃~+80℃
- 使用電源電圧範囲 : 8V~15V
- 適用リレー仕様 : 12V 励磁電流 : 1 A
- 耐水性 : 清水中10cmノ所ニ24時間保持シタ後、水分ヲ拭キ取り自然乾燥後、性能ニ異常ナキコト。但シ、カブラ及ビコネクタ部分ハ浸水ガ無いヨウニ行ウコト。
- 耐振性 : 20 G一定ニテ100~1000Hz60secスweepニテX, Y, Z方向各 2 Hr 振動ヲ与エ性能ニ異常ナキコト。但シ、ワイヤーハーネスハ共振ナキヨウ取り付けケルコト。
- 耐久性 : 30000サイクル動作サセタ後性能ニ異常ナキコト。

SPECIFICATIONS

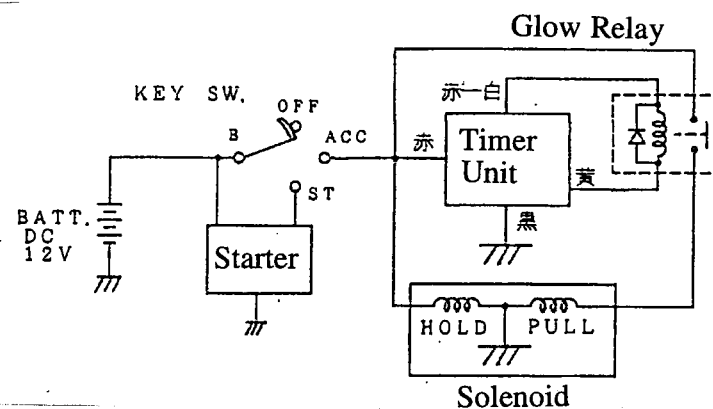
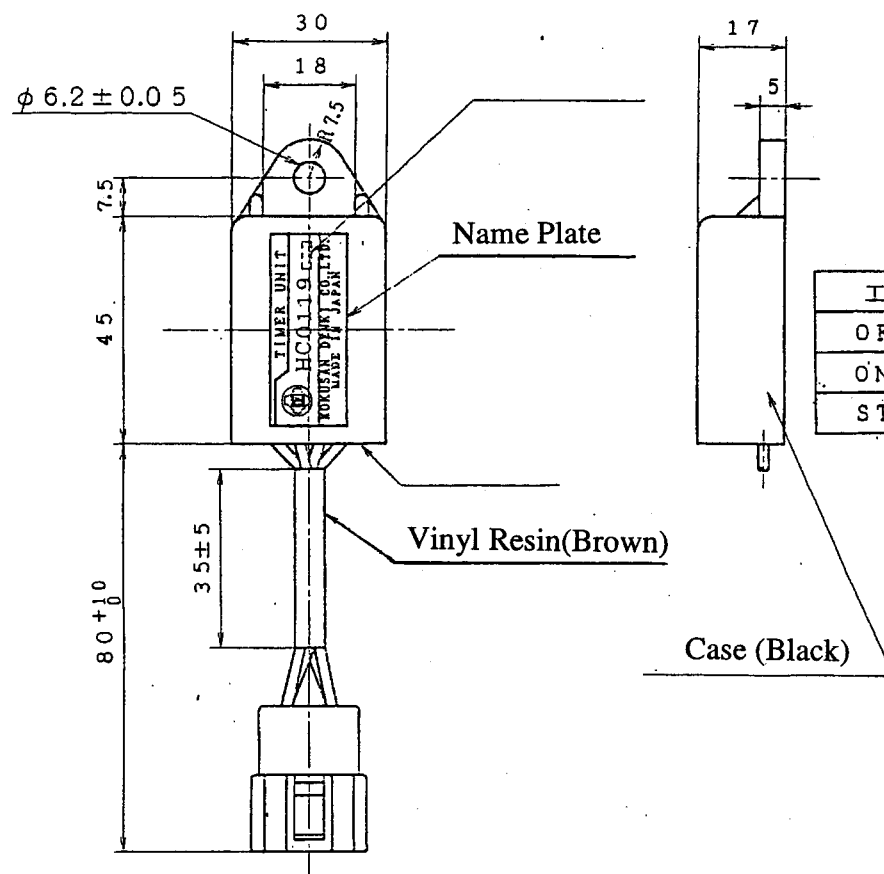
- OPERATION TIME : ON AFTER 15 sec.
- USABLE TEMPERATURE RANGE : -25℃~+80℃
- PRESERVE TEMPERATURE RANGE : -25℃~+80℃
- USABLE VOLTAGE RANGE: 8V~15V
- APPLICABLE RELAY : 12V
- WATERPROOFING : DO NOT EXPOSED TO THE RAIN ON CONNECTOR AND TERMINAL.
- VIBRATION RESISTANCE : 20G
- DURABILITY : 30000 cycle



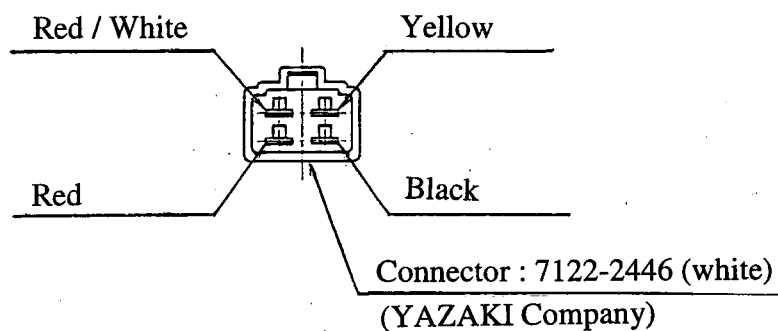
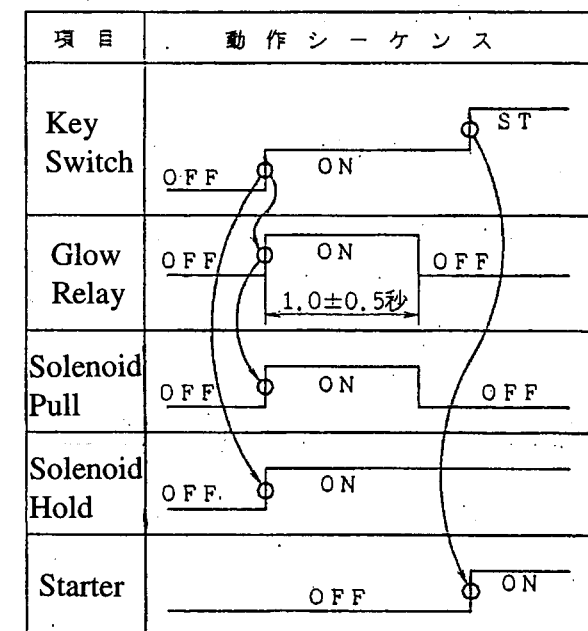
結線図
WIRING
DIAGRAM

MODEL	TNE SERIESE
部品名称	ランプタイマ
NAME	TIMER, GLOW PLUG
PART No.	128300-77920

3D-CAD



工程	B	ACC	ST
OFF			
ON	○	○	
ST	○	○	○



TIMER(1sec

タイマー(1sec

YANMAR

ENGINE PRODUCT OPERATIONS DIV., YANMAR CO., LTD.

CODE

129211-77920