YANMAR

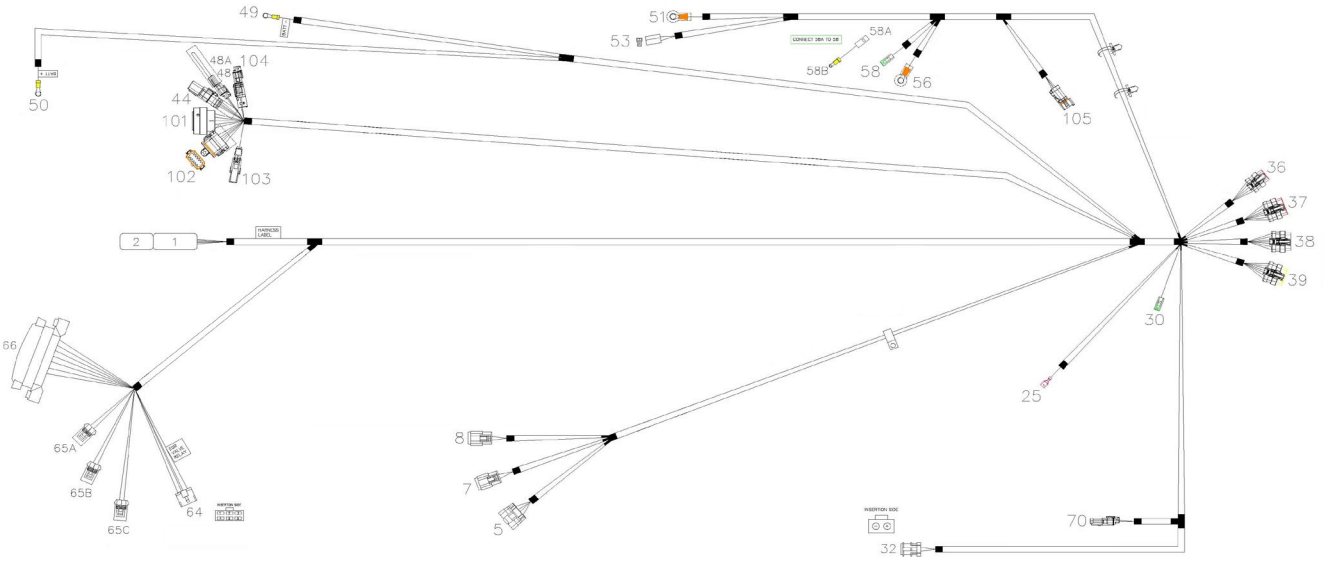
Supplement to Yanmar Kit Installation Instructions

SAFETY

This product is designed and intended only for use with a YANMAR engine. All safety and warning information contained in the Yanmar Operation Manual and Service Manual is adopted and incorporated to apply to the components, accessories, and parts that are utilized with Yanmar engines. Follow all instructions and precautions before installing this product, before operating, during operation, and during periodic maintenance procedures for your safety, the safety of others, and to protect the performance of your engine.

Item	Part No.	Description	Quantity	Remarks
1	129A88-91121	Main Harness Assembly	1	
2	198461-52950*	Relay for EGR valve	1	Included w/ engine
3	-	80A, 12V Relay	2	Included w/ harness
4	-	Starter Sub Harness	1	Included w/ harness

MODELS
3TNV88C



NOTE: Starter Sub Harness may not be necessary; Starter type will determine
Service parts are denoted by an asterisk. To replace non-service parts, the entire kit will need to be purchased.

KPH8 - Harness KIT
INS-KPH8-0011

YANMAR

Installation Instructions

NOTE: Only the Starter and Glow Plug Relays are included with the harness kit. The EGR valve relay is supplied with the distributor standard specification engine in the loose parts box. The optional connections for distributer use are located in the Accessory Coupler. The optional features include Pre-Heat Lamp, Engine Stop 1 & 2, Charge Lamp, etc.

Please see the next page for detailed installation instructions.

WARNING: Be sure battery cables are connected correctly. Disconnecting either the positive or negative battery cable while the equipment is operating will cause premature failure of electronic components. Also, never weld on equipment with the ECU connected to the wire harness.

NOTE: In the event that the wire harness needs to be extended, never use scotch locks or butt connectors to extend the wire harness. All extended wires must be soldered and sealed.

Remote Mounted ECU Applications:

For applications that remotely mount the ECU within the wire harnesses reach please use the following ECU mounting guidelines:

1- Install the ECU in a location that is not subject to steam or high-pressure water for cleaning
2- Install the ECU in a location that is well ventilated and not subject to direct sunlight.
3- Install the ECU so that the connector faces downward. Failure to do so may trap water in the connector, resulting in corrosion of connector pins.
4- Ensure no water is trapped inside the connector when plugging the connector. Water inside the connector may corrode connector pins, resulting in malfunctioning of the ECU.

Refer to harness drawing for additional design requirements for consideration of application. A troubleshooting guide is available through Yanmar's Distributor Website or by contacting Yanmar America's Service Department.

Table 1: Comply with torque standards in the table to avoid unexpected damage during installation or in the future.

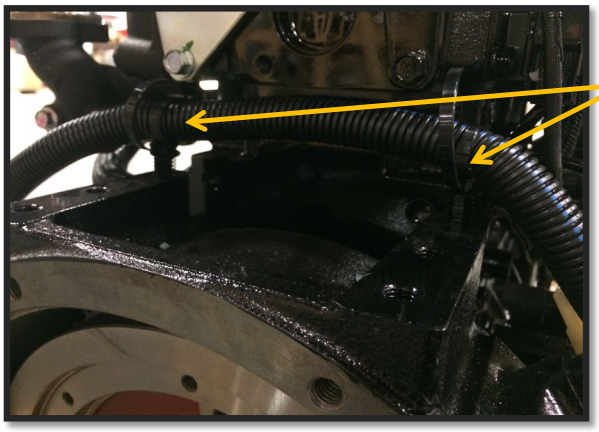
Diameter x Pitch	Kgf-m	Foot-lbf	N-m
M5x0.8	0.4 ~ 0.7	3 ~ 5	4 ~ 6.7
M6 x 1.0	1.0~1.2	7 ~ 9	9.8 ~ 11.8
M8 x 1.25	1.5 ~ 2.9	10.6 ~ 20.9	14.4 ~ 28.3
M12 x 1.75	8.0 ~ 10.0	57.8 ~ 72.3	78.4 ~ 98.0

Note: There are no bolts included with harness kit

Harness Routing Instructions

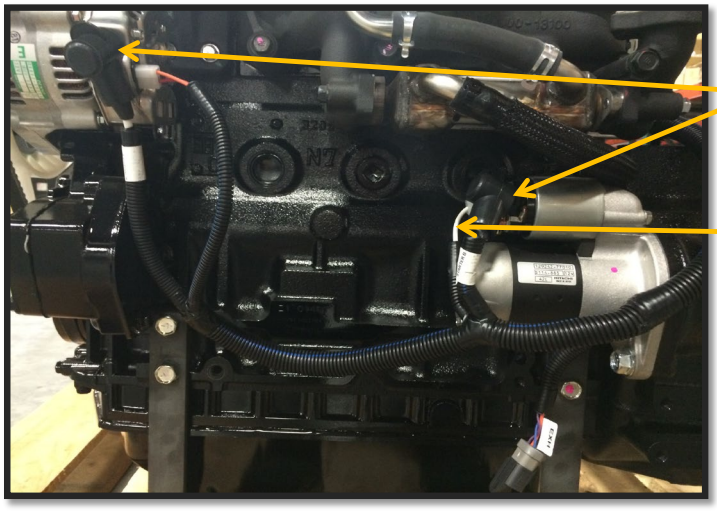
1. Lay the loose harness on engine to gauge fitment and placement of where the relays, ECU, and connectors should go based on the wiring diagrams provided. Please refer to TNV application manual for cautionary measures to be taken when mounting a harness to an engine.

2. Secure section of loom containing (2) P-clips to the flywheel housing with loosely attached P-clips. There will be a series of M10 bolt holes on the top of the flywheel housing.



P-clips hold down the alternator and starter section of loom to the flywheel housing. Make sure P-clips and loom have the proper orientation to allow the loom to rest close to the flywheel barrel.

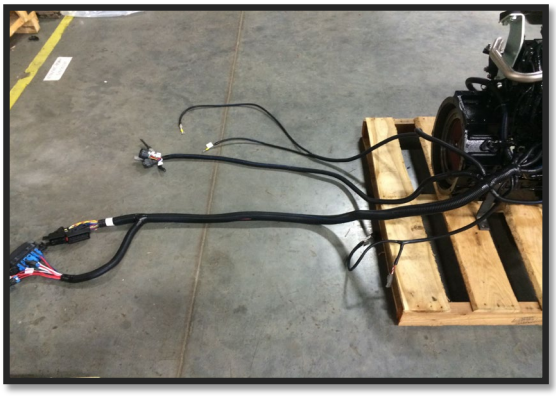
3. Connect alternator plugs (51) & (53) and starter connectors (56) & (58). Cover terminals after connecting.



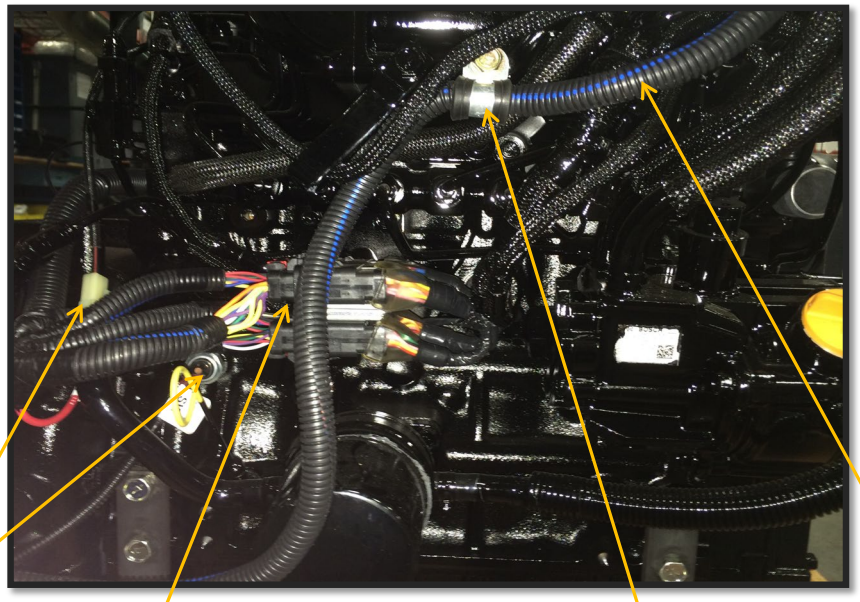
Replace terminal covers after connecting

Starter Sub Harness may need to be removed to properly attach connector (58)

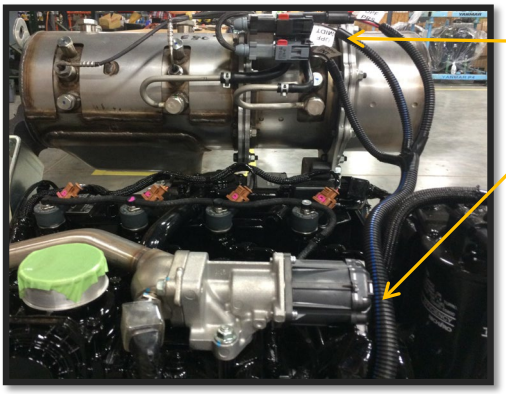
4. Layout harness as shown. Connectors 1, 2, 64, 65 - 66, 44, 48, 101 - 104, and the battery leads (49 & 50)



5. The intermediate couplers (36-39) should be connected next. The mounting points for the turbo engines may differ from the naturally aspirated engines. Please see the pictures below for reference on positioning. Connect glow plug (30) and oil pressure switch (25). Route the DPF loom section similar to placement shown. Use loose clamp noted to attach harness. Always avoid harness contact with high temp surfaces such as the DPF, EGR, etc.



6. Route the DPF branch between the EGR valve and the fuel filter up to the DPF connections. Check and adjust if necessary to ensure that no contact will be made in operation between harness and high temp surfaces (DPF, etc)



Refer to harness drawing for additional design requirements for consideration of application.

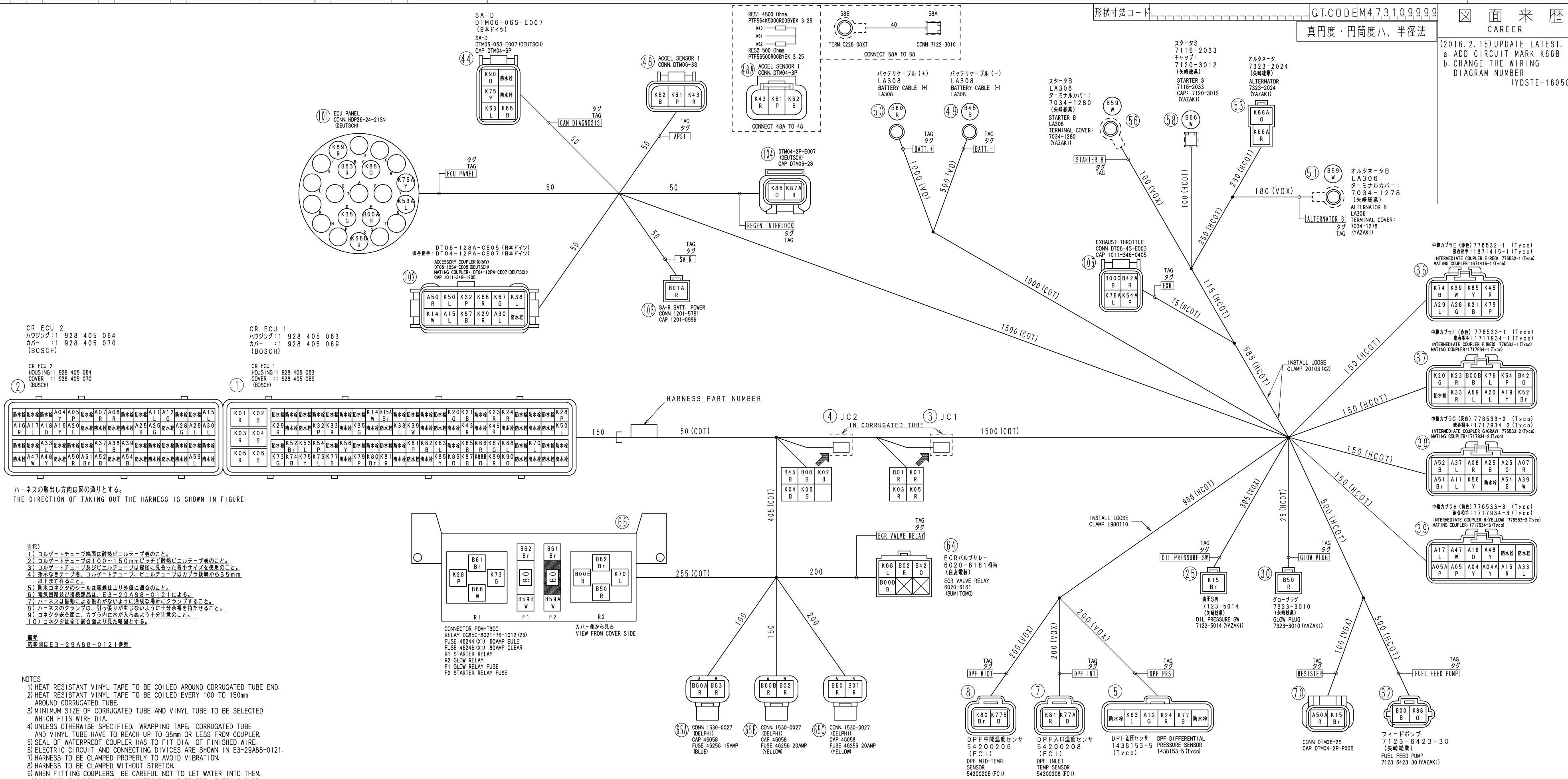
要	○	購買仕様書	検査基準書	品質管理工程図	特別管理部品	量産初期安定管理部品

三角法
3RD ANGLE PROJECTION

形状寸法コード | GT.CODE M473109999
真円度・円筒度ハ、半径法

図面来歴
CAREER

(2016.2.15) UPDATE LATEST.
a. ADD CIRCUIT MARK K66B
b. CHANGE THE WIRING DIAGRAM NUMBER (YDSTE-16050)



ハーネスの取出し方向は図の通りとする。
THE DIRECTION OF TAKING OUT THE HARNESS IS SHOWN IN FIGURE.

注記)
1) コルゲートチューブ端面は耐熱ビニルテープ巻のこと。
2) コルゲートチューブは100~150mmピッチで耐熱ビニルテープ巻のこと。
3) コルゲートチューブ及びビニルチューブは線径に見合った最小サイズを使用のこと。
4) 指示なきテープ巻、コルゲートチューブ、ビニルチューブはカプラ後端から35mm以下まで有ること。
5) 防水コネクタのシールは電線仕上り外径に適合のこと。
6) 電気回路及び接続部品は、E3-29A88-0121による。
7) ハーネスは振動による振れがないように適切な場所にクランプすること。
8) ハーネスのクランプは、引っ張りが生じないように十分余裕を持たせること。
9) コネクタ嵌合面に、カプラ内に水が入らぬよう十分注意のこと。
10) コネクタは全て嵌合面より見た略図とする。

備考
結線図はE3-29A88-0121参照

NOTES
1) HEAT RESISTANT VINYL TAPE TO BE COILED AROUND CORRUGATED TUBE END.
2) HEAT RESISTANT VINYL TAPE TO BE COILED EVERY 100 TO 150mm AROUND CORRUGATED TUBE.
3) MINIMUM SIZE OF CORRUGATED TUBE AND VINYL TUBE TO BE SELECTED WHICH FITS WIRE DIA.
4) UNLESS OTHERWISE SPECIFIED, WRAPPING TAPE, CORRUGATED TUBE AND VINYL TUBE HAVE TO REACH UP TO 35mm OR LESS FROM COUPLER.
5) SEAL OF WATERPROOF COUPLER HAS TO FIT DIA. OF FINISHED WIRE.
6) ELECTRIC CIRCUIT AND CONNECTING DIVICES ARE SHOWN IN E3-29A88-0121.
7) HARNESS TO BE CLAMPED PROPERLY TO AVOID VIBRATION.
8) HARNESS TO BE CLAMPED WITHOUT STRETCH.
9) WHEN FITTING COUPLERS, BE CAREFUL NOT TO LET WATER INTO THEM.
10) COUPLER FIGURES ARE ROUGH SKETCHES VIEWED FROM FITTING SIDE.

REMARKS
WIRING DIAGRAM IS E3-29A88-0121

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

本部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。

No.	線種 KIND OF WIRE	線径 CROSS SECTION	線色 WIRE COLOR	回路記号 CIRCUIT MARK	端子 TERMINAL	回路記号 CIRCUIT MARK	端子 TERMINAL	回路接続先 CIRCUIT MATING TIP		備考 REMARKS
001	AVS	5.0	R	B60		B60		50	65C	
002	AVS	5.0	R			B60A			65A	
003	AVS	5.0	R			B60B			65B	
004	AVS	5.0	R	B01		B01		65C	3	
005	AVSS	1.25	R			B01A			103	
006	AVSS	1.25	R	B02		B02		65B	64	
007	AVSS	2.0	R	K01		K01		3	1	
008	AVSS	2.0	R	K03		K03		3	1	
009	AVSS	2.0	R	K05		K05		3	1	
010	AVSS	2.0	R	B63		B63		65A	101	
011	AVSS	1.25	O	K88		K88		32	101	
012	AVSS	0.85	O			K88A			53	
013	AVSS	0.5	O			K88B			1	
014	AVSS	0.5	G	K35		K35		101	1	
015	AVS	5.0	B	B45		B45		4	49	
016	AVSS	2.0	B	K02		K02		1	4	
017	AVSS	2.0	B	K04		K04		1	4	
018	AVSS	2.0	B	K06		K06		1	4	
019	AVSS	1.25	B	B00		B00		4	32	
020	AVSS	1.25	B			B00A			101	
021	AVSS	1.25	B			B00B			37	
022	AVSS	1.25	B			B00C			105	
023	AVSS	0.5	B			B00D			64	
024	AVSS	0.5	B			B00E			66	
025	AV	8.0	W	B59		B59		56	51	
026	AV	8.0	W			B59A			66	
027	AV	8.0	W			B59B			66	
028	AVS	3.0	Br	B61		B61		66	66	
029	AVS	5.0	Br	B62		B62		66	66	
030	AVS	3.0	W	B66		B66		66	58	
031	AVSS	0.5	P	K28		K28		1	66	
032	AVSS	1.25	G	K73		K73		1	66	
033	AVSS	0.5	L	K70		K70		1	66	
034	AVS	5.0	R	B50		B50		30	66	
035	AVSS	1.25	R	A50		A50		2	102	
036	AVSS	0.85	R			A50A			70	
037	AVSS	1.25	R	K29		K29		1	102	
038	AVSS	0.5	R	K89		K89		1	101	
039	AVSS	0.5	L	K50		K50		1	102	
040	AVSS	0.5	P	K32		K32		1	102	
041	AVSS	0.85	Br	K15		K15		25	70	
042	AVSS	0.5	Br			K15A			1	
043	AVSS	0.5	R	K66		K66		1	102	
044	AVSS	0.85	R			K66A			53	
045	AVSS	0.5	R			K66B			101	
046	AVSS	0.5	G	K67		K67		1	102	
047	AVSS	0.5	L	K38		K38		1	102	

No.	線種 KIND OF WIRE	線径 CROSS SECTION	線色 WIRE COLOR	回路記号 CIRCUIT MARK	端子 TERMINAL	回路記号 CIRCUIT MARK	端子 TERMINAL	回路接続先 CIRCUIT MATING TIP		備考 REMARKS
048	AVSS	0.5	B	K87		K87		1	102	
049	AVSS	0.5	B			K87A			104	
050	AVSS	0.5	B	K65		K65		1	44	
051	AVSS	0.5	O	K86		K86		1	104	
052	AVSS	1.25	L	A30		A30		2	102	
053	AVSS	0.5	W	K14		K14		1	102	
054	AVSS	1.25	L	A15		A15		2	102	
055	AVSS	0.5	R	K24		K24	金 GOLD	1	5	
056	AVSS	0.5	L	K63		K63	金 GOLD	1	5	
057	AVSS	0.5	G	A12		A12	金 GOLD	2	5	
058	AVSS	0.5	B	K77		K77	金 GOLD	1	5	
059	AVSS	0.5	B			K77A	金 GOLD		7	
060	AVSS	0.5	B			K77B	金 GOLD		8	
061	AVSS	0.5	R	K81		K81	金 GOLD	1	7	
062	AVSS	0.5	Br	K80		K80	金 GOLD	1	8	
063	AVSS	0.5	R	K45		K45		1	36	
064	AVSS	0.5	Y	K85		K85		1	36	
065	AVSS	0.5	W	K39		K39		1	36	
066	AVSS	0.5	B	K74		K74		1	36	
067	AVSS	0.5	P	K79		K79		1	36	
068	AVSS	0.5	B	K21		K21		1	36	
069	AVSS	0.5	G	A28		A28		2	36	
070	AVSS	0.5	L	A29		A29		2	36	
071	AVSS	1.25	O	B42		B42		64	37	
072	AVSS	1.25	O			B42A			105	
073	AVSS	0.5	P	K54		K54		1	37	K76とツイスト K76 TWISTED PAIR
074	AVSS	0.5	P			K54A			105	K76Aとツイスト K76A TWISTED PAIR
075	AVSS	0.5	L	K76		K76		1	37	K54とツイスト K54 TWISTED PAIR
076	AVSS	0.5	L			K76A			105	K54Aとツイスト K54A TWISTED PAIR
077	AVSS	0.5	R	K23		K23		1	37	
078	AVSS	0.5	G	K20		K20		1	37	
079	AVSS	0.5	Br	K52		K52		1	37	
080	AVSS	1.25	Y	A19		A19		2	37	A20とツイスト A20 TWISTED PAIR
081	AVSS	1.25	L	A20		A20		2	37	A19とツイスト A19 TWISTED PAIR
082	AVSS	0.5	L	A11		A11		2	38	
083	AVSS	0.5	Br	A51		A51		2	38	
084	AVSS	0.5	R	A07		A07		2	38	
085	AVSS	0.5	G	A26		A26		2	38	
086	AVSS	0.5	B	A25		A25		2	38	
087	AVSS	0.5	W	A39		A39		2	38	A54とツイスト A54 TWISTED PAIR

No.	線種 KIND OF WIRE	線径 CROSS SECTION	線色 WIRE COLOR	回路記号 CIRCUIT MARK	端子 TERMINAL	回路記号 CIRCUIT MARK	端子 TERMINAL	回路接続先 CIRCUIT MATING TIP		備考 REMARKS
088	AVSS	0.5	B	A54		A54		2	38	A39とツイスト A39 TWISTED PAIR
089	AVSS	0.5	B	A38		A38		2	–	A39、A54のシールドに接続 SHIELD WITH A39, A54
090	AVSS	0.5	R	A08		A08		2	38	
091	AVSS	0.5	L	A37		A37		2	38	
092	AVSS	0.5	B	A52		A52		2	38	
093	AVSS	1.25	L	A33		A33		2	39	A16とツイスト A16 TWISTED PAIR
094	AVSS	1.25	R	A16		A16		2	39	A33とツイスト A33 TWISTED PAIR
095	AVSS	1.25	W	A47		A47		2	39	A17とツイスト A17 TWISTED PAIR
096	AVSS	1.25	L	A17		A17		2	39	A47とツイスト A47 TWISTED PAIR
097	AVSS	1.25	Y	A48		A48		2	39	A18とツイスト A18 TWISTED PAIR
098	AVSS	1.25	O	A18		A18		2	39	A48とツイスト A48 TWISTED PAIR
099	AVSS	1.25	Y	A04		A04		2	39	A05とツイスト A05 TWISTED PAIR
100	AVSS	1.25	Y			A04A		39	–	A04に接続 CONNECTED TO A04
101	AVSS	1.25	P	A05		A05		2	39	A04とツイスト A04 TWISTED PAIR
102	AVSS	1.25	P			A05A		39	–	A05に接続 CONNECTED TO A05
103	AVSS	0.5	L	K68		K68		1	64	
104	AVSS	0.5	O	K90		K90		1	44	
105	AVSS	0.5	Y	K75		K75		1	44	K53とツイスト K53 TWISTED PAIR
106	AVSS	0.5	Y			K75A			101	K75に接続 CONNECTED TO K75
107	AVSS	0.5	L	K53		K53		1	44	K75とツイスト K75 TWISTED PAIR
108	AVSS	0.5	L			K53A			101	K53に接続 CONNECTED TO K75
109	AVSS	0.5	R	K43		K43	金 GOLD	1	48	
110	AVSS	0.5	P	K61		K61	金 GOLD	1	48	
111	AVSS	0.5	B	K62		K62	金 GOLD	1	48	
112	AVSS	0.5	Y	K56		K56		1	38	
113	AVSS	0.5	L	A59		A59		2	37	
114	AVSS	0.5	R	K33		K33		1	37	

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	//
直角度	⊥
傾斜度	∠
位置度	⊕
同軸度	◎
対称度	⌯
円筒振レ	↗
全振レ公差	⌰

重要チェックポイント

YA PART

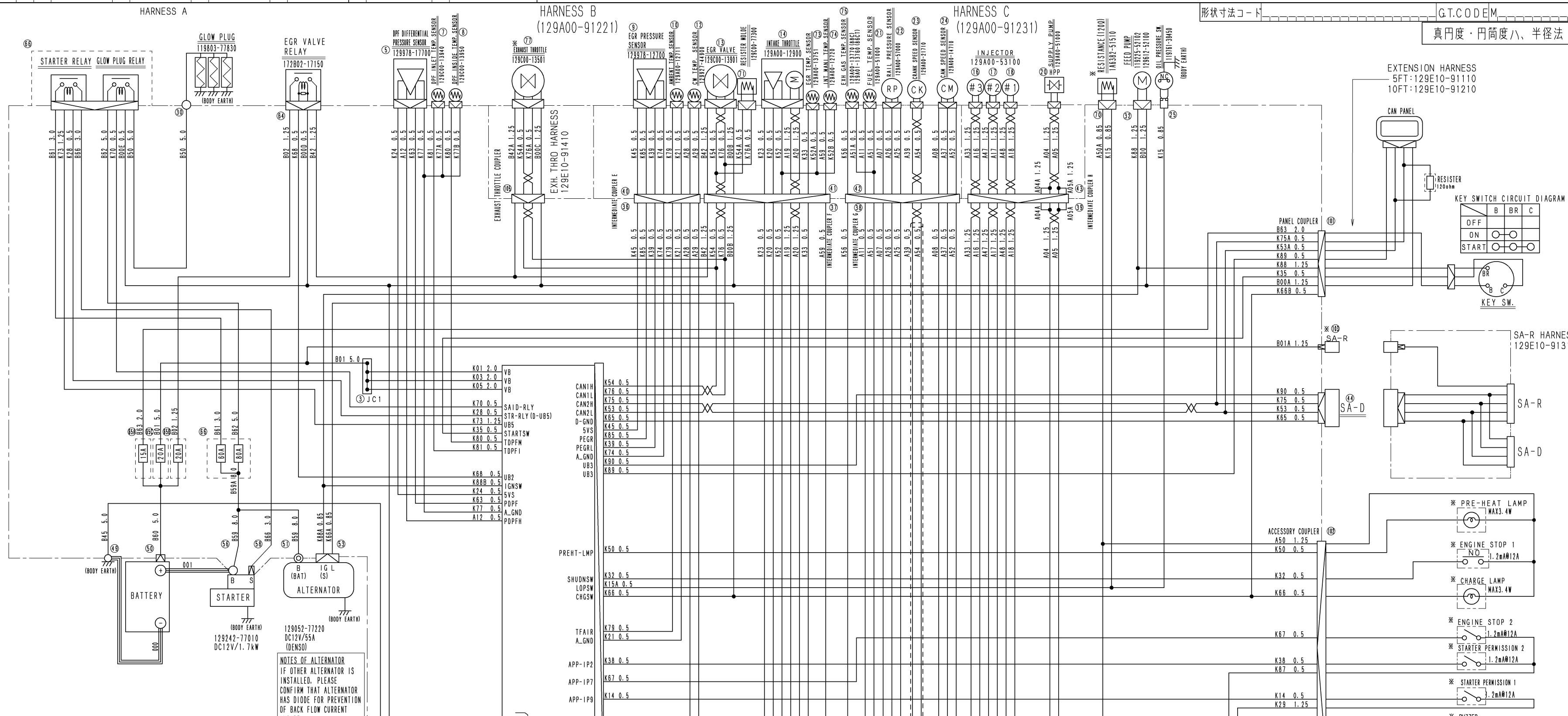
素材質量 WEIGHT (RAW)	(± %)	水圧試験 HYDRAULIC TEST	MPa (kg/cm²)	小形工開発部	部長 G. MANAGER	技部長 MANAGER
完成質量 WEIGHT (精度%)	(± %)	空圧試験 PNEUMATIC TEST	MPa (kg/cm²)			
	長 SEC. MANAGER D. Kajita	機種 MODEL	3TNV 88C	尺度 SCALE	FREE	
検図 CHECKED S. Mori	機能担当者 SPECIALIST H. Shiomi	個数 QTY.	1	材質 MATERIAL	COMP	

設計 DESIGNED	製図 DRAWN	年月日 DATE	名称 NAME
H. Sekita	N. Wakizaka	2016 2.15	HARNESS, A T4

HARNESS, A T4

YANMAR CO., LTD.
POWER SYSTEM OPERATIONS DIV.

コード CODE 129A88-91121 | 図面サイズ A1 (D)



NOTES

1. STARTER WIRING
   1-1. TOTAL ELECTRIC RESISTANCE OF BATTERY CABLE (000+001) : MAX 2/1000Ω
   (REFERENCE) AV15: MAX 1.4m, AV20: MAX 2.2m
   AV30: MAX 3.8m, AV40: MAX 4.6m
   1-2. TOTAL ELECTRIC RESISTANCE OF STARTER WIRING (B59+B61+B66) : MAX 5/100Ω
   (REFERENCE) EACH COUPLER: 15/1000Ω
   SCREW TERMINAL: 0Ω
   1-3. BATTERY EARTH CABLE (000) TO BE CONNECTED SECURELY. DO NOT BE PAINTED ON SURFACE TO AVOID MISCONNECTION.
2. BATTERY HANDLING
   FOLLOWING INSTRUCTIONS TO BE KEPT, OR IT MAY CAUSE ELECTRIC DEVICES TROUBLE. ECU ALTERNATOR (DIODES) TROUBLE DUE TO REVERSE CONNECTION IS OUT OF WARRANTY.
   2-1. BATTERY TO BE FIXED.
   2-2. BATTERY CABLE LENGTH TO BE ADJUSTED AND CLAMPED NOT TO BE REVERSELY CONNECTED.
   2-3. BATTERY CABLE TERMINAL NOT TO BECOME LOOSEAND NOT TO CAUSE THE POWER SUPPLY SWITCHED OFF.
3. ALTERNATOR HANDLING
   3-1. UNSPECIFIED LOAD NOT TO BE APPLIED ON ALTERNATOR L AND P TERMINAL. NOT ACCEPTABLE THAT UNSPECIFIED LOAD IS APPLIED WITHOUT YANMAR APPROVAL.
   3-2. WHILE ALTERNETOR TURNS, BATTERY TERMINAL AND B TERMINAL NOT TO BE DISCONNECTED.
   3-3. ELECTRIC RESISTANCE OF B TERMINAL CABLE (B59) : MAX 5/100Ω
   MOOR APPROPRIATELY FOR FEAR OF SHORTING BODY AND PROTECT BY CORRUGATED TUBE. IF NECESSARY, TO BE PROTECTED BY LARGE AMOUNT OF CURRENT FUSE etc.
   3-4. IG LINE OF ALTERNATOR (K88A) SHOULD BE SEPARATED ECU WIRING (K88B) OR CONNECTED WITH DIODE.
4. ECU WIRING
   4-1. CAN BUS LENGTH (USE TWISTED PAIR) : MAX 40m
   4-2. DIFFERENCE IN POTENTIAL
   ECU GND - BATTERY GND: <1V
   ECU POWER - BATTERY: <1V
   4-3. GND LINES TO BE CONNECTED TO EARTH AT 1 POINT IF POSSIBLE. AND THEY TO BE CONNECTED TO BATTERY AS CLOSELY AS POSSIBLE WITH LOW IMPEDANCE.
   4-4. INJECTOR WIRING TO BE BY TWISTED PAIR CABLE.
   4-5. TOTAL ELECTRIC RESISTANCE OF INJECTOR WIRING IS LESS THAN 65/1000Ω.
   4-6. SUPPLY PUMP WIRING TO BE BY TWISTED PAIR CABLE.
   4-7. CRANK REV. SENSOR WIRING TO BE TWISTED PAIR CABLE WITH SHIELD.
   4-8. ALL WIRING OF ECU TERMINALS EXCEPT FOR WIRING OF PARTS THAT SELECT OPTION ARE FOLLOWING AS SHOWN IN THE DIAGRAM.
   4-9. BATTERY CABLE (B60) SHOULD BE DIRECTLY CONNECTED WITH BATTERY (+) TERMINAL. ESPECIALLY, DO NOT SHARE ECU POWER SUPPLY (B01) WITH LARGE CURRENT EQUIPMENT SUCH AS STARTER "B" TERMINAL ANDSTART ASSISTANCE etc.
   4-10. WHEN CONNECTING PRESSURE SWITCH (119761-39450) TO ECU CONTACT CURRENT SHOULD BE MORE THAN 100mA BY LOWERING OF OIL PRESSURE LAMP etc. OR SELECT LOW CORRENT SPECIFICATION OIL PRESSURE SWITCH (OPTION).
   4-11. DO NOT ADD ANY LOAD EACH LINE BESIDES ONLY THE SPECIFIED LOAD. IT IS NOT ALLOWED TO CONNECT ANY UNPECIFIED LOAD WITHOUT YANMAR APPROVAL.
   4-12. PITCH OF TWISTED PAIR : MAX 25mm
   4-13. NO LOAD OTHER THAN THE ONE SHOWN IN WIRING DIAGRAM SHOULD BE CONNECTED TO THE E-ECU IGNSW TERMINAL.
   4-14. THE TORAL RESISTANCE VALUE BETWEEN E-ECU GND (K02, K04, K06) -BATTELY GND (B45), AND E-ECU POWER SUPPLY (K01, K02, K03) -BATTERY (B60) SHALL BE 8/100Ω.
   4-15. LAMPS LOAD AND CONTACT CURRENT OF SWITCHES CONNECTED TO THE E-ECU MUST BE KEPT IN THIS DRAWING.
   ⚠4-16. THE CRANK SPEED SENSOR (A39, A54) MUST NOT BE CONNECTED REVERSELY. IF CONNECTED REVERSELY, THE FUEL INJECTION TIMING WOULD SHIFT IMPROPERLY AND IT WOULD CAUSE THE ENGINE SPEED UNSTABLE AND THE PERFORMANCE WORSE.
5. TOTAL LENGTH OF STARTING AID WIRING (B59 (A) +B62+B50) : MAX 5m
6. KEY SWITCH B AND BR TERMINALS NOT TO BE OPEN BETWEEN ON POSITION AND START POSITION.
7. OTHER GENERALS
   7-1. INDICATED WIRE TYPE AND FUSE CAPACITY TO BE KEPT.
   7-2. WIRE TYPE TO BE SELECTED AS AMBIENT TEMP.
   7-3. WHEN FITTING COUPLERS, BE CAREFUL NOT TO LET WATER INTO THEM.
   7-4. HARNESS TO BE CLAMPED PROPERLY TO AVOID VIBRATION.
   7-5. HARNESS TO BE CLAMPED WITHOUT STRETCH.
   7-6. JOINTS HAVE TO BE WATERPROOF. (BY JOINT COUPLER OR BUTYL TAPE etc.)
   7-7. CONFIRM THAT SURGE CURRENT AND VOLTAGE DO NOT OCCURE UNDER NOMAL OPERATIONS AND PREDICTABLE WRONG OPERATIONS.
   7-8. CONFIRM THAT INSTANTANEOUS BREAK (MAX 6V) DO NOT OCCURE UNDER NOMAL OPERATIONS AND PREDICTABLE WRONG OPERATIONS.
   7-9. DEVICES WITH PARTS CODE ARE ABLE TO BE SUPPLIED BY YANMAR.
   7-10. ※ MARKED ARE OPTION.
   7-11. MAKE SURE THAT THE FAULT INDICATOR LAMP, LAMP AND SWITCHES OF DPF OPERATOR INTERFACE IS ATTACHED TO A POSITION THAT CAN EASILY BE SEEN BY THE OPERATOR.
   7-12. THE HARNESS SHALL BE SETUP IN THE PLACE THAT DOESN'T HIT AND CATCH THE EDGE PART.
   7-13. THE HARNESS SHALL BE PROTECTED APPROPRIATELY FROM WATER, THE MEDICINE, THE EXTERNAO PRESSURE AND HEAT. PROTECT IT BY THE VINYL TUBE AND THE CORRUGATE TUBE.
   7-14. THE HARNESS SHALL KEEP OFF THE HEAT SOURCE IN THE EXHAUST SYSTEM ETC., AND SETUP IT.
   7-15. YOU MUST INSTALL THE CONNECTOR OF SA-D TO A LOCATION THAT IS EASY ACCESS ON THIS DEVICE.
   7-16. IN ADDITION, FOR WATERPROOF OF THE CONNECTOR OF SA-D, ENGINE AND PLACE THE MATING CONNECTOR.

三角法
3RD ANGLE PROJECTION

図面来歴
CAREER

(2016.2.15) UPDATE LATEST
a. ADD CIRCUIT MARK K66B
b. ADD EXH. THRO HARNESS
c. ADD EXTENSHION HARNESS
d. SA-R HARNESS
(YDSTE-16050)

Rev.1 (2016.8.22)
a. ADD THE NOTES.
b. COLLECT THE CIRCUIT NAME
(YDSTX-16070)

素材質量 WEIGHT (RAW)	(± %)	水圧試験 HYDRAULIC TEST	MPa (kg/cm²)
完成質量 WEIGHT (精度%)	(± %)	空圧試験 PNEUMATIC TEST	MPa (kg/cm²)
主席	長 SEC. MANAGER D. Kajita	機種 MODEL	3TNV88C
検図 CHECKED H. Sekita	機能担当者 SPECIALIST H. Shiomi	個数 QTY.	1
設計 DESIGNED H. Sekita	製図 DRAWN N. Wakizaka / 年月日 DATE 2016 2.15	名称 NAME	WIRING DIAGRAM (DPF-CR / WIRING DIAGRAM, CR

小形工開発部: 部長 G. MANAGER; 技部長 MANAGER T. Sasaki

尺度 SCALE
材質 MATERIAL

YANMAR CO., LTD.
POWER SYSTEM OPERATIONS DIV.

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図面サイズ A1 (D)