

## Supplement to Yanmar Kit Installation Instructions

## SAFETY

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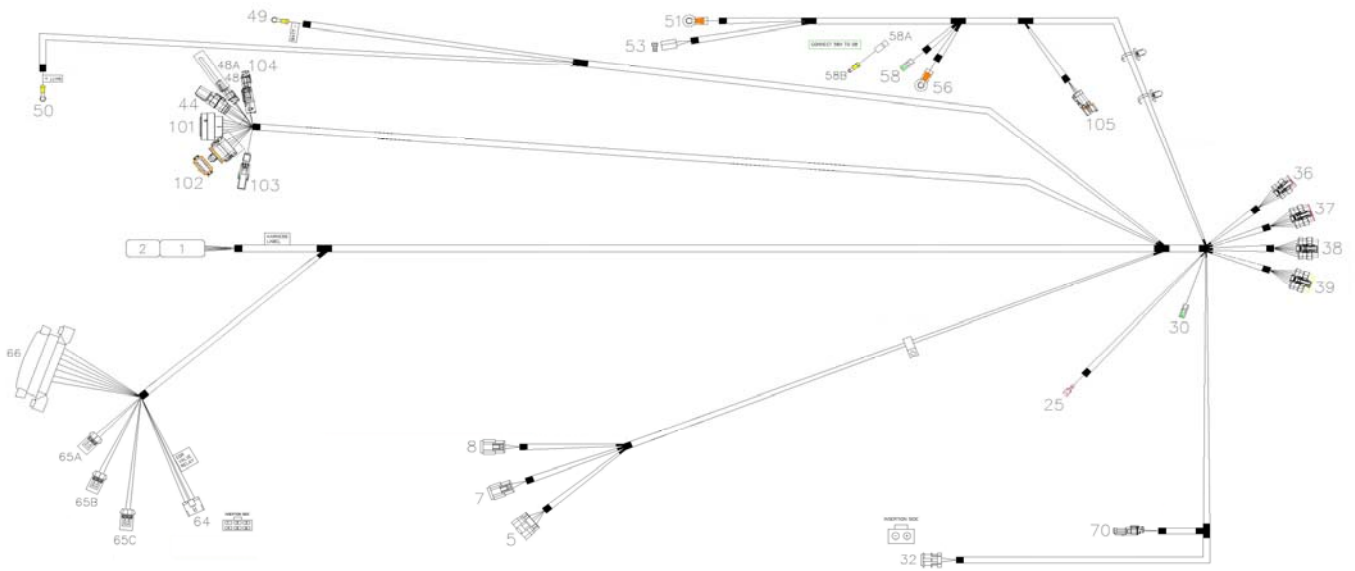
This product is designed and intended only for use with a YANMAR engine. All safety and warning information contained in the Yanmar Operation Manual and Service Manual is adopted and incorporated to apply to the components, accessories, and parts that are utilized with Yanmar engines. Follow all instructions 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.



YANMAR CO., LTD.  
YANMAR AMERICA CORP.

Item	Part No.	Description	Quantity	Remarks
1	900300	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



## 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 distributor 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.

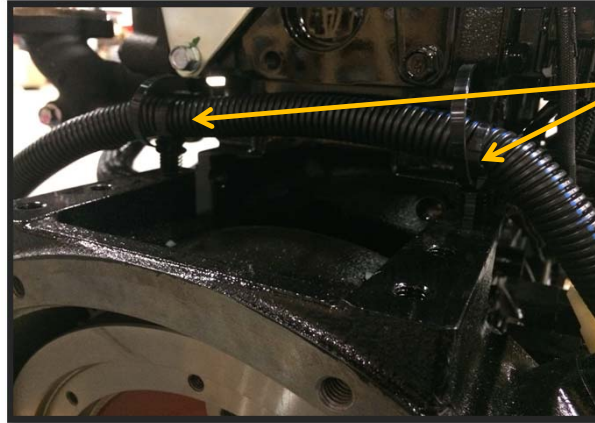
Table 1: Comply with torque standards in the table to avoid unexpected damage during installation or in the future.

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

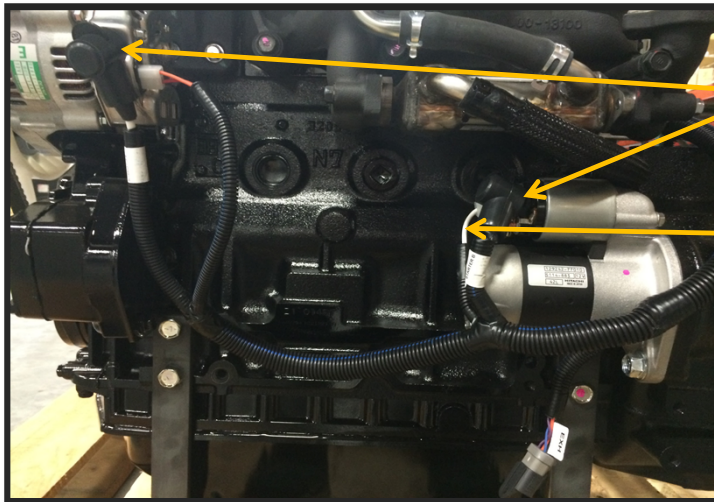
## Harness Routing Instructions

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

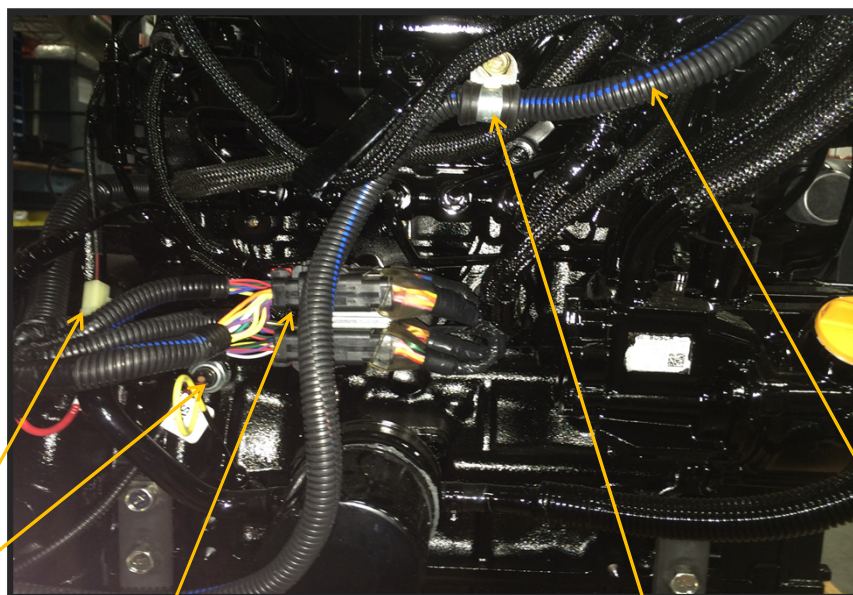
Starter Sub Harness may need to be removed to properly attach connector (58)

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



## Harness Routing Instructions

- 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.



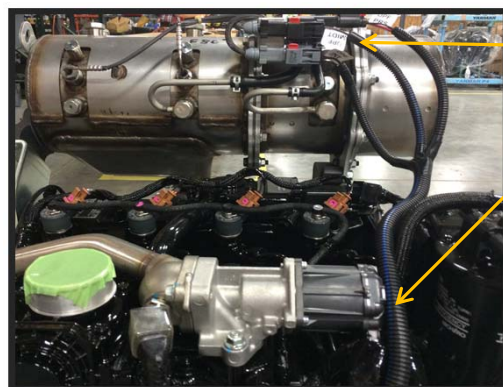
Oil Pressure Switch and Glow Plug

Intermediate couplers (36 - 39)

Loose clamp for fixing DPF harness section

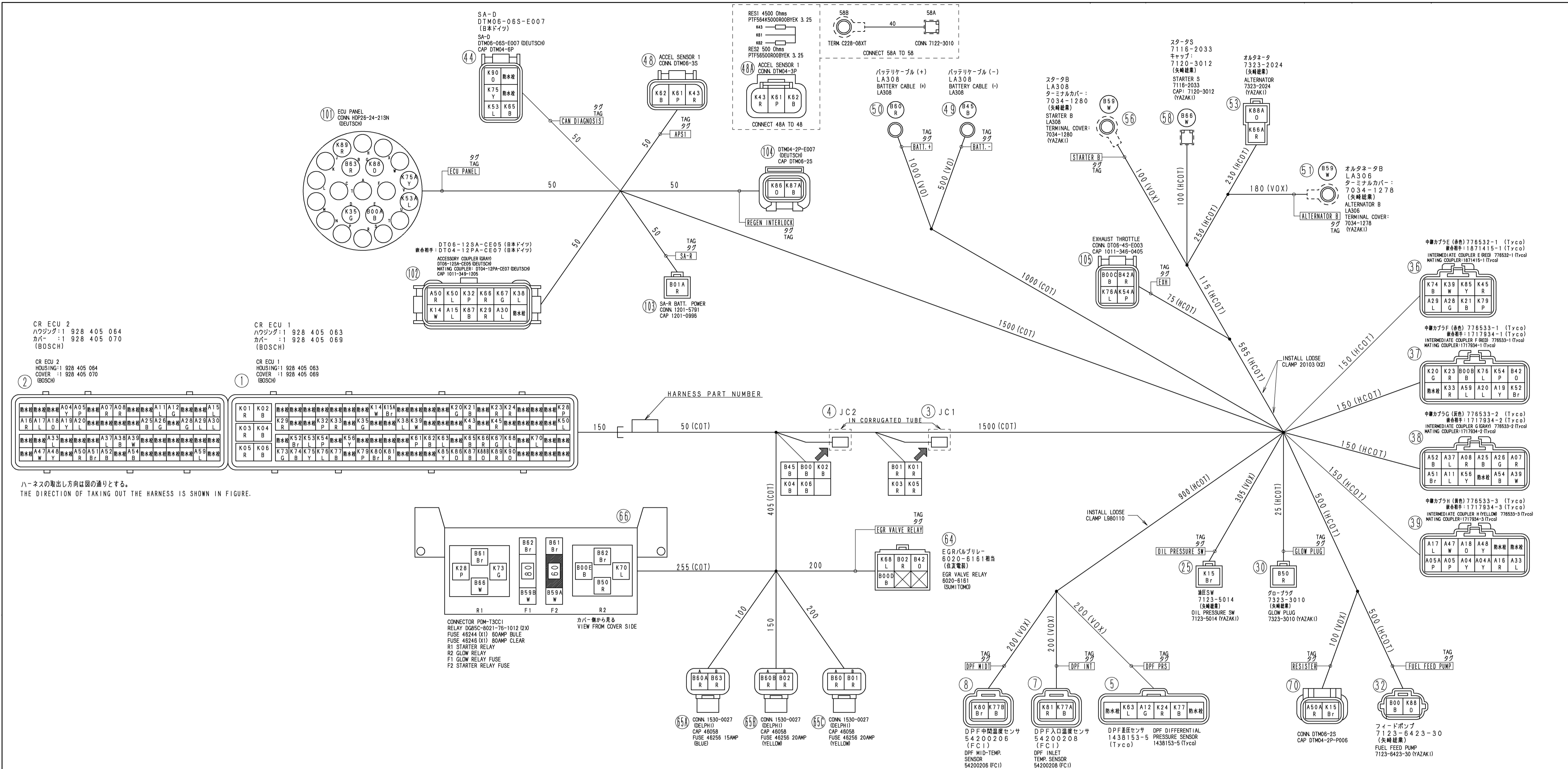
DPF harness section continued below

- 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)



The routing shown is for exhaust manifold mounted DPF's. Flywheel mounted DPF's will need harness section routed similarly. This section is secured by clamp shown above.

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



ハ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.

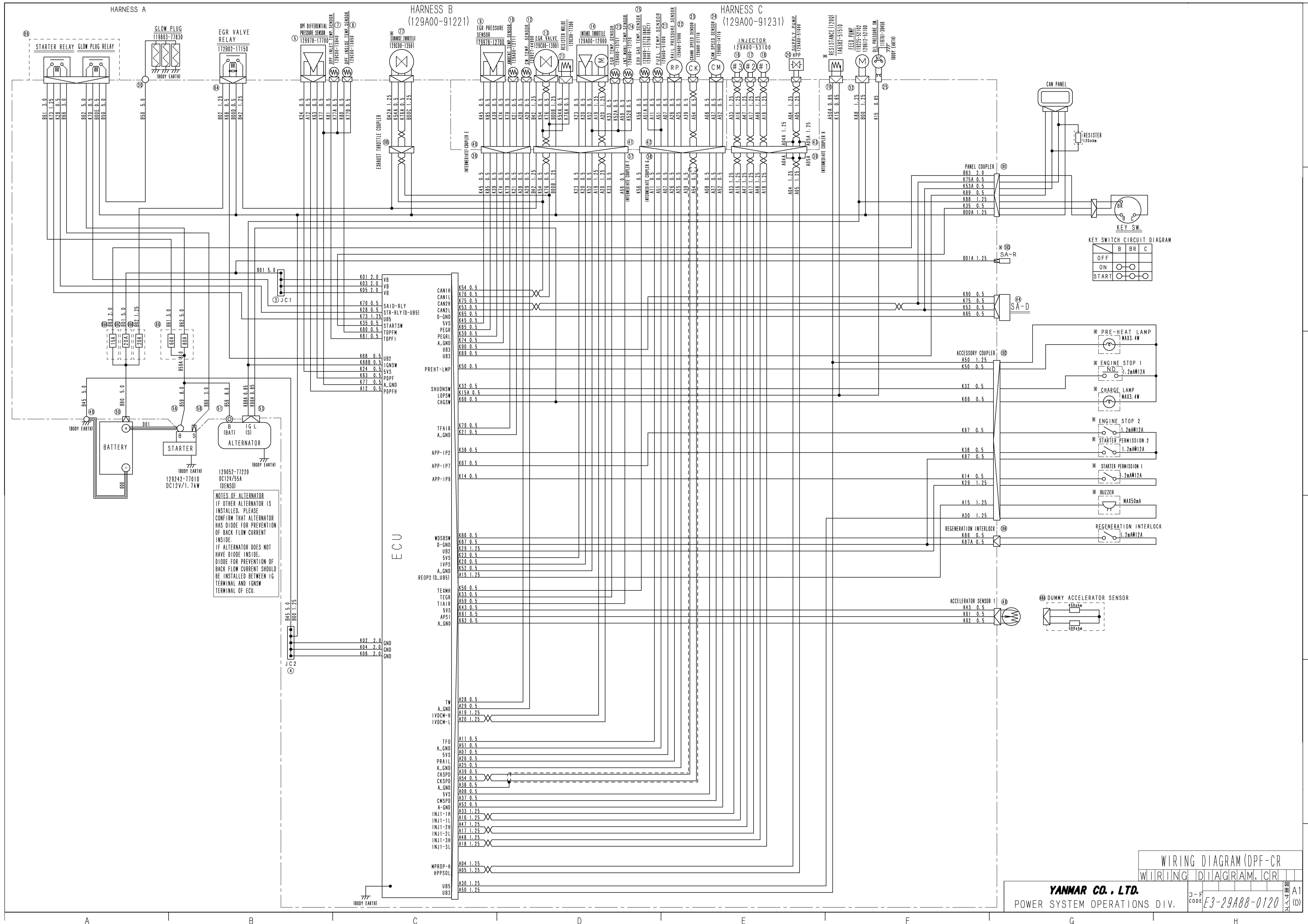
REMARKS  
WIRING DIAGRAM IS E3-29A88-0120

No.	線路 KIND	線色 COLOR	回路記号 CIRCUIT	端子 TERMINAL	回路記号 CIRCUIT	端子 TERMINAL	回路記号 CIRCUIT	端子 TERMINAL	備考 REMARKS
001	AVS	5.0	R	B60	B50	B50	B50		
002	AVS	5.0	R	B60A	B50A	B50A	B50A		
003	AVS	5.0	R	B60B	B50B	B50B	B50B		
004	AVS	5.0	R	B01	B50	B50	B50		
005	AVSS	1.25	R	B01A	B50A	B50A	B50A		
006	AVSS	1.25	R	B02	B50	B50	B50		
007	AVSS	2.0	R	K01	K01	K01	K01		
008	AVSS	2.0	R	K03	K03	K03	K03		
009	AVSS	2.0	R	K05	K05	K05	K05		
010	AVSS	2.0	R	B63	B5A	B5A	B5A		
011	AVSS	1.25	R	K68	K68	K68	K68		
012	AVSS	0.85	R	K69	K69	K69	K69		
013	AVSS	0.5	R	K88	K88	K88	K88		
014	AVSS	0.5	R	K35	K35	K35	K35		
015	AVS	8.0	R	B45	B45	B45	B45		
016	AVSS	2.0	R	K02	K02	K02	K02		
017	AVSS	2.0	R	K04	K04	K04	K04		
018	AVSS	2.0	R	K06	K06	K06	K06		
019	AVSS	1.25	R	B00	B00	B00	B00		
020	AVSS	1.25	R	B00A	B00A	B00A	B00A		
021	AVSS	1.25	R	B00B	B00B	B00B	B00B		
022	AVSS	1.25	R	B00C	B00C	B00C	B00C		
023	AVSS	0.5	R	B00D	B00D	B00D	B00D		
024	AVSS	0.5	R	B00E	B00E	B00E	B00E		
025	AV	8.0	W	B59	B59	B59	B59		
026	AV	8.0	W	B59A	B59A	B59A	B59A		
027	AV	8.0	W	B59B	B59B	B59B	B59B		
028	AVS	3.0	BT	B61	B61	B61	B61		
029	AVS	3.0	BT	B62	B62	B62	B62		
030	AVS	3.0	W	B66	B66	B66	B66		
031	AVSS	0.5	P	K48	K48	K48	K48		
032	AVSS	1.25	G	K73	K73	K73	K73		
033	AVSS	0.5	L	K70	K70	K70	K70		
034	AVS	5.0	R	B60	B60	B60	B60		
035	AVSS	1.25	R	A50	A50	A50	A50		
036	AVSS	0.85	R	A50A	A50A	A50A	A50A		
037	AVSS	1.25	R	K29	K29	K29	K29		
038	AVSS	0.5	R	K89	K89	K89	K89		
039	AVSS	0.5	L	K50	K50	K50	K50		
040	AVSS	0.5	R	K52	K52	K52	K52		
041	AVSS	0.85	BT	K15	K15	K15	K15		
042	AVSS	0.5	BT	K15A	K15A	K15A	K15A		
043	AVSS	0.5	R	K66	K66	K66	K66		
044	AVSS	0.85	R	K66A	K66A	K66A	K66A		
045	AVSS	0.5	R	K67	K67	K67	K67		
046	AVSS	0.5	R	K38	K38	K38	K38		

No.	線路 KIND	線色 COLOR	回路記号 CIRCUIT	端子 TERMINAL	回路記号 CIRCUIT	端子 TERMINAL	回路記号 CIRCUIT	端子 TERMINAL	備考 REMARKS
047	AVSS	0.5	B	K87	K87	K87	K87		
048	AVSS	0.5	B	K87A	K87A	K87A	K87A		
049	AVSS	0.5	B	K85	K85	K85	K85		
050	AVSS	0.5	O	K86	K86	K86	K86		
051	AVSS	1.25	L	A30	A30	A30	A30		
052	AVSS	0.5	W	K14	K14	K14	K14		
053	AVSS	1.25	L	A15	A15	A15	A15		
054	AVSS	0.5	R	K24	K24	K24	K24		
055	AVSS	0.5	L	K63	K63	K63	K63		
056	AVSS	0.5	G	A12	A12	A12	A12		
057	AVSS	0.5	B	K77	K77	K77	K77		
058	AVSS	0.5	B	K77A	K77A	K77A	K77A		
059	AVSS	0.5	B	K81	K81	K81	K81		
060	AVSS	0.5	R	K80	K80	K80	K80		
061	AVSS	0.5	BT	K80	K80	K80	K80		
062	AVSS	0.5	R	K45	K45	K45	K45		
063	AVSS	0.5	Y	K85	K85	K85	K85		
064	AVSS	0.5	W	K39	K39	K39	K39		
065	AVSS	0.5	B	K74	K74	K74	K74		
066	AVSS	0.5	P	K79	K79	K79	K79		
067	AVSS	0.5	B	K21	K21	K21	K21		
068	AVSS	0.5	G	A08	A08	A08	A08		
069	AVSS	0.5	L	A29	A29	A29	A29		
070	AVSS	1.25	O	B42	B42	B42	B42		
071	AVSS	1.25	O	B42A	B42A	B42A	B42A		
072	AVSS	0.5	P	K54	K54	K54	K54		
073	AVSS	0.5	P	K54A	K54A	K54A	K54A		
074	AVSS	0.5	L	K76	K76	K76	K76		
075	AVSS	0.5	L	K76A	K76A	K76A	K76A		
076	AVSS	0.5	R	K23	K23	K23	K23		
077	AVSS	0.5	G	K20	K20	K20	K20		
078	AVSS	0.5	BT	A52	A52	A52	A52		
079	AVSS	1.25	Y	A19	A19	A19	A19		
080	AVSS	1.25	L	A20	A20	A20	A20		
081	AVSS	0.5	L	A11	A11	A11	A11		
082	AVSS	0.5	BT	A61	A61	A61	A61		
083	AVSS	0.5	R	A07	A07	A07	A07		
084	AVSS	0.5	G	A26	A26	A26	A26		
085	AVSS	0.5	R	A25	A25	A25	A25		
086	AVSS	0.5	W	A39	A39	A39	A39		

YANMAR CO., LTD.  
POWER SYSTEM OPERATIONS DIV.  
コード 129A88-91120

名称 HARNESS, A T4  
HARNESS, A T4



WIRING DIAGRAM (DPF-CR)  
 WIRING DIAGRAM, CIR