



YANMAR CO., LTD.
YANMAR AMERICA CORP.

Supplement to Yanmar Kit Installation Instructions

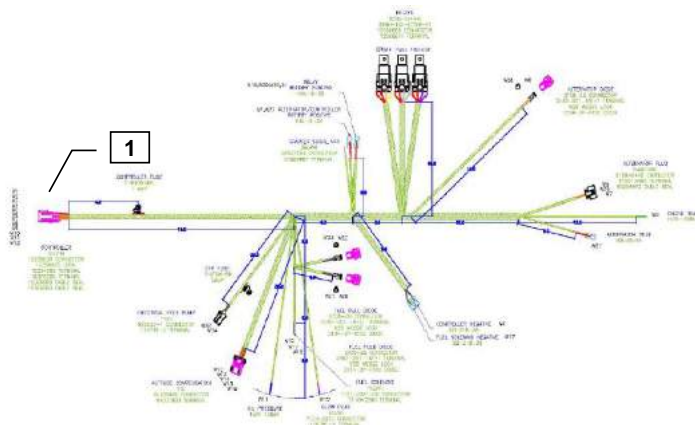
SAFETY

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.

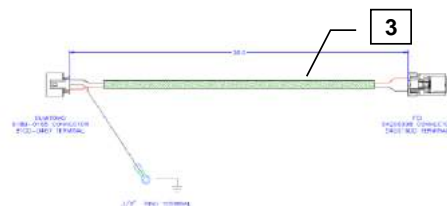
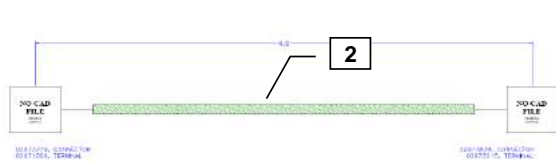


YANMAR CO., LTD.
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Item	Part No.	Description	Quantity	Remarks
1	119749-91160	Wiring Harness	1	
2	119749-91180	Starter Patch Harness	1	
3	119749-91190	Patch for Altitude Compensation Solenoid	1	



TIER 4F MODELS
3TNV74F-SDSA
3TNV80F-SDSA





Installation Instructions

Hand tighten all bolts and nuts until assembly is completed, then torque according to specifications in Table 1. The numbers in () represent the item numbers.

1. Connect harness terminals to appropriate locations. See engine wiring harness diagram and schematics shown on page 3 and 4 of this document.

NOTE: The spare starter patch harness is used if the 1.2kW starter is used.

2. Mount the bracketed relays in the front exhaust side engine foot.
3. After connecting all terminals to appropriate locations, check the following:
 - a) Make sure the wires do not contact the exhaust manifold or muffler.
 - b) Make sure the wires do not contact any sharp or abrasive surfaces.
 - c) Use wire ties to secure the wire harness to the engine.
 - d) Cover all harness terminals not used after assembly is completed

WARNING: Be sure battery cables are connected correctly before operation. If at any time during operation, the battery cables are removed, the harness could fail prematurely.

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: Proper torque specifications for bolts and nuts.

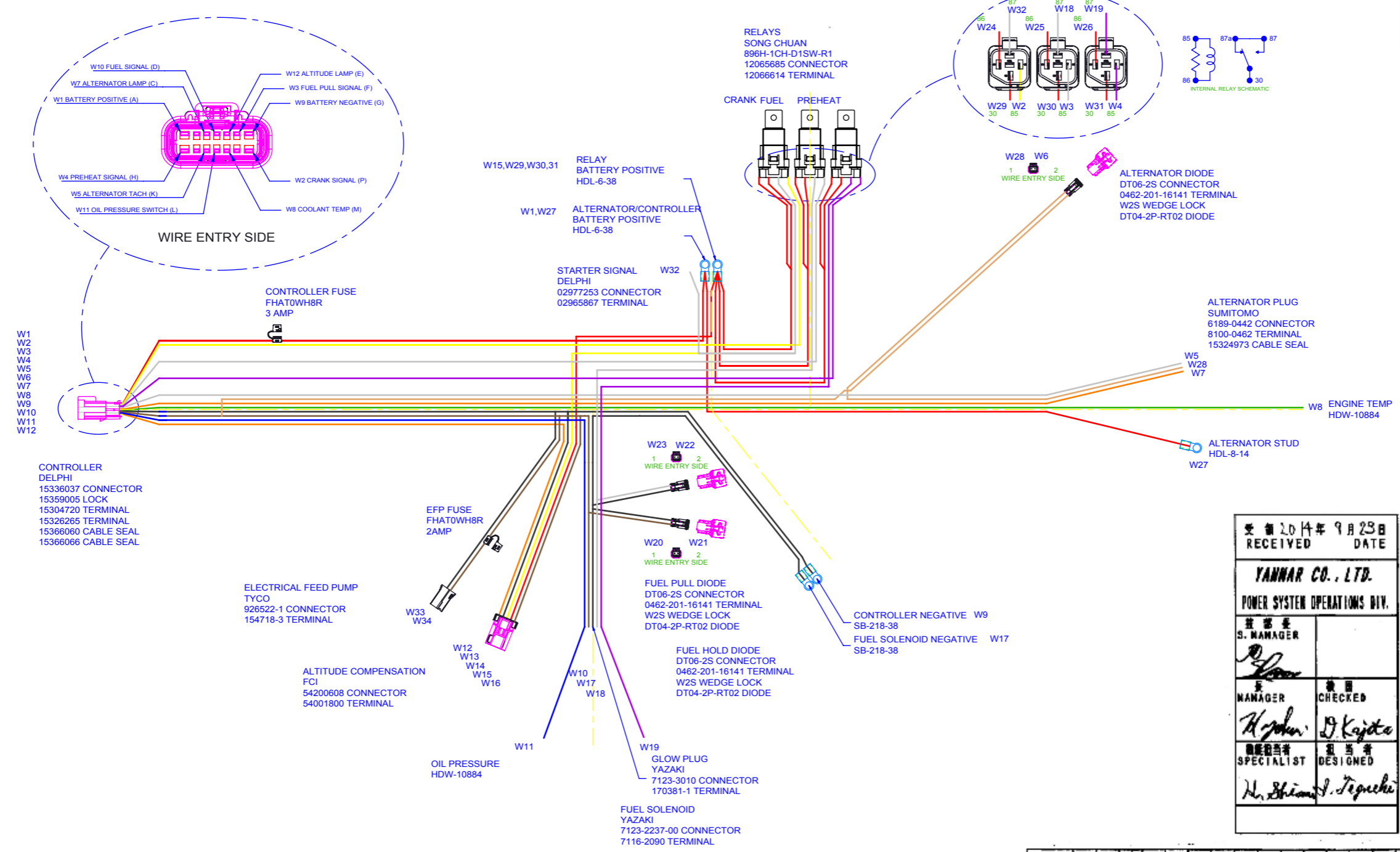
Diameter x Pitch	Kgf-m	Foot-lbf	N-m
M8 x 1.25	1.5 ~ 2.9	10.6 ~ 20.9	14.4 ~ 28.3
M10 x 1.50	4.5 ~ 5.5	32.5 ~ 39.8	44.0 ~ 54.0
M12 x 1.75	8.0 ~ 10.0	57.8 ~ 72.3	78.4 ~ 98.0

図面来歴

CAREER
(2014.9.23) YA作成図面をヤンマー図面として出図可 (YDSTM-14083)

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".

本図面の環境負荷低減の取組としては、YIS V-0001J(環境負荷低減の取組)の規格を満足すること。



受領 2014年 9月 23日
RECEIVED DATE

YANMAR CO., LTD.
POWER SYSTEM OPERATIONS DIV.

技師長 S. MANAGER
MANAGER CHECKED
H. John D. Kajita
副部長 担当者 SPECIALIST DESIGNED
H. Shimizu T. Tezuka

YA PART

非標準部品

機種	STNV	STNV			
MODEL	E-OF	74T			
	SSA	SSA			
数量	1	1			
QTY.					

ヤンマー部品名簿 11-キスCMP

名称 HARNESS ASSY (1/3)

ヤンマーコード CODE 119749-91160

- Notes
1. ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED.
 2. WIRE LENGTH TOLERANCE TO BE +/-0.125" UNLESS OTHERWISE NOTED.
 3. LOOM TO EXTEND WITHIN 1" OF WIRE ENTRY TO CONNECTOR/TERMINAL, AS SHOWN ABOVE.
 4. ALL CONNECTION TO BE CRIMPED, SOLDERED, HEAT SHRINK.
 5. MAIN HARNESS TO BE LABELED WITH PART NUMBER, REV LEVEL, DATE, VENDOR ID.

種類	記号
真直度	—
真円度	○
平行度	∥
垂直度	⊥
傾斜度	∠
位置度	⊕
同軸度	◎
対称度	≡
円筒公差	∅
全端公差	∅

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:	FINISH:	DESIGN AND BREAK SHARP EDGES	STNV80F-SDSA	REVISION
YANMAR CO. LTD YANMAR AMERICA CORP.			TITLE: HARNESS ASSY TIER4<19KW, YA KIT	
DRAWN J. CARNER	SIGNATURE	DATE 2014.7.24	UWG NO. 119749-91160	
CHKD A. ENGELS	SIGNATURE	DATE 2014.7.24	A3	
APPVD R. ADAMS	SIGNATURE	DATE 2014.7.24	PAGE 1/3	
YANMAR CO. LTD SMALL ENGINE DEVELOPMENT DEPT			SUPPLIER PART NO. 700-1035 REV E	

WIRE NUMBER	COLOR	WIRE GAUGE	LENGTH (INCHES-REF)	END A CONNECTOR	END A TERMINAL/SEAL	END A PORT	END B CONNECTOR	END B TERMINAL/SEAL	END B PORT	WIRE FUNCTION
W1	RED	16 AWG	41.0	15336037	15304720	A	N/A	HDL-6-38	N/A	CONTROLLER BATTERY POSITIVE, B+
W2	YELLOW/RED	16 AWG	53.0	15336037	15304720	P	12065685	12066614	85	CRANK SIGNAL
W3	WHITE	16 AWG	53.0	15336037	15326265	F	12065685	12066614	85	FUEL PULL SIGNAL
W4	VIOLET/RED	16 AWG	53.0	15336037	15304720	H	12065685	12066614	85	GLOW PLUG SIGNAL
W5	WHITE	16 AWG	59.0	15336037	15326265	K	6189-0442	8100-0462	3	ALTERNATOR TACH
W6	TAN	16 AWG	55.0	SPLICE W/W10	N/A	N/A	DT06-2S	0462-201-16141	2	ALTERNATOR EXCITE
W7	ORANGE/WHITE	16 AWG	59.0	15336037	15326265	C	6189-0442	8100-0462	1	ALTERNATOR CHARGE LAMP
W8	GREEN	16 AWG	65.0	15336037	15326265	M	N/A	HDW-10884	N/A	HIGH TEMPERATURE SWITCH
W9	BLACK	16 AWG	45.0	15336037	15304720	G	N/A	SB-218-38	N/A	CONTROLLER BATTERY NEGATIVE, B-
W10	BROWN/RED	16 AWG	41.0	15336037	15326265	D	7123-2237-00	7116-2090	R	FUEL HOLD SIGNAL
W11	BLUE	16 AWG	47.0	15336037	15326265	L	N/A	HDW-10884	N/A	LOW PRESSURE SWITCH
W12	ORANGE/RED	16 AWG	66.0	15336037	15326265	E	54200608	54001800	3	HIGH ALTITUDE SIGNAL
W13	BLACK	16 AWG	38.0	SPLICE W/W9	N/A	N/A	54200608	54001800	2	ALTITUDE COMPENSATION GROUND, B-
W14	YELLOW/RED	16 AWG	46.0	SPLICE W/W32	N/A	N/A	54200608	54001800	6	ALTITUDE COMPENSATION STARTER SIGNAL
W15	RED	14 AWG	48.0	N/A	HDL-6-38	N/A	54200608	54001800	4	ALTITUDE COMPENSATION POSITIVE, B+
W16	BROWN/RED	16 AWG	38.0	SPLICE W/W10	N/A	N/A	54200608	54001800	5	ACCESSORY BATTERY POSITIVE, B+
W17	BLACK	16 AWG	26.0	N/A	SB-218-38	N/A	7123-2237-00	7116-2090	B	FUEL SOLENOID GROUND, B-
W18	WHITE	14 AWG	32.0	12065685	12066614	87	7123-2237-00	7116-2090	W	FUEL PULL SIGNAL
W19	VIOLET/RED	14 AWG	38.0	12065685	12066614	87	7123-3010	7116-3010	1	GLOW PLUG SIGNAL
W20	BROWN/RED	16 AWG	5.0	SPLICE W/W16	N/A	N/A	DT06-2S	0462-201-16141	1	FUEL HOLD SIGNAL, DIODE
W21	BLACK	16 AWG	5.0	SPLICE W/W17	N/A	N/A	DT06-2S	0462-201-16141	2	BATTERY NEGATIVE, B-
W22	BLACK	16 AWG	5.0	SPLICE W/W17	N/A	N/A	DT06-2S	0462-201-16141	2	BATTERY NEGATIVE, B-
W23	WHITE	16 AWG	5.0	SPLICE W/W18	N/A	N/A	DT06-2S	0462-201-16141	1	FUEL PULL SIGNAL, DIODE
W24	RED	16 AWG	6.0	SPLICE W/W29	N/A	N/A	12065685	12066614	86	CRANK RELAY COIL POSITIVE, B+
W25	RED	16 AWG	6.0	SPLICE W/W30	N/A	N/A	12065685	12066614	86	FUEL RELAY COIL POSITIVE, B+
W26	RED	16 AWG	6.0	SPLICE W/W31	N/A	N/A	12065685	12066614	86	PREHEAT RELAY COIL POSITIVE, B+
W27	RED	8 AWG	30.0	N/A	HDL-8-14	N/A	N/A	HDL-6-38	N/A	ALTERNATOR BATTERY POSITIVE, B+
W28	TAN	16 AWG	36.0	DT06-2S	0462-201-16141	1	6189-0442	8100-0462	2	ALTERNATOR EXCITE
W29	RED	14 AWG	23.0	N/A	HDL-6-38	N/A	12065685	12066614	30	CRANK RELAY BATTERY POSITIVE, B+
W30	RED	14 AWG	23.0	N/A	HDL-6-38	N/A	12065685	12066614	30	FUEL RELAY BATTERY POSITIVE, B+
W31	RED	14 AWG	23.0	N/A	HDL-6-38	N/A	12065685	12066614	30	PREHEAT RELAY BATTERY POSITIVE, B+
W32	WHITE	16 AWG	23.0	12065685	12066614	87	02977253	02965867	N/A	CRANK SIGNAL
W33	BLACK	16 AWG	27.0	SPLICE W/W9	N/A	N/A	926522-1	154718-3	2	BATTERY NEGATIVE, B-
W34	BROWN/RED	16 AWG	27.0	SPLICE W/W10	N/A	N/A	926522-1	154718-3	1	FUEL HOLD SIGNAL

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".

本品の環境規制物質の使用に関しては、YIS V-0001J(環境規制物質の使用制限)の規格を準拠すること。

図面来歴
CAREER
(1/3参照のこと)

- 検査済
- 検査の種類と区号
- 検査記号
- 実形
- 真円度
- 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
- 円筒度
- 全縦寸公差

受領 2014年9月23日
RECEIVED DATE

YANMAR CO., LTD.
POWER SYSTEM OPERATIONS DIV.

技師長
S. MANAGER
Shiro

検査者
CHECKED
A. Kojima

設計担当
SPECIALIST
A. Shiohira

設計者
DESIGNED
I. Taguchi

非標準部品

機種 MODEL	31NV 80F	31WV 74F			
	-S05A-	-S05A-			
数量 QTY.	1	1			

YA PART

ヤンマー部品名
HARNESS ASSY (3/3)

ヤンマーコード
119749-91160

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: LINEAR: ANGULAR:

DESUR AND BREAK SHARP EDGES

STANDARD: JIS S 1022

REVISION

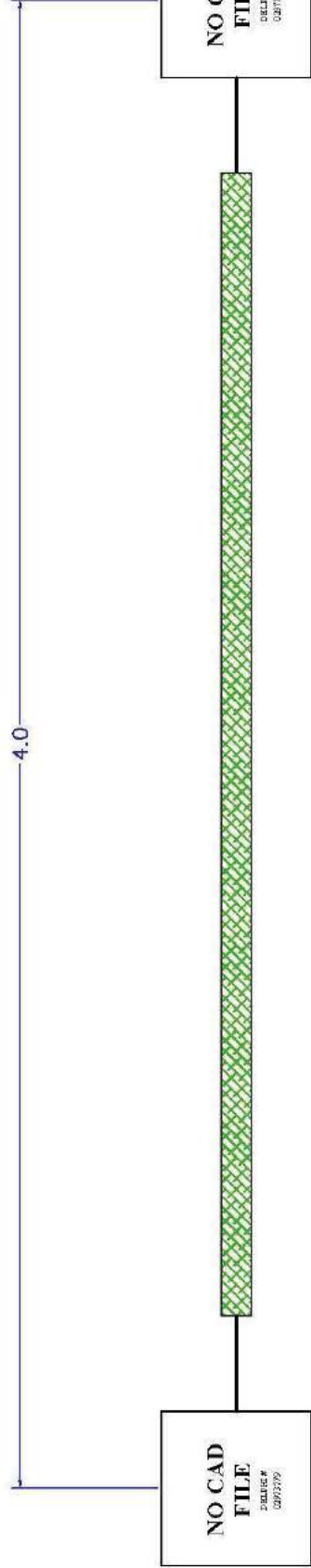
**YANMAR CO. LTD
YANMAR AMERICA CORP.**

TITLE:
HARNESS ASSY TIER4<19kW, YA KIT

DWG NO. **119749-91160** A3

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WIRE NUMBER	COLOR	WIRE GAUGE	LENGTH (INCHES-REF)	END A CONNECTOR	END A TERMINAL/SEAL	END A PORT	END B CONNECTOR	END B TERMINAL/SEAL	END B PORT	WIRE FUNCTION
W1	WHITE	16 AWG	4.0	02973778	02971859	1	02977878	02973215	1	CRANK SIGNAL



02973779, CONNECTOR
02971859, TERMINAL

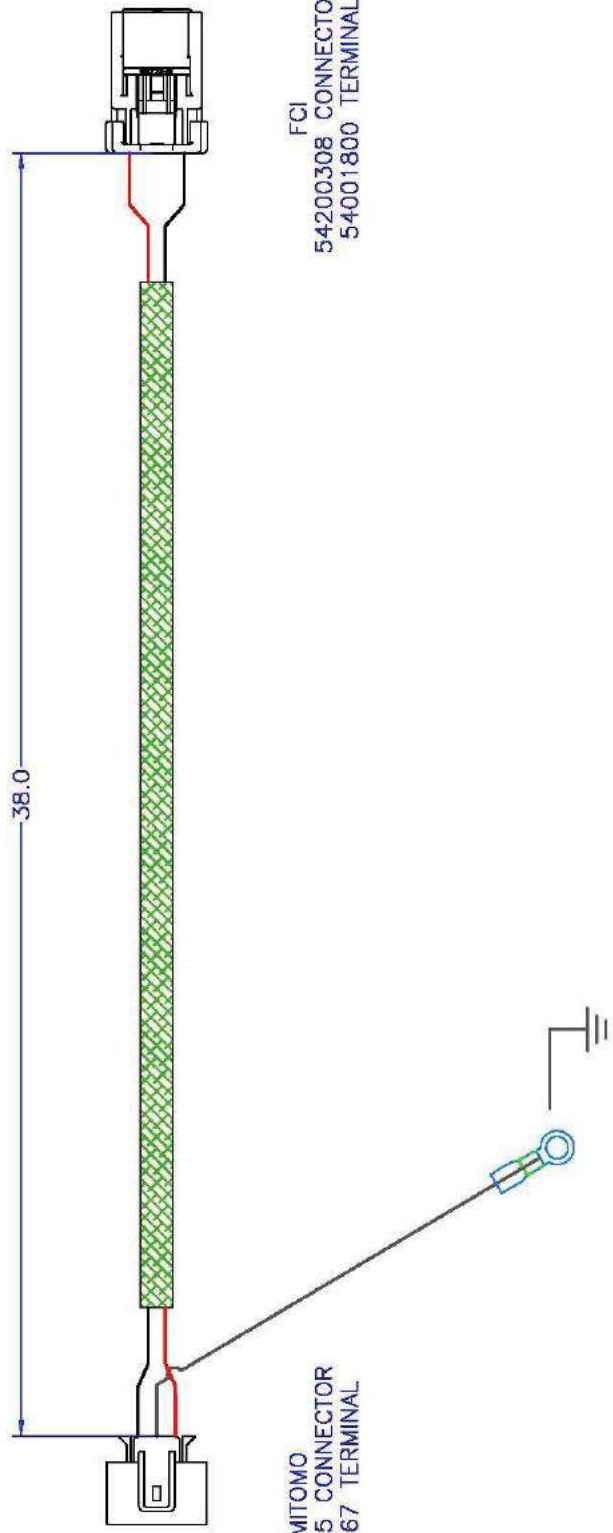
02977878, CONNECTOR
02973215, TERMINAL

NOTES:

1. ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED.
2. WIRE LENGTH TOLERANCE TO BE +/- 0.125" UNLESS OTHERWISE NOTED.
3. LOOM TO EXTEND WITHIN 1" OF WIRE ENTRY TO CONNECTOR/TERMINAL AS SHOWN ABOVE.
4. ALL CONNECTIONS TO BE CRIMPED, SOLDERED, HEAT SHRINK.
5. MAIN HARNESS TO BE LABELED WITH PART NUMBER, REV LEVEL, DATE, VENDOR ID.

JULIA CRONKOSTER, PROJ. MGR. SUNBELT AIR FLOW METER 11115		3700 AVE. BIRMINGHAM 35202		810814205		TENDER A	
TITLE: CRANK SIGNAL WIRE		PART NUMBER: 02973779		REVISION: 001		YANMAR CO. LTD YANMAR AMERICA CORP.	
DATE: 08/01/01		DRAWN BY: JAC		CHECKED BY: JAC		TITL	
REV	DATE	BY	DESCRIPTION	REV	DATE	BY	DESCRIPTION
01		JAC	INITIAL RELEASE				
02		JAC	REVISION				
03		JAC	REVISION				
04		JAC	REVISION				
05		JAC	REVISION				
PAGE NO. 119749-91180				PAGE NO. A3			
REV. NO.				REV. NO.			

WIRE NUMBER	COLOR	WIRE GAUGE	LENGTH (INCHES-REF)	END A CONNECTOR	END A TERMINAL/SEAL	END A PORT	END B CONNECTOR	END B TERMINAL/SEAL	END B PORT	WIRE FUNCTION
W1	RED	16 AWG	40.0	6189-0165	8100-0467	3	54200308	54001800	1	SOLENOID HOLD, B+
W2	WHITE	XX AWG	40.0	6189-0165	8100-0467	1	54200308	54001800	3	SOLENOID PULL, B+
W3	BLACK	XX AWG	12.0	6189-0165	8100-0467	2	-	3/8" RING	-	SOLENOID GROUND, B-



3/8" RING TERMINAL

- NOTES:
1. ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED.
 2. WIRE LENGTH TOLERANCE TO BE +/- 0.125" UNLESS OTHERWISE NOTED.
 3. BRAIDED SPLIT LOOM TO EXTEND WITHIN 1" OF WIRE ENTRY TO CONNECTOR/TERMINAL, AS SHOWN ABOVE.
 4. MAIN HARNESS TO BE LABELED WITH PART NUMBER, REV LEVEL, DATE, VENDOR ID.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES ARE: LENGTHS FRACTIONS DECIMALS ANGLES		REV. #		DATE	
DESIGN	J. GAYNE	2016.06			
CHECKED	A. BIGELOS	2016.07.04			
APPROVED	R. BUDANE	2016.07.04			
YANMAR CO. LTD. SWAL. HIGH DEVELOPMENT DEPT.					
GROUP					
REV.					
DATE					
DRAWING NO. 211407530A			REVISION A		
YANMAR CO. LTD YANMAR AMERICA CORP.			TITLE		
HARNESS ASSY, Altitude TIER4<19KW, YA KIT			DWG. NO. 119749-91190		
A3			SUPPLIER PART NO. 7C00713		
PAGE 1/1					