



Supplement to Yanmar Kit Installation Instructions

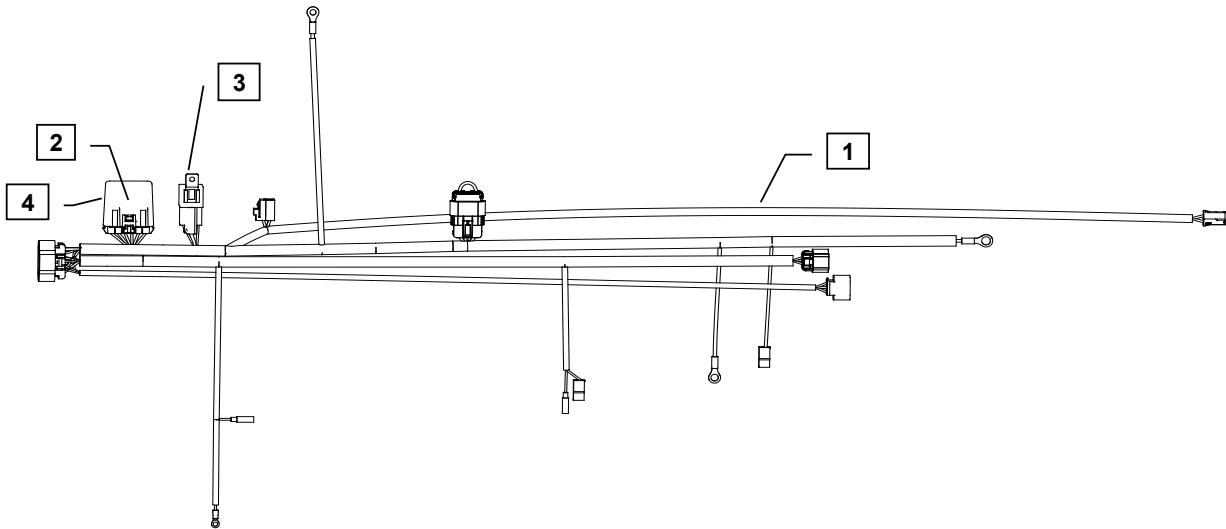
SAFETY

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	119749-91100*	Wiring Harness (IDI)3	1	(A)
2	119749-91420*	Control Module Timer	1	
3	119749-91460*	Relay 70A 12V Sealed	1	
4	119749-91440*	Control Module Housing	1	
5	1908-00*	Switch Retainer	2	



MODELS

- 2TNV70
- 3TNV70
- 3TNV76
- 3TNV74F-NDYA
- 3TNV80F-NXDYA
- 3TNV80F-NGGE

Remarks: (A) When utilizing the Yanmar harness to a control panel that has 10 ft. or more of wiring between them, you must install a relay, 119749-91400.
 (B) 119749-91500 is an extension used to connect harness, 119749-91100, to customer specified control panel.

Note: 1) Service parts are denoted by an asterisk. To replace non-service parts, the entire kit will need to be purchased.



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 provided with panel kit.

NOTE: The spare ring terminal in the kit is for the S-Terminal on the Denso starter. The spade connector, for the Hitachi starter, will have to be replaced with the ring terminal if Denso Starter is equipped.

2. Use the Switch Retainer (5) to mount the Relay (3) to an open thread bore on the cylinder head.
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.

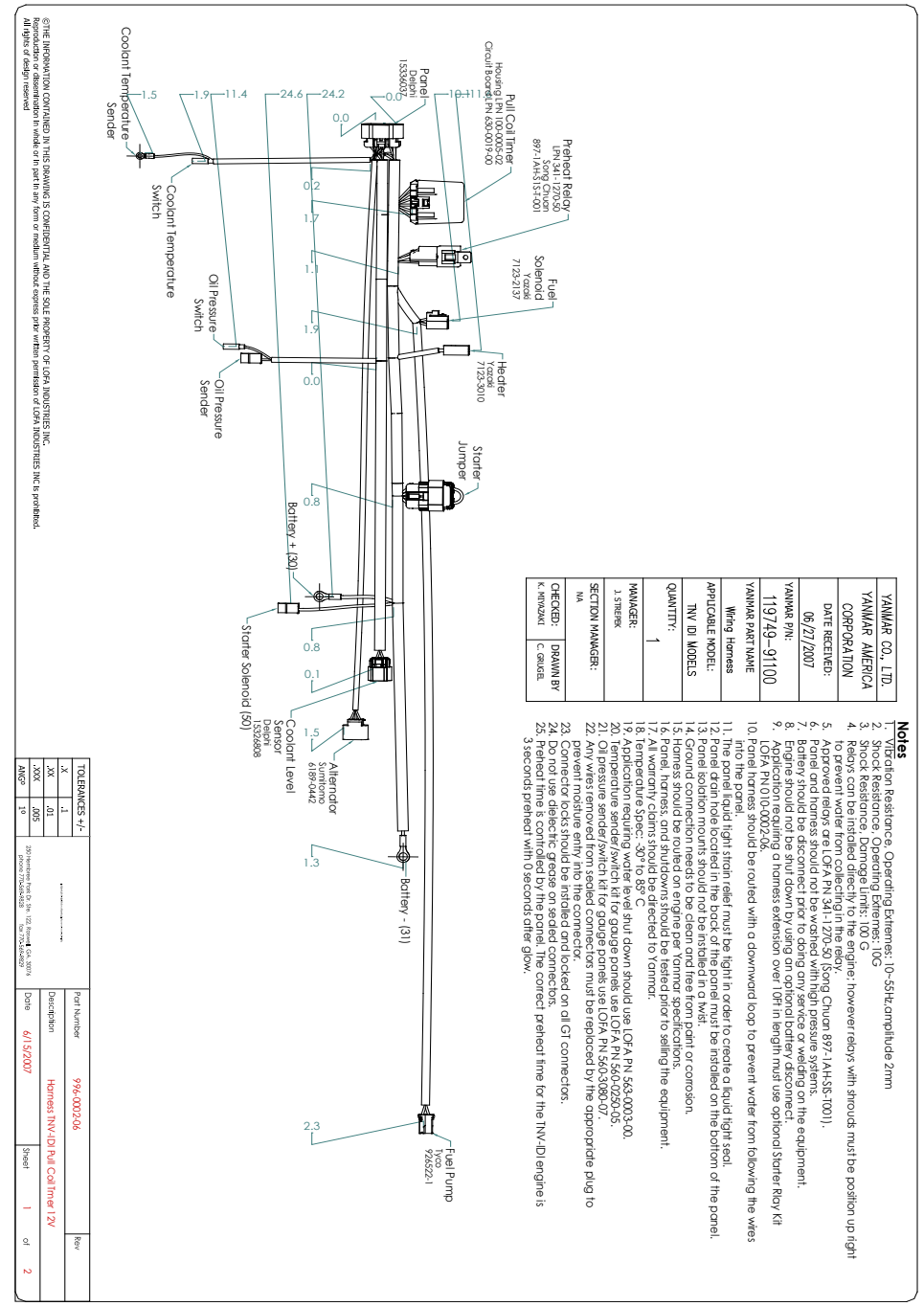
NOTE: Application requiring a harness extension to a control panel over 10Ft in length must use the starter relay at the connector labeled Starter Jumper, 119749-91400.

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.

NOTE: 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
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

Installation Instructions



YANMAR CO., LTD.
YANMAR AMERICA CORPORATION
DATE RECEIVED: 06/27/2007
YANMAR P/N: 119749-91100
YANMAR PART NAME: Wiring Harness
APPLICABLE MODEL: TNV, DI MODELS
QUANTITY: 1
MANAGER: J. STRECK
SECTION MANAGER: M.A.
CHECKED: DIAMN BY K. MINAZAKI
DATE: C. RADEL

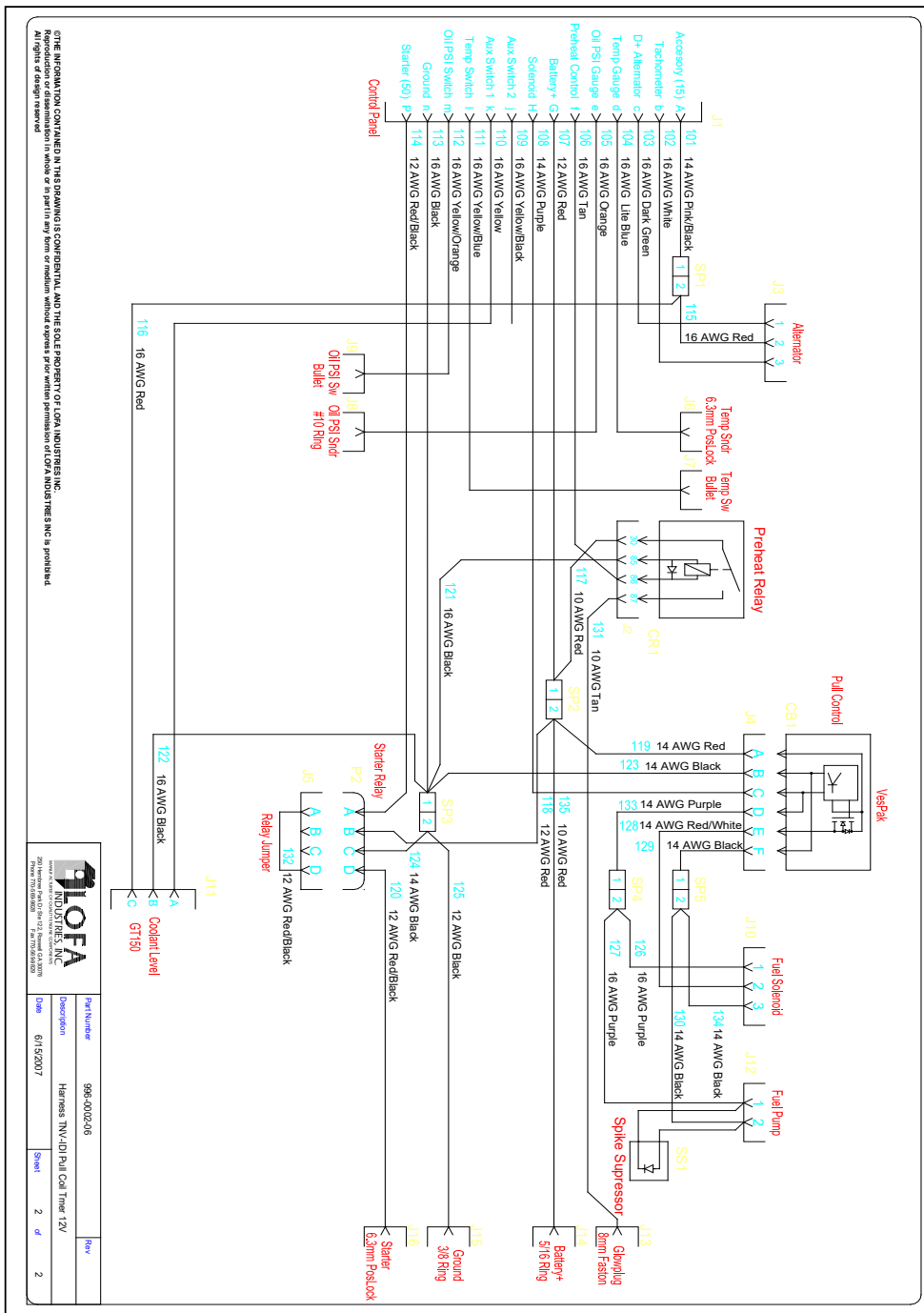
Notes

1. Vibration Resistance, Operating Extremes: 10-58Hz/amplitude 2mm
2. Shock Resistance, Operating Extremes: 10G
3. Shock Resistance, Damage Limits: 100 G
4. Relays can be installed directly to the engine, however relays with shrouds must be position up right
5. Approved relays are LOFA P/N 341-1270-50 (Song Chuan 897-1A-H3S-1001).
6. Panel and harness should not be washed with high pressure systems.
7. Battery should be disconnected prior to doing any service or welding on the equipment.
8. Engine should not be shut down by using an optional battery disconnect.
9. LOFA P/N 100-0027-09 a harness extension over 1ft in length must use optional Starter Relay Kit
10. Panel harness should be routed with a downward loop to prevent water from following the wires into the panel.
11. The panel liquid tight strain relief must be tight in order to create a liquid tight seal.
12. Panel drain holes located in the back of the panel must be installed on the bottom of the panel.
13. Panel drain holes should be clean and free from paint or corrosion.
14. Ground connection needs to be clean and free from paint or corrosion.
15. Harness should be routed on engine per Yanmar specifications.
16. Panel, harness, and shrouds should be tested prior to selling the equipment.
17. All warranty claims should be directed to Yanmar.
18. All warranty claims should be directed to Yanmar.
19. Application requiring water level shut down should use LOFA P/N 543-0003-00.
20. Temperature sender/switch kit for gauge panels use LOFA P/N 543-0080-07.
21. Oil pressure sender/switch kit for gauge panels use LOFA P/N 543-0080-05.
22. Any wires removed from sealed connectors must be replaced by the appropriate plug to maintain the seal.
23. Connector locks should be installed and locked on all GT connectors.
24. Do not use dielectric grease on sealed connectors.
25. Preheat time is controlled by the panel. The correct preheat time for the TNV,DI engine is 3 seconds; preheat with 0 seconds after glow.

TOLERANCES -/+	Part Number	976-000206	Rev
.X	.01		
.XX	.01	Description	Harness TNV,DI Pul Coil Timer 12V
.XXX	.005	Date	6/15/2007
ANG	90	Sheet	1 of 2



Installation Instructions



OTHER INFORMATION CONTAINED IN THIS DRAWING IS CONFIDENTIAL AND THE SOLE PROPERTY OF LOFA INDUSTRIES, INC. Reproduction or dissemination in whole or in part in any form or medium without express prior written permission of LOFA INDUSTRIES, INC. is prohibited. All Rights Reserved.



Part Number	995-002-06	Rev
Description	Harness TNV/IDI/Pull Coil Trkr 12V	
Date	6/15/2007	
Sheet	2	4
		2