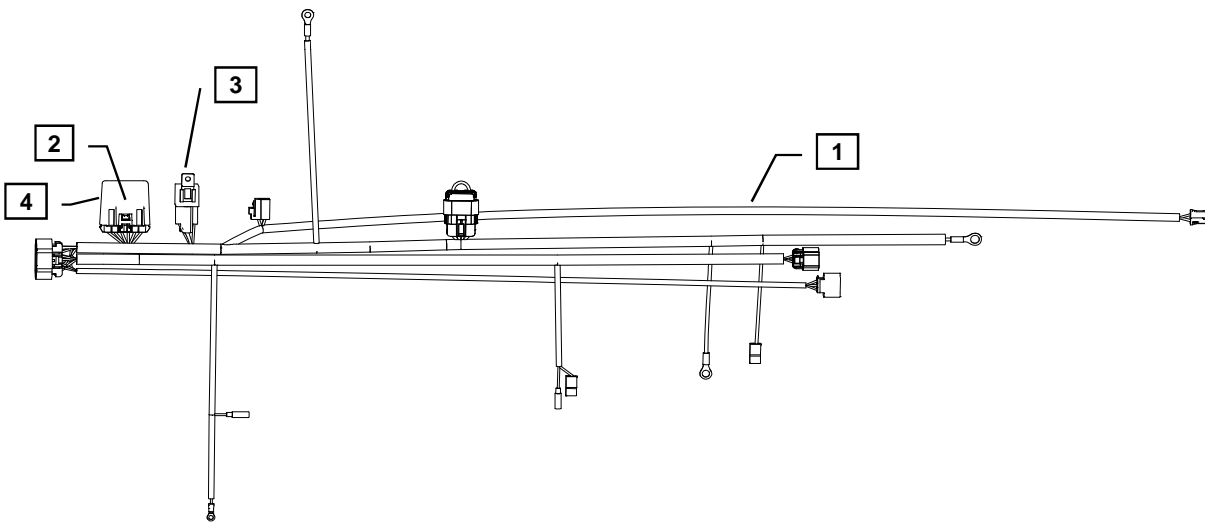




**YANMAR CO., LTD.**  
**YANMAR AMERICA CORP.**

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

- 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.



---

---

## 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.

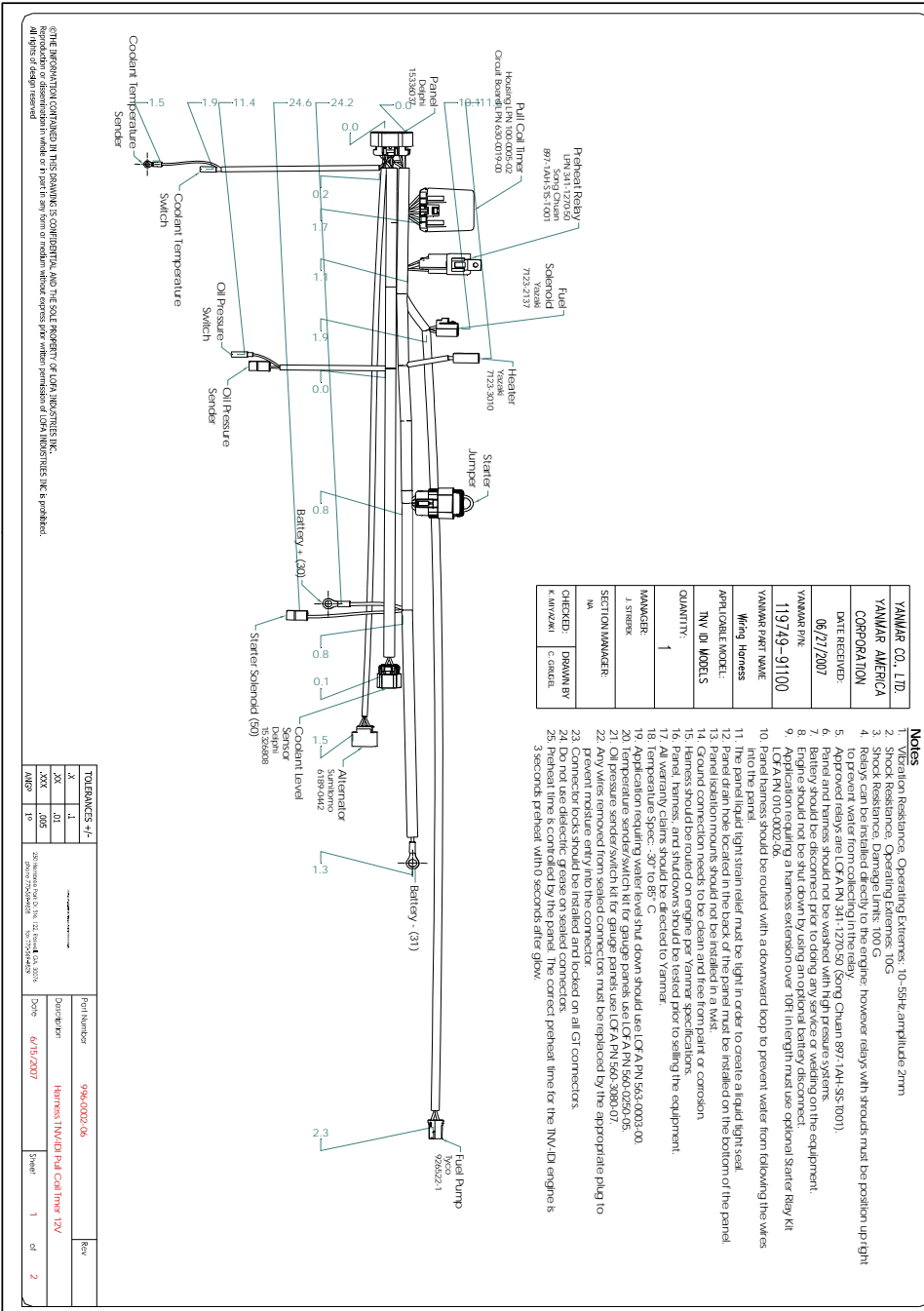
Refer to harness drawing for additional design requirements for consideration of application. A troubleshooting guide is available through Yanmar's Distributor Website or by contacting Yanmar America's Service Department.

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**



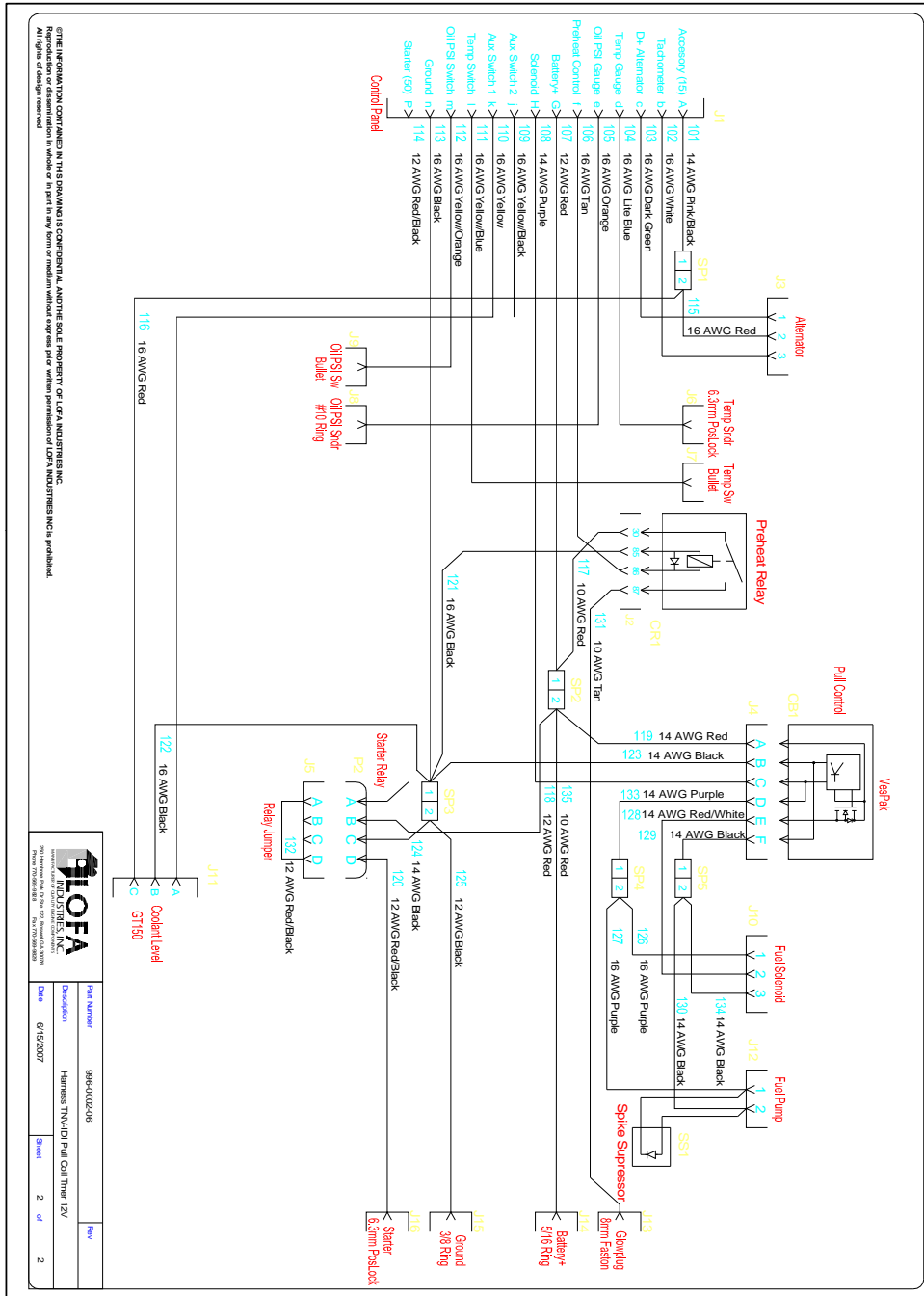
©THE INFORMATION CONTAINED IN THIS DRAWING IS CONFIDENTIAL AND THE SOLE PROPERTY OF LOAN INDUSTRIES, INC. All rights of design reserved.

YANMAR CO., LTD.	YANMAR AMERICA CORPORATION
DATE RECEIVED:	06/27/2007
YANMAR P/N:	119749-91100
YANMAR PART NAME:	Wiring Harness
APPLICABLE MODEL:	TN-V IDI MODELS
QUANTITY:	1
MANAGER:	J. STREIBER
SECTION/MANAGER:	MM
CHECKED:	D. WAIN BY C. GARDNER

- Notes**
1. Vibration Resistance, Operating Extremes: 10-55Hz, amplitude 27mm
  2. Shock Resistance, Operating Extremes: 10G
  3. Shock Resistance, Damage Limits: 100G
  4. Relays can be installed directly to the engine; however relays with studs must be position upright to prevent water from coming in from the top.
  5. Do not use the engine harness kit for the engine with the following Chuan 897, 14H, S15, 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. Application requiring a harness extension over 10ft in length must use optional Starter Relay Kit (119749-91100).
  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 hole located in the back of the panel must be installed on the bottom of the panel.
  13. Ground connection needs to 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 studs should be tested prior to sealing the equipment.
  17. All warranty claims should be directed to Yanmar.
  18. Application requiring water level shut down should use LOFA P/N 563-0003-00.
  19. Application requiring water level shut down should use LOFA P/N 560-0250-05.
  20. Temperature sender/switch kit for gauge panels use LOFA P/N 560-3080-07.
  21. Oil pressure sender/switch kit for gauge panels use LOFA P/N 560-3080-07.
  22. Any wires removed from sealed connectors must be replaced by the appropriate plug to the connector.
  23. Connector locks should be installed and locked on all CI connectors.
  24. Do not use dielectric grease on sealed connectors.
  25. Preheat time is controlled by the panel. The correct preheat time for the TN-V IDI engine is 3 seconds Preheat with 0 seconds after glow.



Installation Instructions



THIS INFORMATION CONTAINED IN THIS DRAWING IS CONFIDENTIAL AND THE SOLE PROPERTY OF LOCA INDUSTRIES, INC. IT IS TO BE KEPT IN STRICTLY CONFIDENTIAL AND NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF LOCA INDUSTRIES, INC. OR ITS AFFILIATES. All rights of design reserved.

<b>GLOFA</b>		Part Number	996-0002-016	Rev	
INDUSTRIES, INC.		Description	Harness TNY/DI Pul. Oil/Turbo 12V	Sheet	2 of 2
29110 Highway Park Drive, 222, Woodstock, GA 30189		Date	6/15/2007	Drawn	
Tel: 770-962-2200 Fax: 770-962-2201					