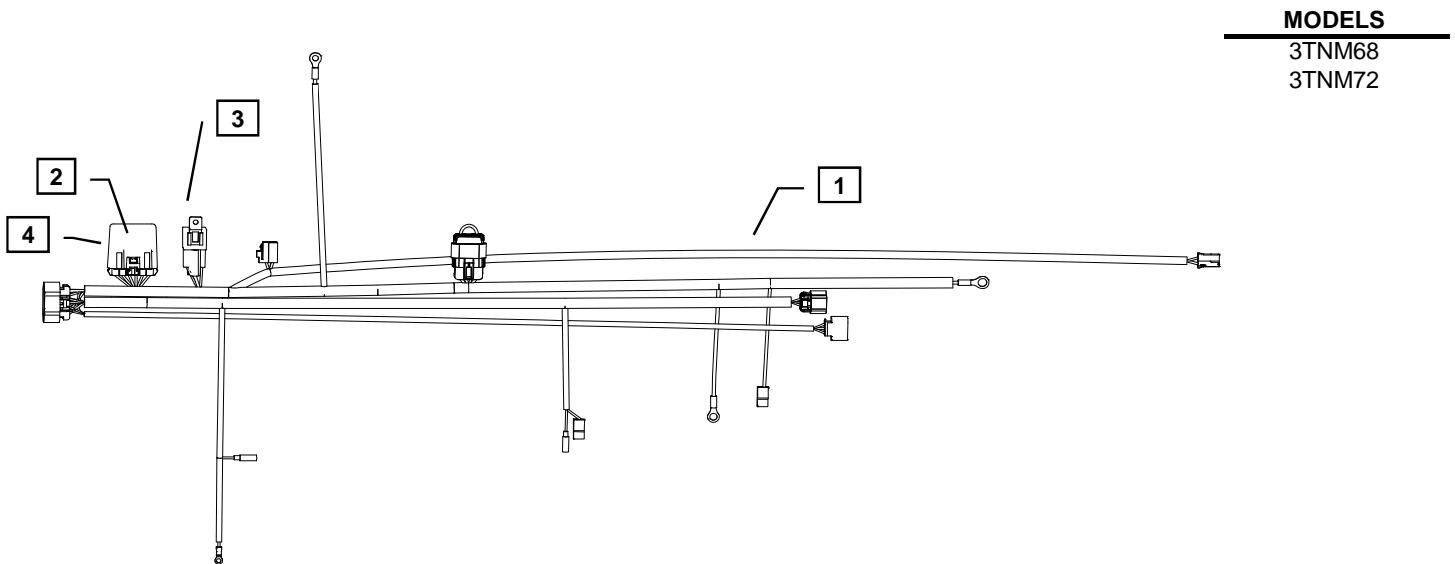




YANMAR CO., LTD.
YANMAR AMERICA CORP.

Item	Part No.	Description	Quantity	Remarks
1	119749-91091	Wiring Harness - MINIMAX	1	(A)
2	119749-91420	Control Module Timer	1	
3	119749-91460	Relay 70A 12V Sealed	1	
4	119749-91440	Control Module Housing	1	



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.



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.
2. 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
 - e) Make sure that the relay and control module timer is mounted in a vertical fashion to prevent water intrusion.

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.**

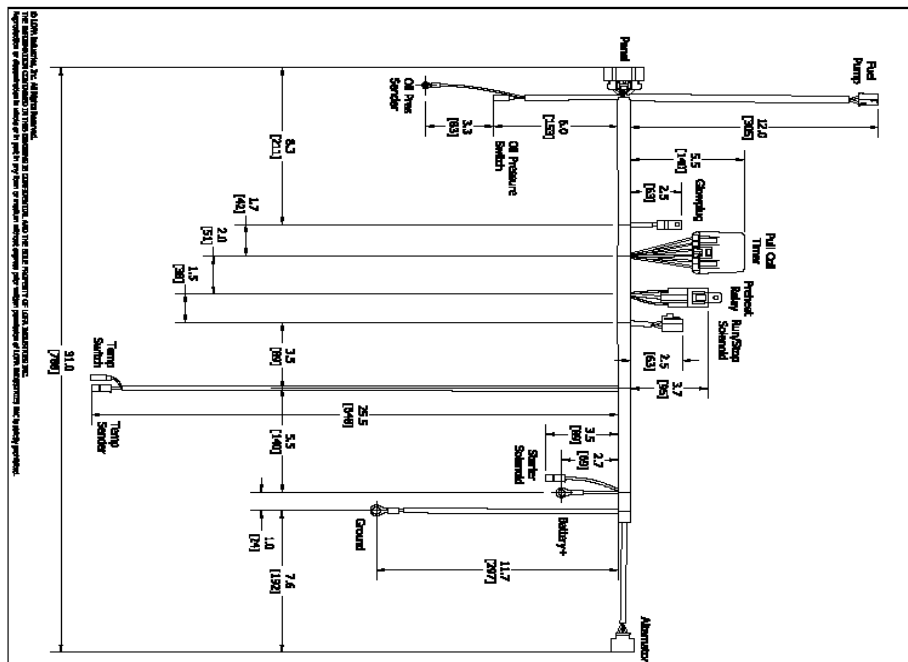
Refer to harness drawing for additional design requirements for consideration of application. A troubleshooting guide is available through Yanmar's Distributor Website or by contacting Yanmar America's Service Department.

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
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



Installation Instructions



Wire Size	Wire Color	Wire Length
16AWG	RED	1.2 [30]
16AWG	BLACK	2.1 [53]
16AWG	WHITE	1.5 [38]
16AWG	GREEN	3.5 [89]
16AWG	YELLOW	5.5 [140]
16AWG	BLUE	7.4 [188]
16AWG	BROWN	1.0 [25]
16AWG	PINK	3.5 [89]
16AWG	GRAY	5.5 [140]
16AWG	ORANGE	7.4 [188]
16AWG	GREEN	1.0 [25]



996-0010-03
Harnesse Yanmar Mini Motor

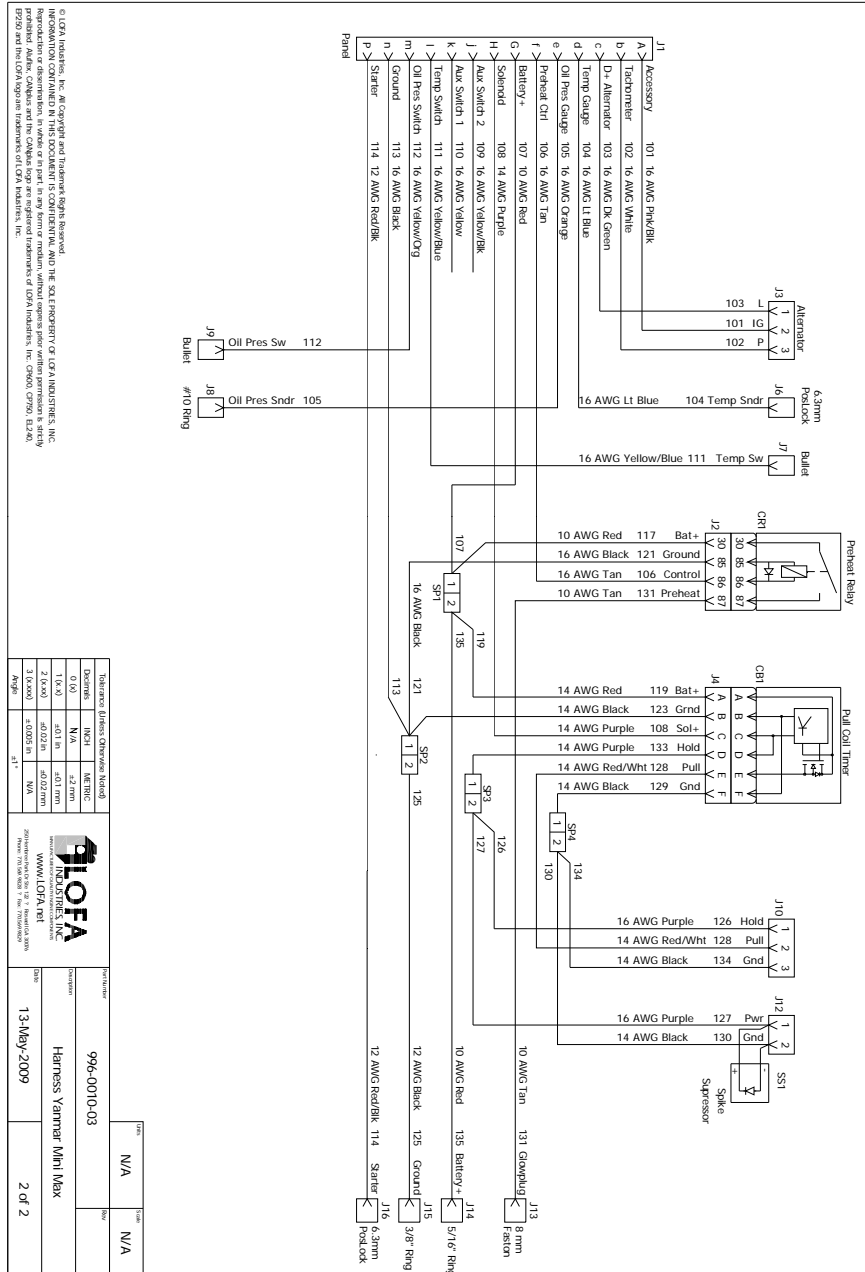
13-Hdy-2009
1 of 2

INCH [mm]
1/4

- Notes**
1. Verify the battery, opening terminals, 110-4325-jump/lead from...
 2. Check the battery voltage. The voltage should be 10.8 V.
 3. Check the battery terminals. They should be clean and tight.
 4. Battery can be installed directly to the engine; however, battery should be position up right to prevent water from collecting in the battery connector.
 5. Approved relay is LDFN, PN 541-1270-00 (Seng Chuan 897-144-515-1101), (see also).
 6. Relay and harness should not be worked with high pressure equipment.
 7. Battery should be disconnected prior to doing any service or working on the equipment.
 8. Battery should be disconnected prior to doing any service or working on the equipment.
 9. Panel harness should be tested with a "blowdown" bag to prevent water from blowing the wires into the panel.
 10. The panel wires "wire strain" relief must be tighten in order to create a water "seal" seal.
 11. Panel drain hole located in the back of the panel must be installed on the bottom of the panel.
 12. Panel harness means should not be washed; use a cloth.
 13. Ground connection must be clean and free from paint or corrosion.
 14. Ground connection must be clean and free from paint or corrosion.
 15. Panel, harness, and accessories should be tested prior to adding the equipment.
 16. All warranty claims should be directed to Yanmar.
 17. Temperature Spec: -50° to 80° C
 18. Application regarding water level state down should use LDFN, PN 583-003-040.
 19. All precision sensors/switch for engine harness use LDFN, PN 583-003-040.
 20. All precision sensors/switch for engine harness must be replaced by the appropriate plug to ensure proper operation.
 21. All precision sensors/switch for engine harness must be replaced by the appropriate plug to ensure proper operation.
 22. Crankcase holes should be installed and located on all CRT connectors.
 23. Do not use silicone grease on sealed connectors.
 24. Release time is controlled by the panel. The correct release time for the Mini Pex engine is 1 second pulse with 0 seconds delay given.



Installation Instructions



© LOFA Industries, Inc. All Copyright and Trademark Rights Reserved. This document is the property of LOFA Industries, Inc. and is not to be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of LOFA Industries, Inc. LOFA Industries, Inc. is a registered trademark of LOFA Industries, Inc. (C800, C790, E126).

Dimension (Metric/Imperial)		Metric	
Distance	INCH	MILLIMETER	
0.10	N/A	2.7 mm	
1.00	N/A	25.4 mm	
2.00	±0.02 in	±0.02 mm	
3.00	±0.05 in	N/A	
Asy			±1



Part Number	996-0010-03	Rev	N/A
Part Name	Harness Yanmar Mini Max	Rev	N/A
Date	13-May-2009	Page	2 of 2