



## Supplement to Yanmar Kit Installation Instructions

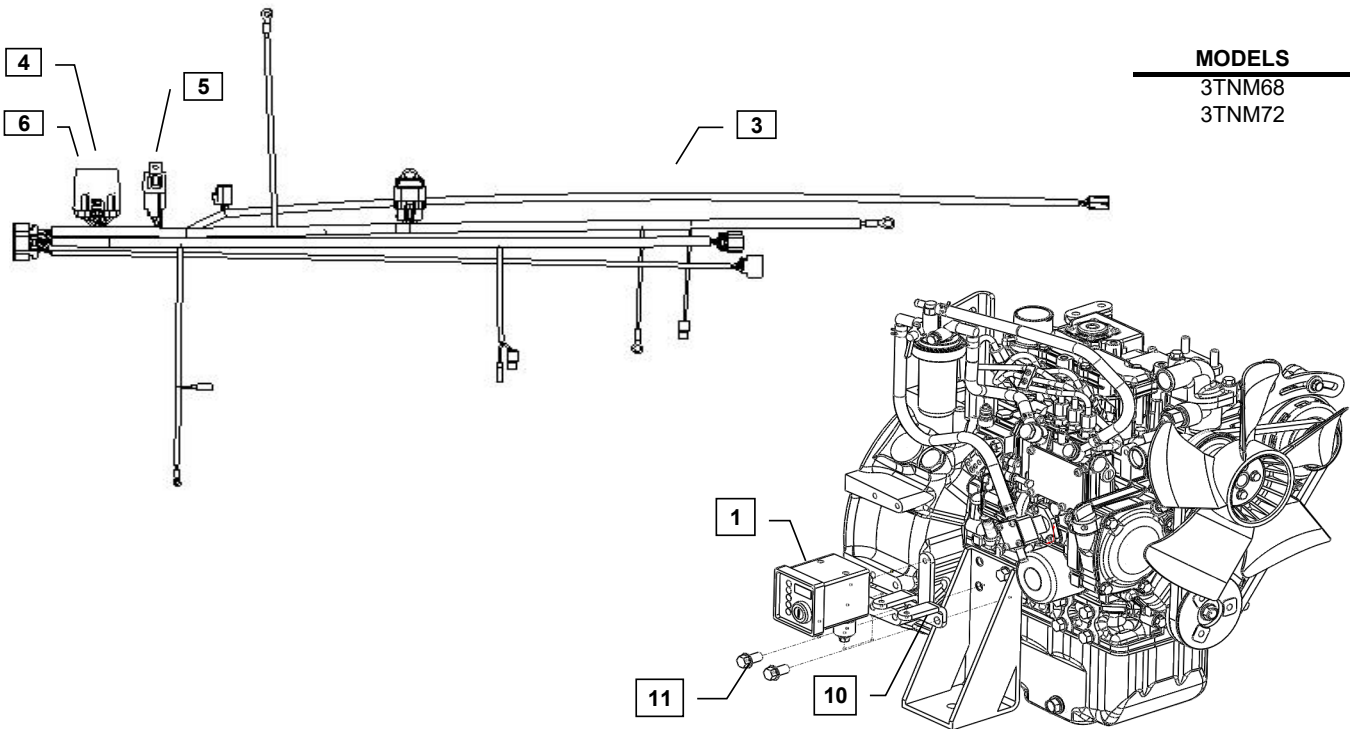
# SAFETY

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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.



Item	Part No.	Description	Quantity	Remarks
1	119749-91111*	Control Panel (IDI)	1	
2	119749-91050*	Ignition Key, Engine Control Panel	2	
3	119749-91091*	Wiring Harness - MINIMAX	1 (B)	
4	119749-91420*	Control Module Timer	1	
5	119749-91460*	Relay 70A 12V Sealed	1	
6	119749-91440*	Control Module Housing	1	
7	129689-92100*	Isolator Mount M6 x 1.0	3	
8	129689-91180	Washer, M6 (Star)	3 (A)	
9	26366-060002*	Nut, M6 x 1.0 (Flanged hex head)	4	
10	119749-91140*	Panel Mounting Bracket	1	
11	26106-100252*	Bolt, M10 x 1.5 - 25 (Flanged hex head)	2	



Remarks: (A) 129689-91180 is not a service part and does not need to be replaced.  
 (B) 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.  
 Note: 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. Fasten Control Panel (1) to the Mounting Bracket (10) using Isolators (7), Star Washers (8) and Lock Nuts (9). Star washers should be installed between isolators and bracket.

NOTE: Make sure isolators are not twisted during installation to avoid premature failure of components.

2. Assemble Control Panel (1) and Mounting Bracket (10) assembly to injection pump side rear engine mounting pad using M10x1.5 - 25 Bolts (11).
3. Connect harness terminals to appropriate locations. See engine wiring harness diagram and schematics provided with panel kit.
5. 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 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.

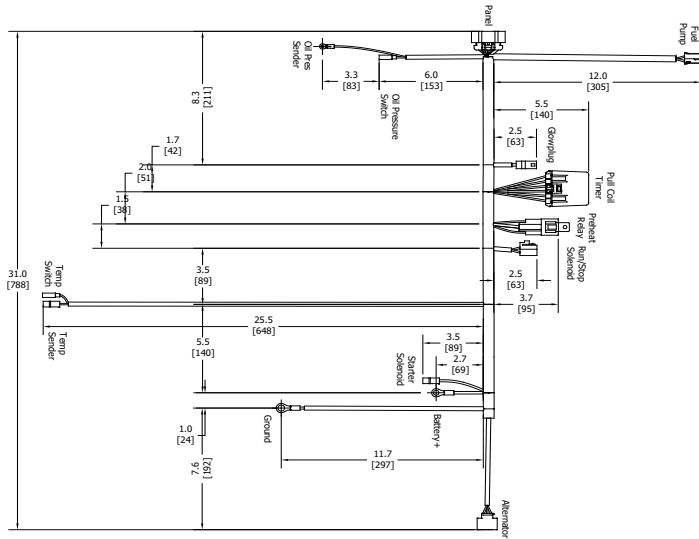
Table 1: Proper torque specifications for bolts and nuts.

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



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For information, YANMAR has provided this information for your reference only. It is not intended to be used as a substitute for the original equipment manufacturer's instructions. YANMAR is not responsible for any damage or injury resulting from the use of this information.



### Notes

1. Voltage Resistance, Operating Extreme: 10~55Hz/ampitude 2mm
2. Shock Resistance, Operating Extreme: 10G
3. Shock Resistance, Damage Limit: 10G
4. The panel must be installed in a vertical position to prevent water from collecting in the relay connector.
5. Approved relay is LDF4 PN 34-1370-50 (Sony Quan 897-144-SIS-T001, sealed).
6. Panel and harness should not be washed with high pressure systems.
7. The panel and harness should be protected from the equipment.
8. Engine should not be shut down by using an optional battery disconnect.
9. Panel harness should be routed with a downward loop to prevent water from id/droving the wires.
10. The panel water tight seal must be tight in order to create a water tight seal.
11. Panel drain hole located in the back of the panel must be installed on the bottom of the panel.
12. Panel drain hole should not be sealed with a wax.
13. The panel should be installed in a vertical position.
14. Harness should be routed on engine per Yanmar specifications.
15. Panel, harness, and shutdowns should be tested prior to sealing the equipment.
16. Temperature Spec: -30° to 85° C
17. Temperature Spec: -30° to 85° C
18. Application requiring water level shut down should use LDF4 PN 563-003-00.
19. Approval of panel kit for specific use use LDF4 PN 563-003-00.
20. Panel kit should be installed and tested by an appropriate plug to prevent moisture entry into the connector.
21. Connector locks should be installed and locked on all GFI connectors.
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23. Preheat time is controlled by the panel. The correct preheat time for the Mtl Max engine is 3 seconds preheat with 0 seconds after glow.
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Tolerance (unless otherwise stated)	
Dimension	INCH
0.00	0.00
0.01	0.01
0.02	0.02
0.03	0.03
0.04	0.04
0.05	0.05
0.06	0.06
0.07	0.07
0.08	0.08
0.09	0.09
0.10	0.10
0.12	0.12
0.15	0.15
0.20	0.20
0.25	0.25
0.30	0.30
0.375	0.375
0.50	0.50
0.625	0.625
0.75	0.75
1.00	1.00
1.25	1.25
1.50	1.50
2.00	2.00
2.50	2.50
3.00	3.00
4.00	4.00
5.00	5.00
6.00	6.00
8.00	8.00
10.00	10.00
12.00	12.00
15.00	15.00
20.00	20.00
25.00	25.00
30.00	30.00
37.50	37.50
50.00	50.00
62.50	62.50
75.00	75.00
100.00	100.00
125.00	125.00
150.00	150.00
200.00	200.00
250.00	250.00
300.00	300.00
375.00	375.00
500.00	500.00
625.00	625.00
750.00	750.00
1000.00	1000.00



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Hess Yammer Mini Max

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1 of 2



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