



Supplement to Yanmar Kit Installation Instructions

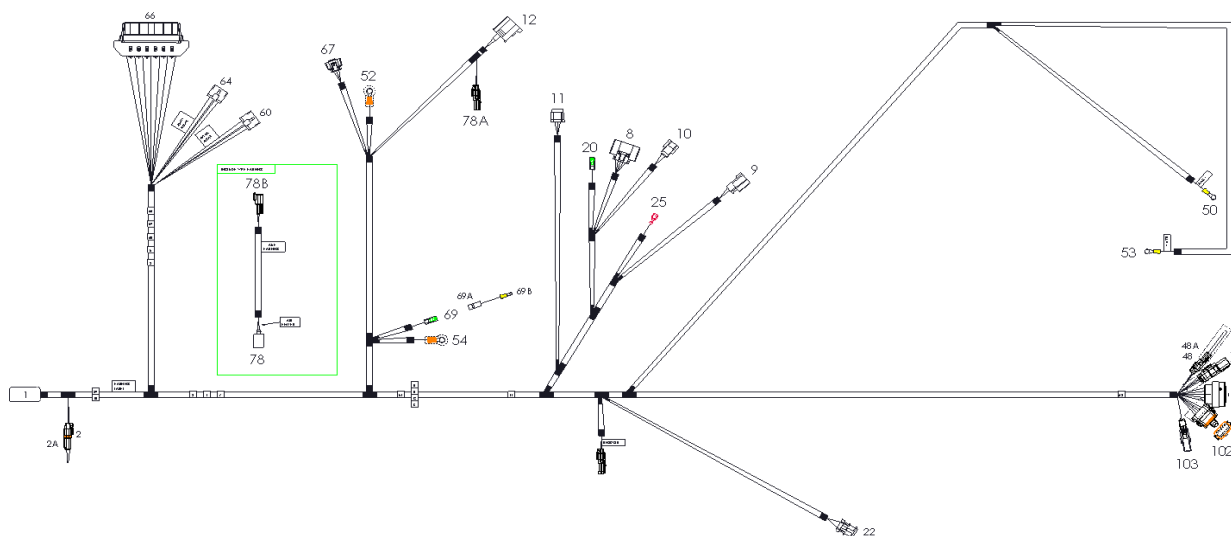
SAFETY

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	119E33-91120	Main Harness Assembly	1	
2	172B02-17150*	CA Type Relay	2	Included w/ engine
3	-	80A, 12V Relay	2	Included w/ harness
4	-	Starter Sub Harness	1	Included w/ harness
5	129927-91200*	Atmospheric Pressure Sensor	1	Included w/ the engine as loose part

MODELS
3TNV80FT



NOTE: Starter Sub Harness may not be necessary; Starter type will determine
Service parts are denoted by an asterisk. To replace non-service parts, the entire kit will need to be purchased.



Installation Instructions

NOTE: Only the Starter and Glow Plug Relays are included with the harness kit. The main relay and rack relay are supplied with the distributor standard specification engine in the loose parts box. The optional connections for distributor use are located in the Accessory Coupler.

Please see the next page for detailed installation instructions.

WARNING: Be sure battery cables are connected correctly. Disconnecting either the positive or negative battery cable while the equipment is operating will cause premature failure of electronic components. Also, never weld on equipment with the ECU connected to the wire harness.

NOTE: In the event that the wire harness needs to be extended, never use scotch locks or butt connectors to extend the wire harness. All extended wires must be soldered and sealed.

Remote Mounted ECU Applications:

For applications that remotely mount the ECU within the wire harnesses reach please use the following ECU mounting guidelines:

- 1- Install the ECU in a location that is not subject to steam or high-pressure water for cleaning
- 2- Install the ECU in a location that is well ventilated and not subject to direct sunlight.
- 3- Install the ECU so that the connector faces downward. Failure to do so may trap water in the connector, resulting in corrosion of connector pins.
- 4- Ensure no water is trapped inside the connector when plugging the connector. Water inside the connector may corrode connector pins, resulting in malfunctioning of the ECU.

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.

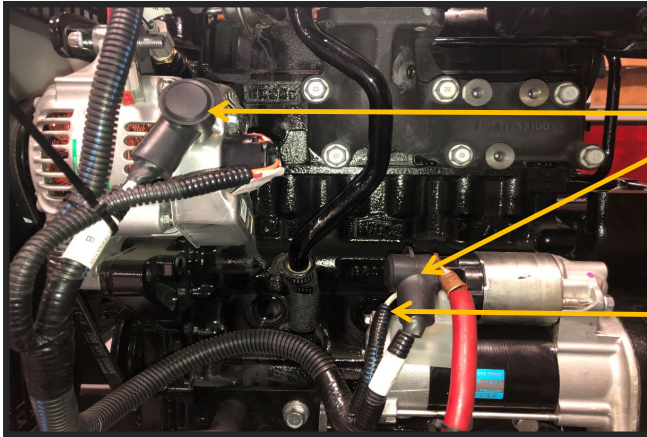
Table 1: Comply with torque standards in the table to avoid unexpected damage during installation or in the future.

Diameter x Pitch	Kgf-m	Foot-lbf	N-m
M5x0.8	0.4 ~ 0.7	3 ~ 5	4 ~ 6.7
M6 x 1.0	1.0~1.2	7 ~ 9	9.8 ~ 11.8
M8 x 1.25	1.5 ~ 2.9	10.6 ~ 20.9	14.4 ~ 28.3
M12 x 1.75	8.0 ~ 10.0	57.8 ~ 72.3	78.4 ~ 98.0

Note: There are no bolts included with harness kit

Harness Routing Instructions

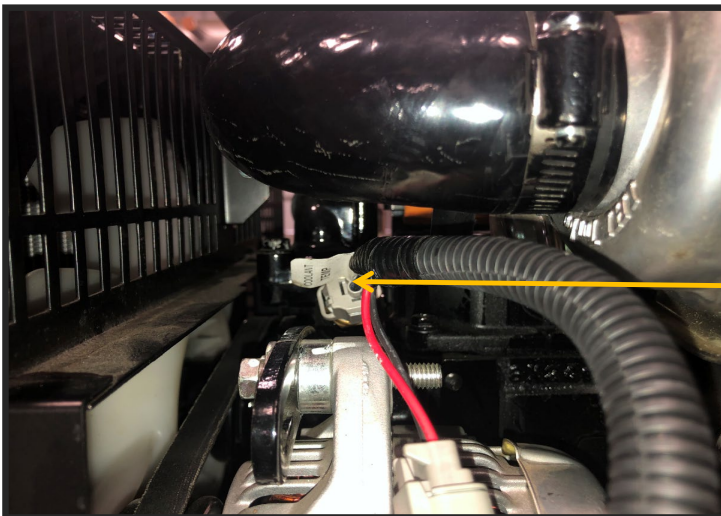
1. Lay the loose harness on an engine to gauge fitment and placement of where the relays, ECU, and connectors should go based on the wiring diagrams provided. Please refer to TNV application manual for cautionary measures to be taken when mounting a harness to an engine.
2. Connect alternator plugs (67) & (52) and starter connectors (69) & (54). Cover terminals after connecting.



Replace terminal covers after connecting

Starter Sub Harness may need to be removed to properly attach connector (58)

3. Connect cooling water temp connector (12) which is near the thermostat.



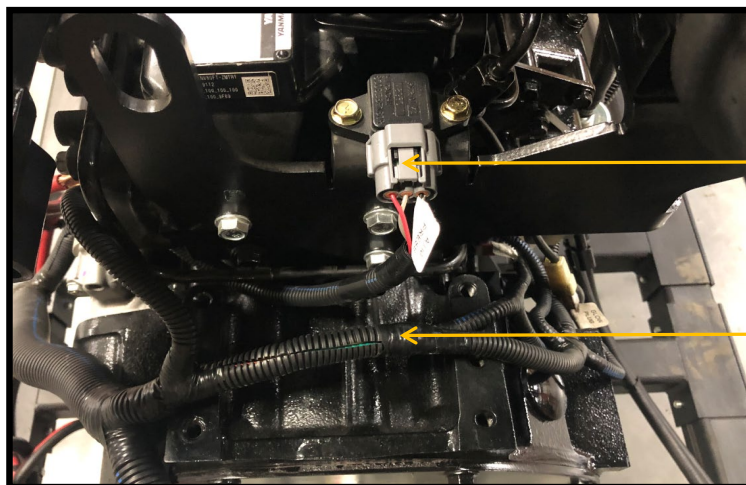
Cooling water temp

4. Layout harness as shown. Connectors 8, 9, 10, 11, 20, 22, 25 and the battery leads (53 & 50)



Harness Routing Instructions

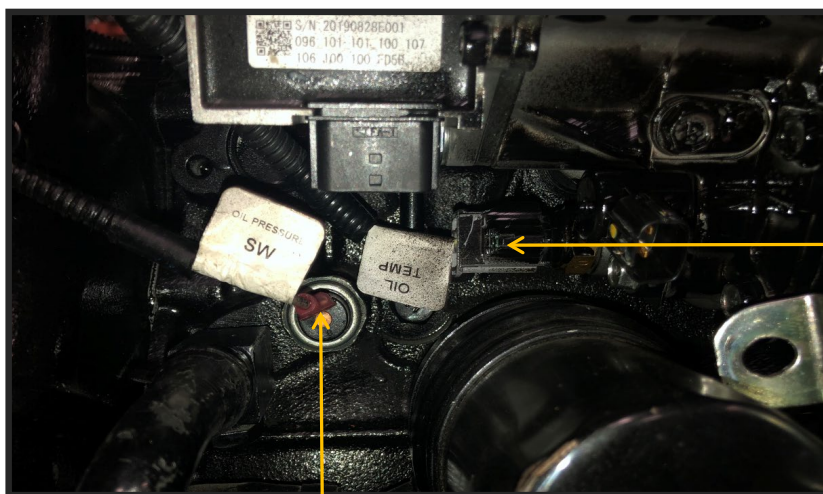
5. Route section of the harness containing connectors 8, 9, 10, 11, 20, 25 around flywheel housing to connect on the intake side of an engine. Connect ATM pressure sensor (11) where the sensor will be supplied loose with an engine.



Atmospheric pressure sensor

Harness routing around the FWH

6. Connect Oil pressure switch and Oil temp connector which are around fuel injection pump and oil filter.



Oil Temp Connector

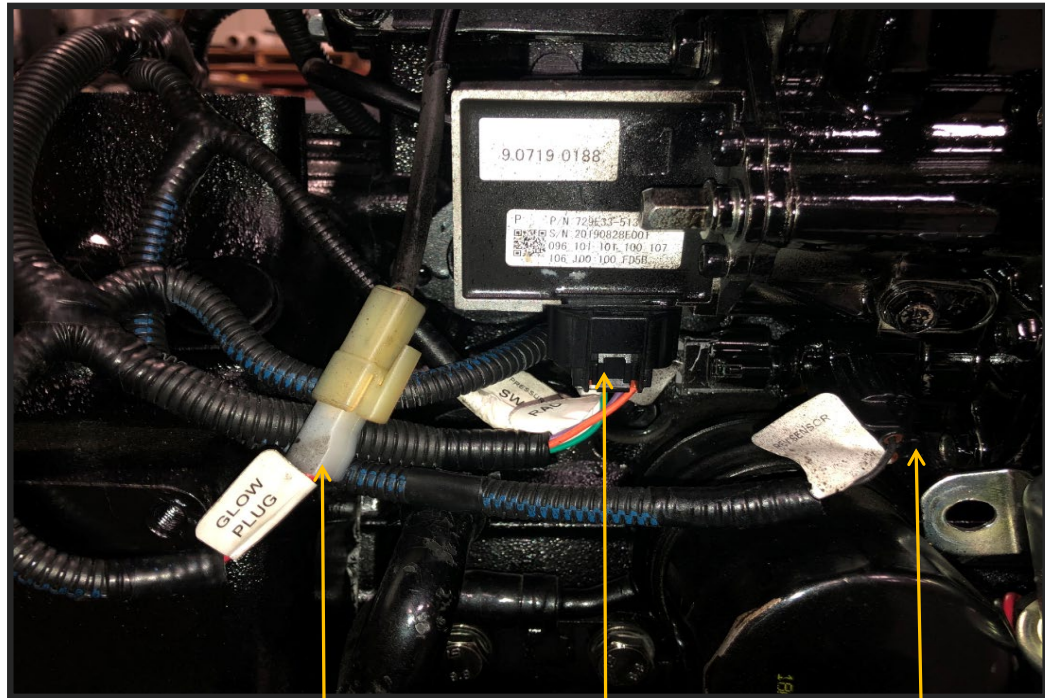
Oil Pressure Switch

Refer to harness drawing for additional design requirements for consideration of application.



Harness Routing Instructions

7. Connect the Glow Plug (20), rack actuator sensor (8) and rev sensor (9) that are around the fuel injection pump.



Glow Plug

Rack Actuator
Sensor

Rev Sensor

Refer to harness drawing for additional design requirements for consideration of application.