SMARTCRAFT DEPTH TRANSDUCER WIRING CONNECTIONS

IMPORTANT: This document guides our dealers, boatbuilders, and company service personnel in the proper installation or service of our products. If you have not been trained in the recommended servicing or installation procedures for these or similar Mercury Marine products, have the work performed by an authorized Mercury Marine dealer technician. Improper installation or servicing of the Mercury product could result in damage to the product or personal injury to those installing or operating the product.

NOTE: After completing installation, place these instructions with the product for the owner's future use.

Depth Transducer Dirty Water Explanation and its Limitations

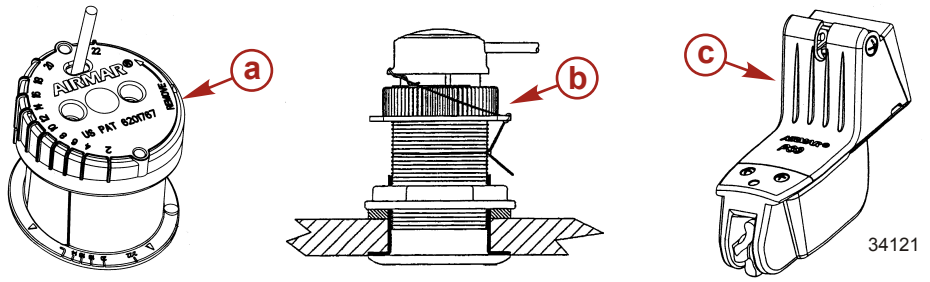
A depth transducer is a device that converts variations in one energy form, into corresponding variations of another energy form. Acoustical depth transducers produce sonic pulses through water to provide an indication of the depth and will show other reflective variations in the water. The sonic pulse from a transducer is a cone shaped projection.

Depth transducers may produce erratic readings of the depth when the water quality is degraded by reflective materials such as refuse, mud, oil, or physical objects in the water; plants, animals, air bubbles or turbulence, reducing the transducer efficiency to lock onto a bottom depth return signal. These conditions are referred to as dirty water. When a depth transducer encounters this condition, the return echo reflection signal from the dirty water can cause an unstable depth reading, or a depth indication that is not accurate.

A depth transducer reading in clean or dirty water conditions, can change rapidly, possibly compromising the vessel because of conditions underwater any time the vessel is underway. The vessel operator is responsible for understanding water conditions where the vessel is navigating. The vessel operator should become familiar with the body of water by referring to nautical charts or communications with other vessel operators, and not rely on the depth transducer only.

Depth Transducer Installation

NOTE: *These depth transducers are specially manufactured to be SmartCraft communication compatible.*



a - In hull
b - Through-the-hull
c - Transom mounted

Install the depth transducer following the instructions provided with the depth finder.

Wire Color Code Abbreviations

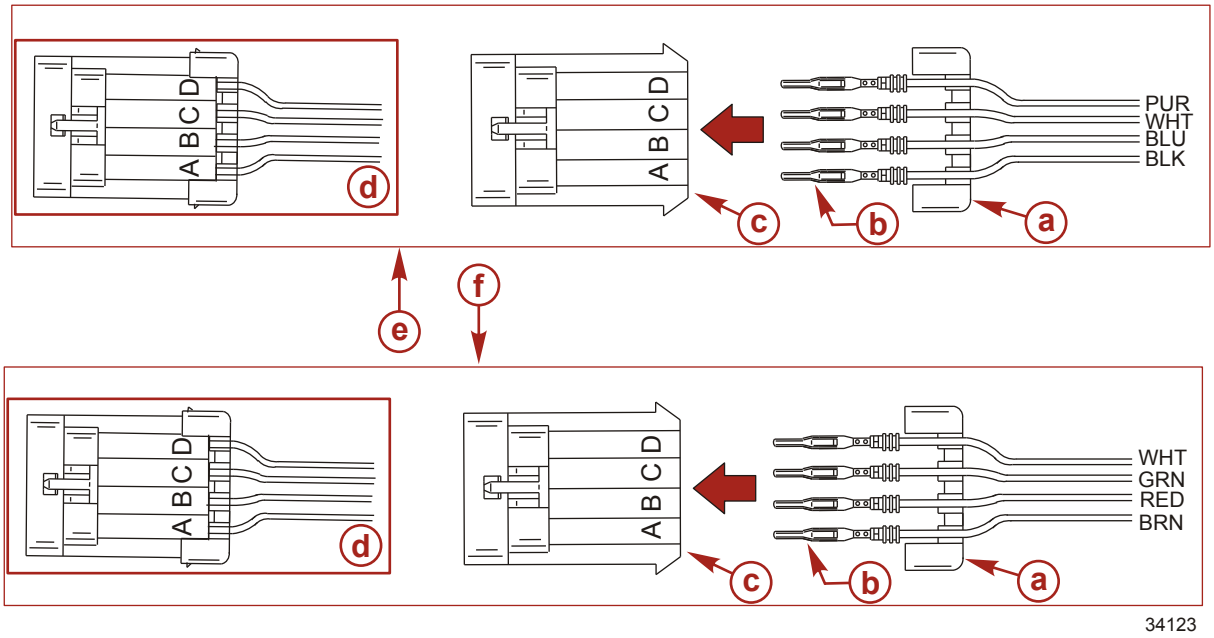
Wire Color Abbreviations				
BLK	Black		BLU	Blue
BRN	Brown		GRY	Gray
GRN	Green		ORN or ORG	Orange
PNK	Pink		PPL or PUR	Purple
RED	Red		TAN	Tan
WHT	White		YEL	Yellow
LT or LIT	Light		DK or DRK	Dark

Depth Transducer Wiring Connections

NOTE: *The transducer wire harness connections are assembled at the factory. However, situations may occur where the wire harness must be removed from the connector to pass through an opening smaller than the connector. When installing the wires into the connector, they can only be pushed into the connector one way. Align the wire terminal with the tabs inside the connector.*

1. Route the transducer cable to the engine.

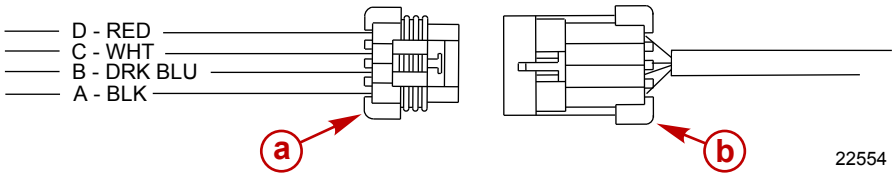
2. Push each wire terminal into its respective position in the wire retainer until they snap in place.
3. Assemble the wire retainer securely into the connector.



a - Wire retainer
b - Wire terminal
c - Connector
d - Assembled components
e - Transducer connector
f - Temperature/speed sensor connector

Depth Transducer Engine Connections for Verado, OptiMax, MerCruiser with a 4 Pin Engine Diagnostic Test Connector

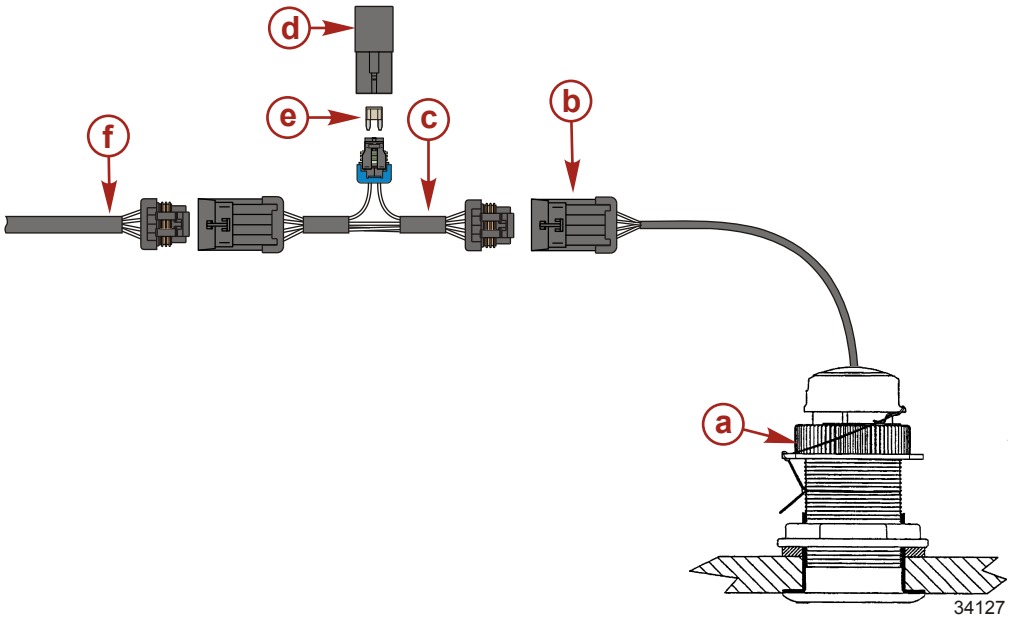
1. Locate the engine diagnostic test connector on the engine. Refer to the appropriate service manual.
   a. If a depth transducer is installed, disconnect the transducer cable from the engine diagnostic test connector.



a - Engine diagnostic test connector
b - Transducer cable connector

   b. For a new installation, disconnect the weather cap from the engine diagnostic test connector.
2. Connect the diagnostic fuse harness to the engine diagnostic test connector. Refer to the installation instructions with the diagnostic fuse harness.

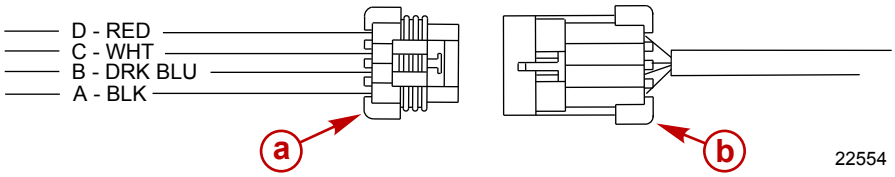
3. Connect the transducer cable to the diagnostic fuse harness.



a - Through-the-hull transducer (reference)
b - Transducer cable connector
c - Diagnostic fuse harness
d - Fuse cover
e - 2 amp fuse
f - Engine diagnostic test connector

Triducer Engine Connections for Verado, OptiMax, MerCruiser

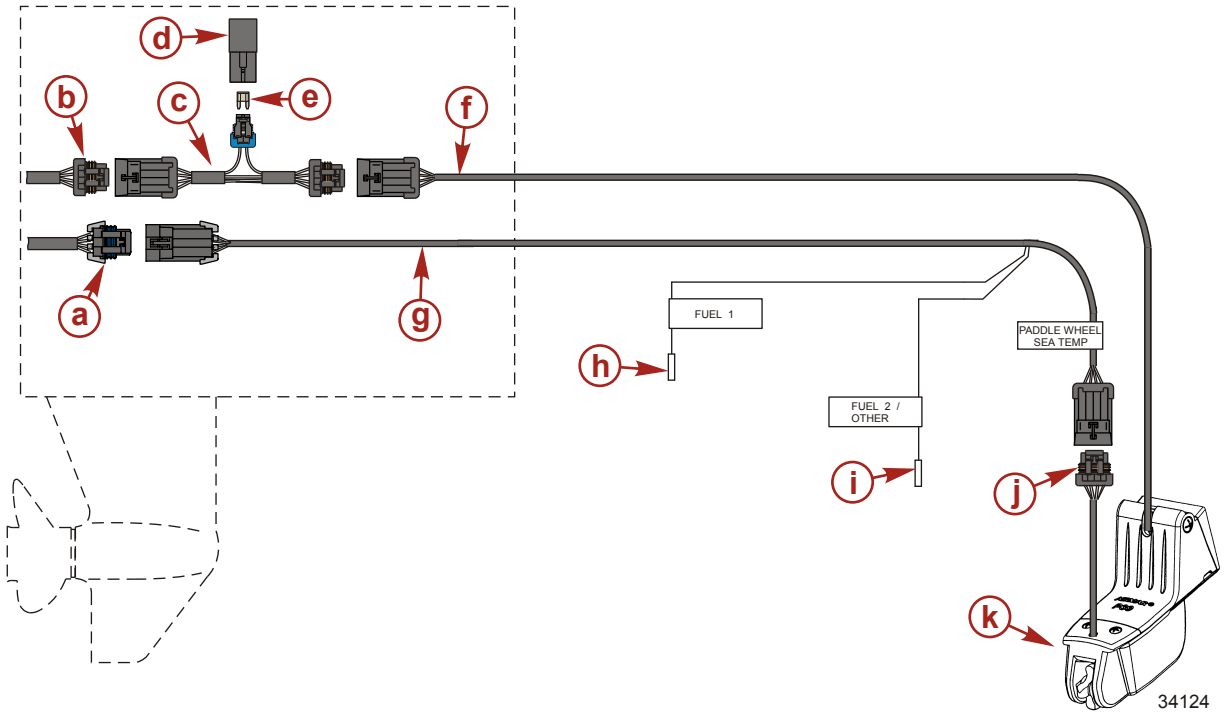
1. Locate the engine diagnostic test connector on the engine. Refer to the appropriate service manual.
   a. If a depth transducer is installed, disconnect the transducer cable from the engine diagnostic test connector.



a - Engine diagnostic test connector
b - Transducer cable connector

   b. For a new installation, disconnect the weather cap from the engine diagnostic test connector.
2. Connect the diagnostic fuse harness to the engine diagnostic test connector. Refer to the installation instructions with the diagnostic fuse harness.
3. Connect the transducer cable (black, blue, white, purple) to the diagnostic fuse harness.
4. Connect the temperature/speed sensor connector (brown, red, green, white) to the vessel harness connector.

5. Connect the vessel harness to the engine harness vessel connector.



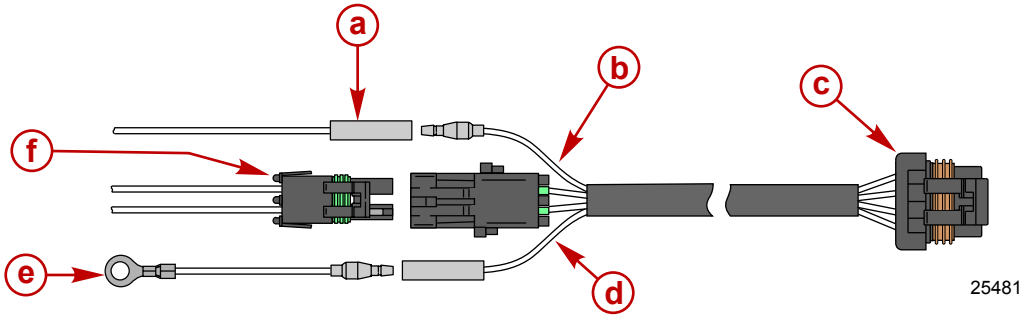
- **a -** Engine harness vessel connector
- **b -** Engine diagnostic test connector
- **c -** Diagnostic fuse harness
- **d -** Fuse cover
- **e -** 2 amp fuse
- **f -** Transducer cable
- **g -** Vessel harness
- **h -** Fuel 1 sender connector
- **i -** Fuel 2/other sender connector
- **j -** Temperature/speed sensor connector
- **k -** Triducer (reference)

Depth Transducer Engine Connections for OptiMax with a 2 Pin Engine Diagnostic Test Connector

1. Locate the engine diagnostic test connector on the engine. Refer to the appropriate service manual.
2. Connect the adapter harness to the engine diagnostic test connector.
3. Connect the black wire with the ring terminal into the black wire on the adapter harness.
4. Locate an engine ground connection within reach of the black wire ring terminal. Secure the ring terminal to the engine ground connection. Apply Liquid Neoprene to the engine ground connection to prevent corrosion.

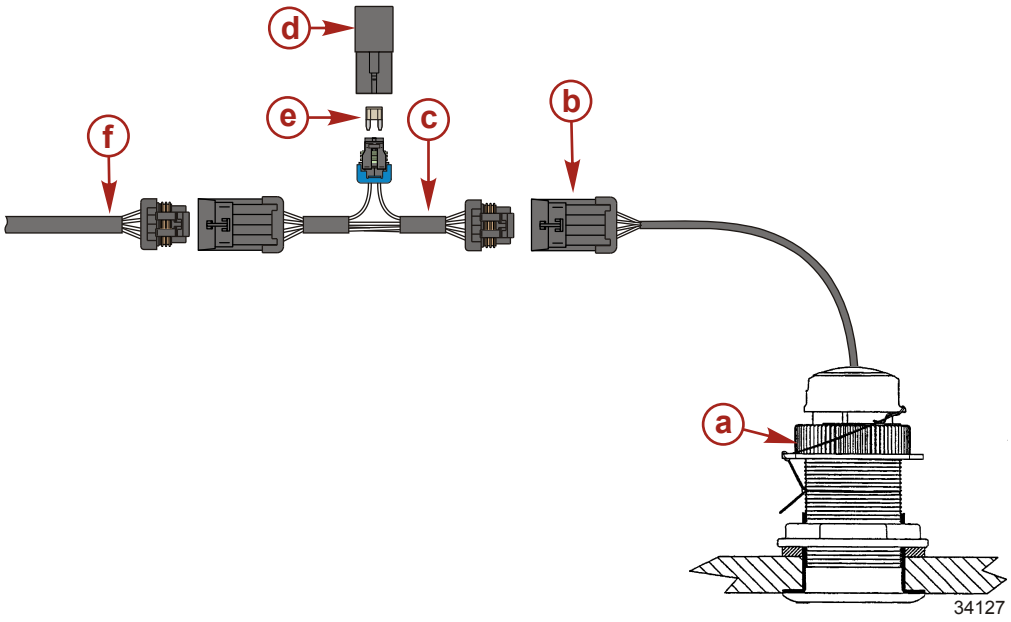
Tube Ref No.	Description	Where Used	Part No.
25	Liquid Neoprene	Adapter harness ring terminal ground connection	92- 25711 3

5. Connect the purple wire from the adapter harness to the engine harness purple wire.



a - Engine harness purple wire female bullet connector
b - Purple wire
c - Female adapter harness connector
d - Black wire
e - Black wire ring terminal
f - Engine diagnostic test connector

6. Connect the diagnostic fuse harness to the adapter harness.
7. Connect the transducer cable connector to the diagnostic fuse harness.



a - Through-the-hull transducer (reference)
b - Transducer cable connector
c - Diagnostic fuse harness
d - Fuse cover
e - 2 amp fuse
f - Adapter harness

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