
SMARTCRAFT SYSTEM TACHOMETER AND SPEEDOMETER INSTALLATION

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.

Thank You

Thank you for purchasing a SmartCraft product. This SmartCraft product is designed with the most advanced technical featured software available today. Mercury Marine makes every attempt possible to ensure new products are compatible with prior versions. New technology allows Mercury Marine to design features today that may not have been available with prior versions of software. Therefore, to ensure the most up-to-date software and optimum features are available to our customers, it is recommended that the same software versions be used.

Installation Information

Before cutting any holes, check area behind dashboard for obstructions (braces, cables, wiring, etc.).

When cutting the dashboard for gauge installation, follow these cutting tips:

- Fiberglass – Apply masking tape to area to be cut to prevent dashboard from cracking.
- Vinyl covered – Remove vinyl from area to be cut with razor blade to keep vinyl from tearing.

Gauge Installation

WARNING

Performing service or maintenance without first disconnecting the battery can cause product damage, personal injury, or death due to fire, explosion, electrical shock, or unexpected engine starting. Always disconnect the battery cables from the battery before maintaining, servicing, installing, or removing engine or drive components.

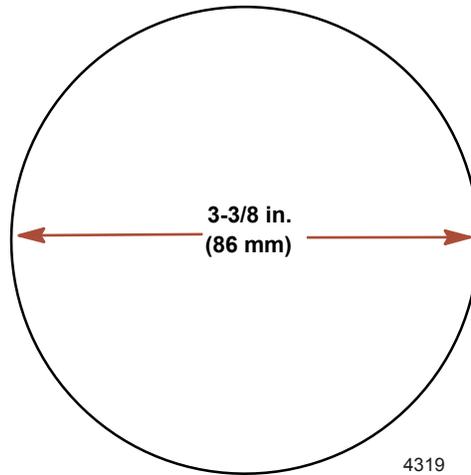
1. Disconnect both battery cables from the battery.

CAUTION

Avoid injury or product damage. Obstructions, such as braces and wiring, may be unseen when looking at the front of the dashboard. Before drilling or cutting any holes in the dashboard, check the area behind the dashboard for obstructions. Do not drill or cut when obstructions are present.

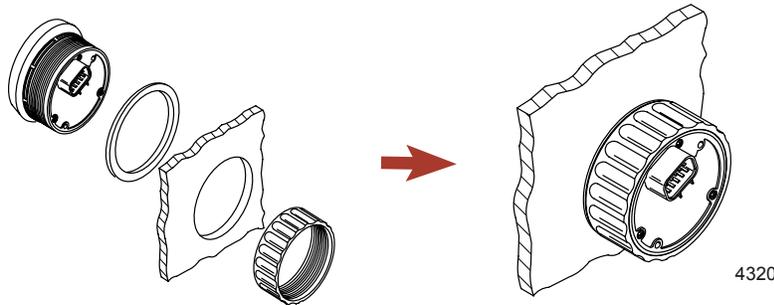
2. Select a location for the tachometer and speedometer that affords good visibility.

3. Ensure there will be clearance between the components to install the bezels, if equipped.
4. If the dashboard is fiberglass, apply masking tape to the area that is to be drilled or cut to help prevent the dashboard from cracking.
5. If the dashboard is vinyl covered, remove the vinyl from the area to be drilled or cut to keep the vinyl from tearing.
6. Drill a 86 mm (3.375 in.) mounting hole using a hole saw.



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7. Place the gauge along with seal into dashboard and secure with retainer nut.

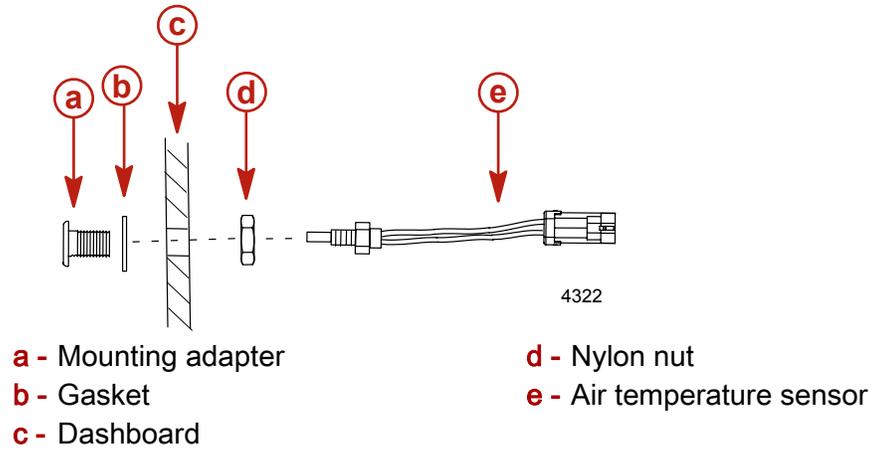


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Outside Air Temperature Sensor Installation (Speedometer only)

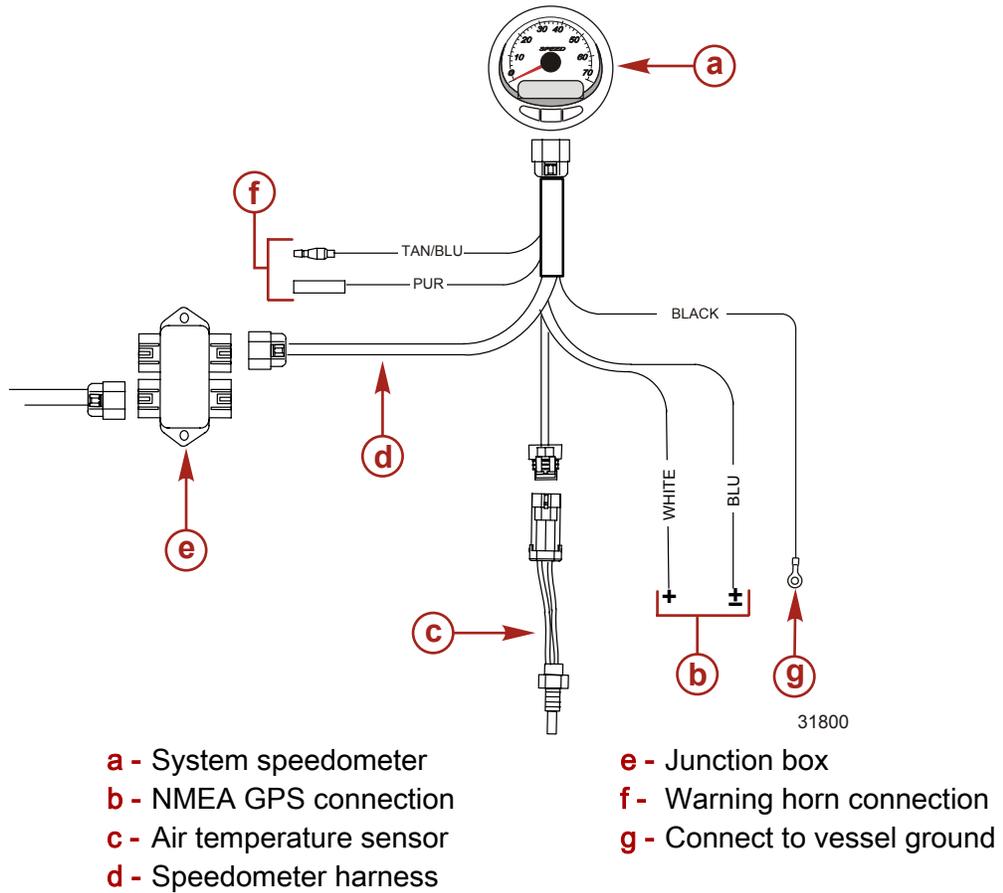
1. Mount the sensor where it will be exposed to outside air and will not be in direct sunlight.
2. Select a location and drill a 19 mm (0.750 in.) mounting hole.
3. Install the mounting adapter.

4. Thread the air temperature sensor into the mounting adapter.



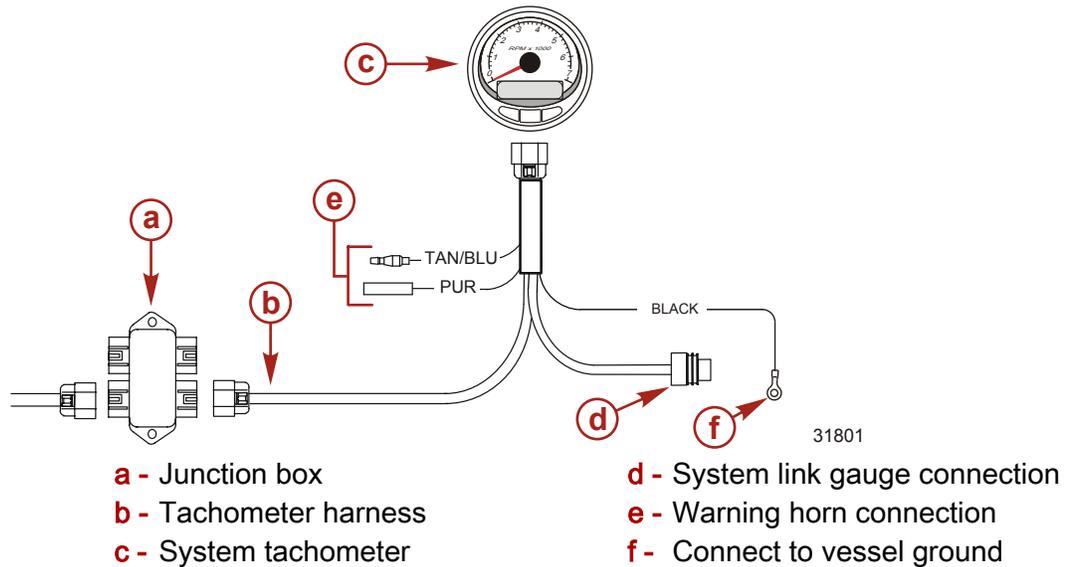
Speedometer Wiring

IMPORTANT: The System Speedometer harness black wire must be connected to the vessel ground and not through the junction box ground.



Tachometer Wiring

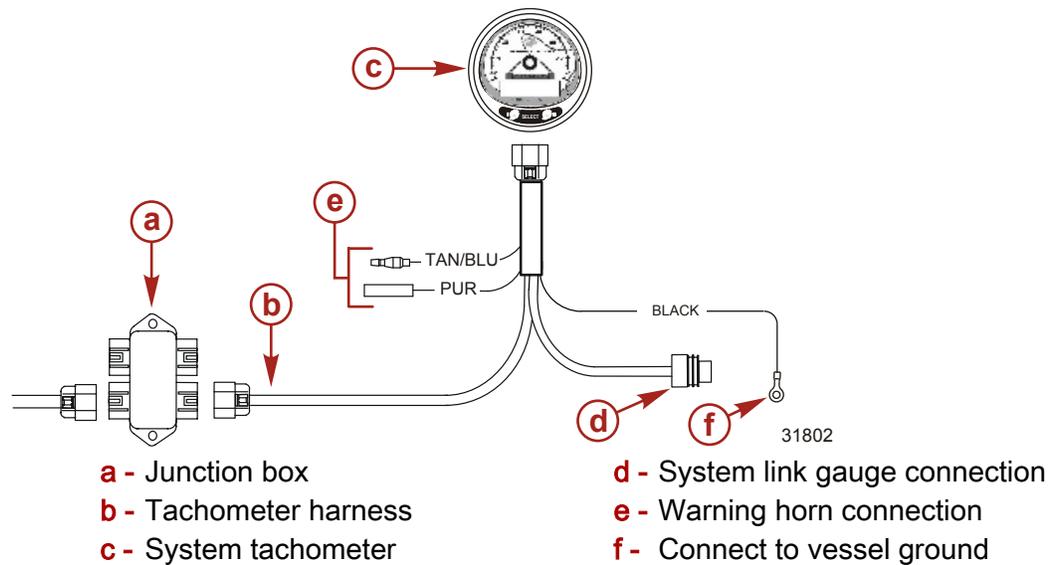
IMPORTANT: The System Tachometer harness black wire must be connected to the vessel ground and not through the junction box ground.



Smart Tow Tachometer Wiring

IMPORTANT: Multiple engine applications using only one Smart Tow Tachometer, must have the Smart Tow Tachometer connected to the starboard engine. Multiple Smart Tow Tachometer applications must have the Smart Tow Tachometers programed for their specific engine location.

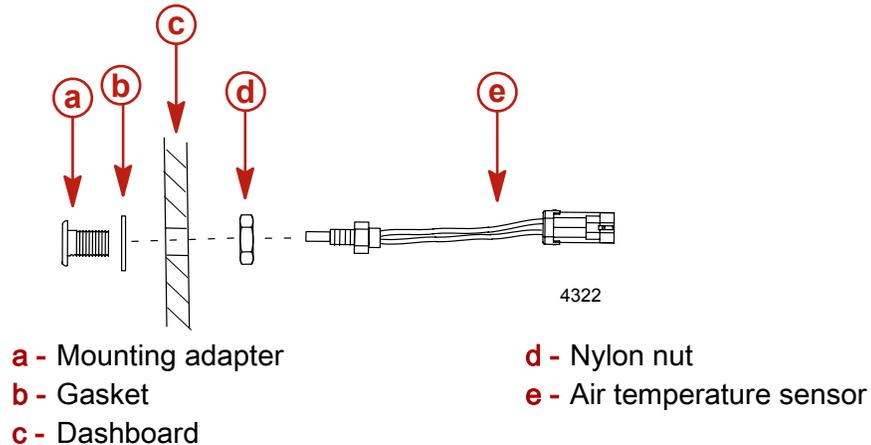
IMPORTANT: The Smart Tow Tachometer harness black wire must be connected to the vessel ground and not through the junction box ground.



Smart Tow Speedometer With GPS Wiring

Outside Air Temperature Sensor Installation

1. Mount the sensor where it will be exposed to outside air and not exposed to direct sunlight.
2. Select a location and drill a 19 mm (0.750 in.) mounting hole.
3. Install the mounting adapter.
4. Thread the air temperature sensor into the mounting adapter.

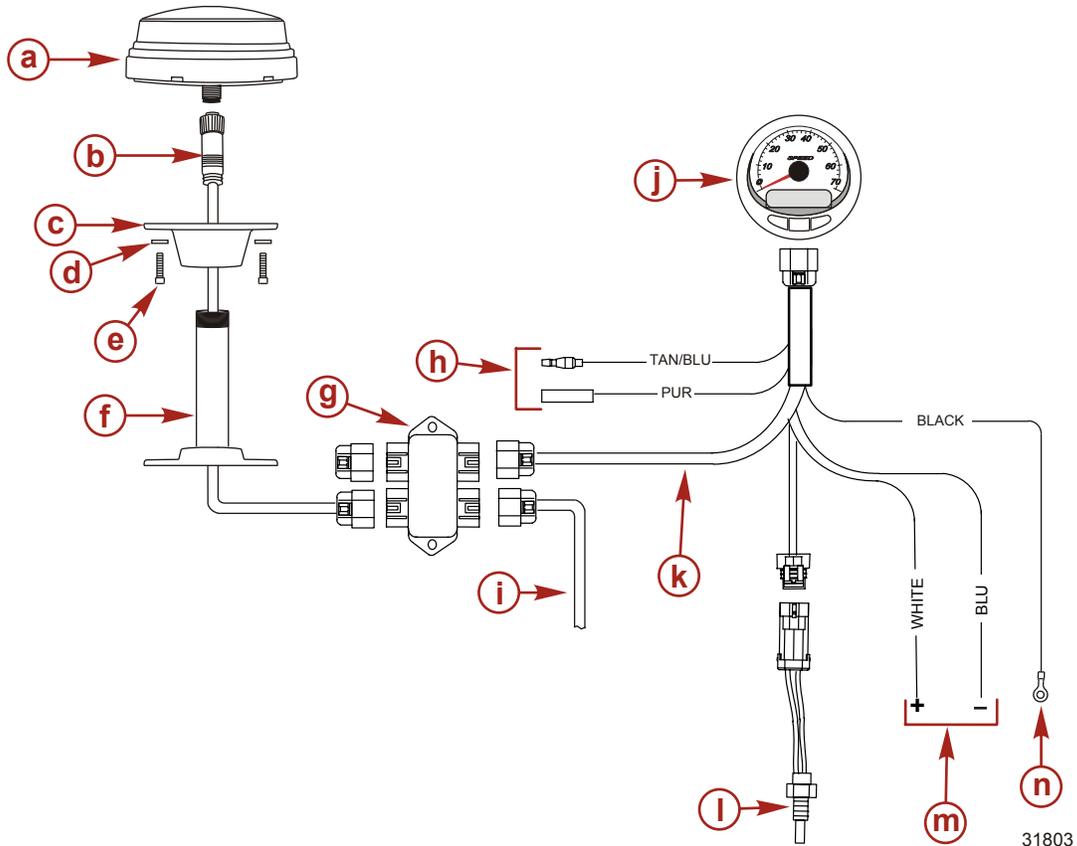


GPS Antenna Installation

1. Connect the antenna harness to the GPS antenna.
2. Mount the GPS antenna in a location with an unobstructed view of the sky. The antenna can be mounted either flush or on a 2.54 cm (1.0 in.) diameter pole.
3. Connect the antenna harness connector to the junction box.

IMPORTANT: Multiple engine applications must have the Smart Tow Speedometer harness connected to the helm harness connector identified with a tag stating "Gauges". When using a GPS antenna, the Smart Tow Speedometer harness and the GPS antenna must be connected to the helm harness connector identified with a tag stating "Gauges" through a junction box. This connection ensures the gauge and the antenna have power when any key is turned on.

IMPORTANT: The System Speedometer harness black wire must be connected to the vessel ground and not through the junction box ground.



- a** - GPS antenna
- b** - Antenna harness
- c** - GPS base
- d** - Lockwasher (3)
- e** - Screw (3)
- f** - Pole mount
- g** - Junction box
- h** - Warning horn connection
- i** - Helm harness connector "Gauges"
- j** - Smart Tow speedometer with GPS
- k** - Speedometer harness
- l** - Air temperature sensor
- m** -NMEA GPS connection
- n** - Connect to vessel ground