# WATER TEMPERATURE GAUGE (100°-240° F) INSTALLATION INSTRUCTIONS

| NOTICE |
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| After completing installation, these instructions should be placed with the product for the owner's future use. |

| NOTICE |
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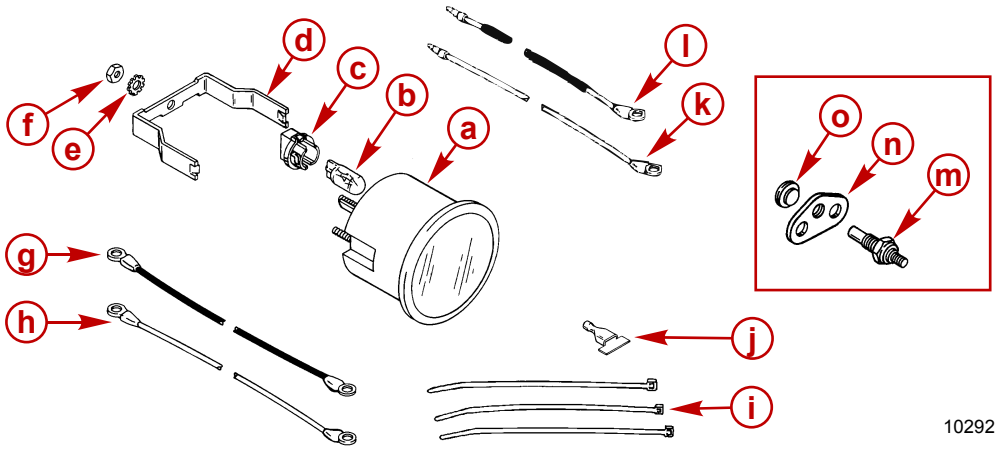
| This document is written to aid our dealers, boatbuilders, and company service personnel in the proper installation or service of our products. Persons who are not familiar with these or similar products produced by Mercury Marine, and who have not been trained in the recommended servicing or installation procedures should 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 the installer or persons operating the product. |

## Components Contained in Kit




| Ref. | Qty. | Description | Part Number |
| --- | --- | --- | --- |
| a | 1 | Gauge - Temperature | N.S.S. |
| b | 1 | Lamp | 88-898139001 |
| c | 1 | Socket | 88-898139 |
| d | 1 | Retaining bracket | 896437008 |
| e | 4 | Lockwasher | 13-23836 |
| f | 4 | Nut (#8-32) | 11-26419 |
| g | 1 | Cable - Black | 84-896437A01 |
| h | 1 | Cable - Purple | 84-896437A03 |
| i | 3 | Cable tie | 54-816311T |
| j | 1 | Terminal - Lamp | 67-851776 |
| k | 1 | Cable - Tan | 84-896437A06 |
| l | 1 | Cable - Tan with sleeve | 84-896437A09 |
| m | - | Sender - Temperature (Must be ordered separately) | 12415 |
| n | - | Cover (Must be ordered separately) | 12419 |
| o | - | Plug - Irridite (Must be ordered separately) | 19-12431T |

# Preparation for Installation

**⚠ CAUTION**

**Always disconnect the battery cables from the battery before working around electrical system components to prevent injury and damage to the electrical system if a wire should accidentally cause a short circuit.**

1. Disconnect battery cables.

***NOTE:*** *The bezel of this gauge has an outside diameter of 62 mm (2-7/16 in.). Choose a gauge location that will ensure clearance between other gauges and instrumentation.*

2. Select a location for gauge that affords good visibility and accessibility from behind dashboard. Ensure that the harness will reach the gauge.

**⚠ 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.**

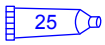
3. Before drilling or cutting, ensure there are no obstructions in the area behind the dashboard.
4. **If the dashboard is fiberglass**, apply masking tape to the area that is to be drilled or cut to help prevent the dashboard from cracking.
5. **If the dashboard is vinyl covered**, remove the vinyl with a razor blade from the area to be drilled or cut, to keep the vinyl from tearing.
6. Cut or drill a 54 mm (2-1/8 in.) hole through dashboard.

# Wire Connections - Water Temperature Gauge

**⚠ CAUTION**

**Avoid electrical short circuits. Position wires on the back of all gauges so that they will not rub or contact the retaining (mounting) bracket when it is installed.**

Before placing gauge in dashboard, connect wires to appropriate terminals using lockwashers and hex nuts. Ensure all connections are secure. Apply sealant to the terminals.

| Tube Ref No. | Description | Where Used | Part No. |
|---|---|---|---|
|   | Liquid Neoprene | Terminals | 92-25711-3 |

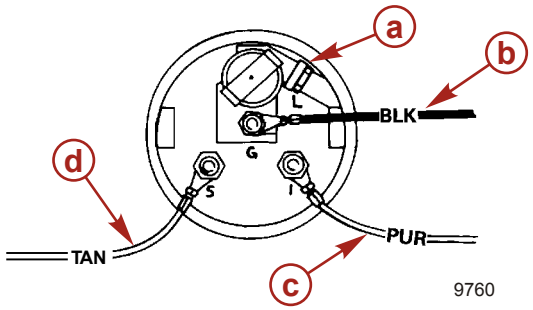
***NOTE:*** *When installing gauge into dashboard, if the dashboard is too thin for retaining bracket to hold gauge securely, connect ground wire to back of retaining bracket using ground terminal stud, lockwasher and hex nut. Tighten nut to specified torque.*

| Description | Nm | lb. in. | lb. ft. |
|---|---|---|---|
| Retaining bracket nut | 1.4 | 12 | |

1. If lighting is desired, use lamp terminal wired in one of the two following ways:
   a. If instrument lighting is desired when the key switch is on, connect a jumper wire from the ignition terminal (purple wire) to the lamp terminal.

b. If using a separate light switch for instrument lighting, connect the lamp terminal to a 12 volt positive (+) switched source.

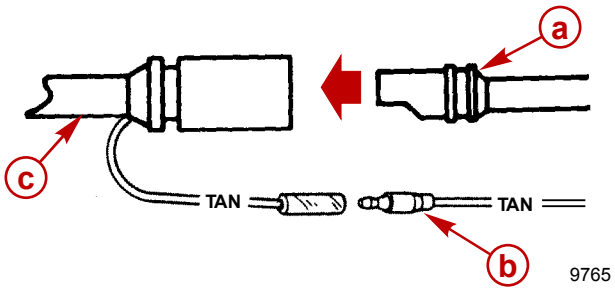
2. Connect tan wire to "S" terminal of temperature gauge.




**a -** Lamp terminal - Connect to +12 volt source
**b -** Black - Ground
**c -** Purple - Connect to ignition terminal of adjacent gauge or +12 volt source
**d -** Tan - Connected to remote control tachometer harness or ignition key switch harness

| Description | Nm | lb. in. | lb. ft. |
|---|---|---|---|
| Gauge terminal nuts | 1.4 | 12 | |

3. Connect tan wire from "S" terminal of the temperature gauge to tan lead on the remote control tachometer harness.




**a -** Tachometer wiring harness from dashboard
**b -** Tan wire from "S" terminal of temperature gauge
**c -** Remote control tachometer harness

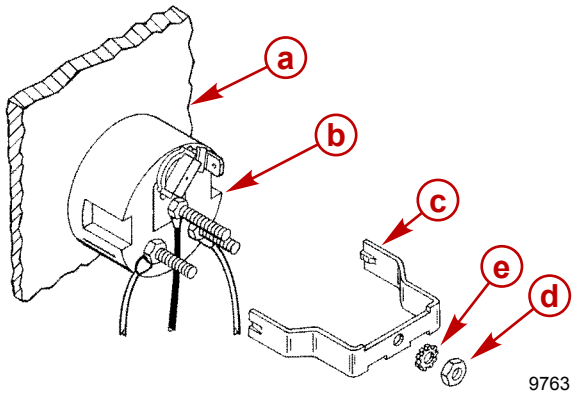
# Installing the Gauge

1. Place the gauge into the dashboard.

***NOTE:*** *On installations where the dashboard is too thick, legs of retaining bracket may have to be shortened to install.*

2. Install the retaining bracket.

3. Install the lockwasher and hex nut. Tighten hex nut to specified torque.

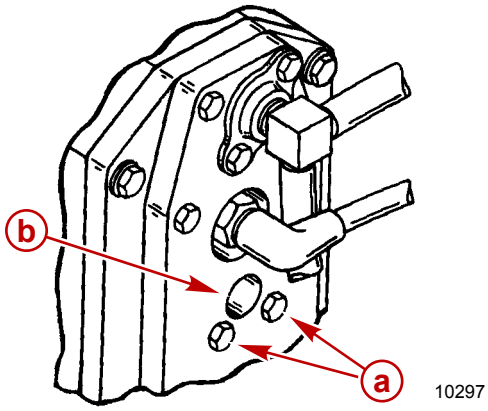



**a -** Dashboard
**b -** Gauge
**c -** Retaining bracket
**d -** Hex nut
**e -** Lockwasher

| Description | Nm | lb. in. | lb. ft. |
|---|---|---|---|
| Retaining bracket hex nut | 1.4 | 12 | |

# Installing Sender (Carbureted and EFI Models)

1. Remove and retain two screws from port cylinder head.

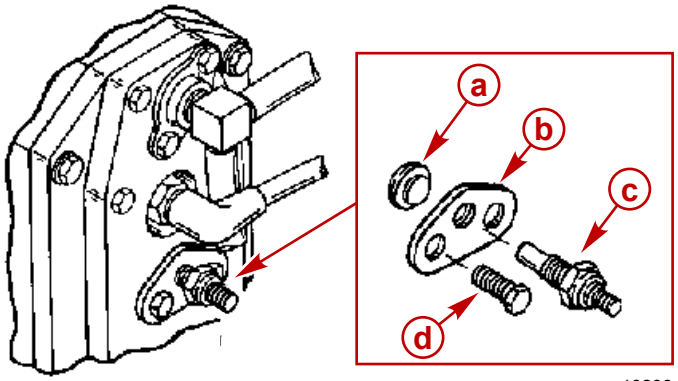



**a -** Mounting screws
**b -** Mounting hole

***NOTE:*** *Clean mounting hole for sender assembly before installation.*

2. Install irridite plug in temperature sender hole.
3. Install cover with two screws. Tighten cover mounting screws to specified torque.

4. Thread sender into cover. Tighten sender to specified torque.




**a -** Irridite plug
**b -** Cover
**c -** Temperature sender
**d -** Mounting screw (2) (Retained)

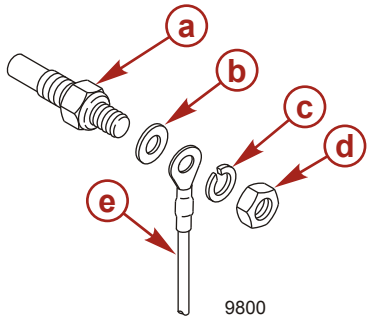
| Description | Nm | lb. in. | lb. ft. |
|---|---|---|---|
| Sender unit mounting screws | 17 | 150 | |
| Temperature sender | 8 | 70 | |

# Installation (Direct Fuel Injection Models)

1. The temperature sender in the starboard cylinder head provides temperature gauge compatible information through the tan lead in the remote control or ignition/choke assembly harness. A new or separate temperature sender is not required for DFI models.

# Wire Connections - Temperature Sender

1. Secure ring terminal end of tan wire with sleeve to temperature sender assembly using the flat washer, lockwasher, and hex nut supplied with sender. Apply sealant to connection.



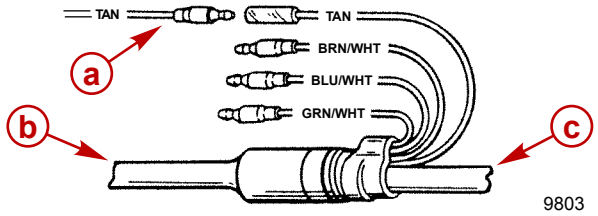

**a -** Temperature sender
**b -** Flat washer
**c -** Lockwasher
**d -** Hex nut
**e -** Tan wire with sleeve connected to tan wire of remote control harness or ignition key harness

| Tube Ref No. | Description | Where Used | Part No. |
|---|---|---|---|
| 25 | Liquid Neoprene | Temperature sender terminal | 92-25711-3 |

**⚠ CAUTION**

**Route and secure harness away from moving or hot parts which can damage wire insulation.**

2. Route tan wire with sleeve to engine/remote control harness, avoiding hot or moving engine components.
3. Connect bullet plug on end of tan wire with sleeve to tan lead of engine/remote control harness or ignition key harness.



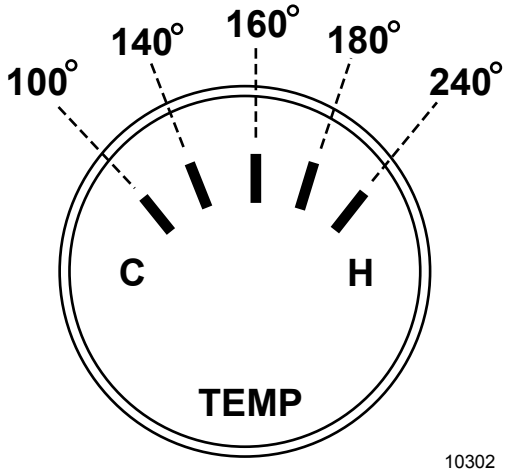

**a -** Tan wire with sleeve from temperature sender

**b -** Engine harness

**c -** Remote control or ignition key harness

## Gauge Operation (All Models)

1. The normal engine operating temperature reading on the gauge should be approximately at the 3/4 scale mark. However, the normal scale reading on tour gauge may differ slightly because of various ambient temperatures. Temperature equivalents for gauges without numeral are as follows:




## Gauge Maintenance

Maintenance inspection is the owner's responsibility and must be performed at intervals as specified.

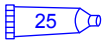
Normal Service - Every 50 hours of operation or 60 days (whichever comes first).

Severe Service - Every 25 hours of operation of 30 days (whichever comes first).

***NOTE:*** *Saltwater area operation is considered severe service.*

1. Check the gauge for adequate tightness in the dashboard and retighten the retaining nut if necessary.
2. Check sender assembly for adequate tightness in cylinder head and retighten if necessary.

3. Check the electrical connections. Tighten and apply sealant to the terminals, if needed.

| Tube Ref No. | Description | Where Used | Part No. |
|---|---|---|---|
|   | Liquid Neoprene | Terminals | 92-25711-3 |

4. Clean the gauge by washing with fresh water to remove sand and salt deposits. Wipe off with a soft cloth moistened with water. The gauge may be scored or damaged if wiped with abrasive material (sand, saline or detergent compounds, and so on) or washed with solvents such as trichlorethylene, turpentine or similar.

**Products of Mercury Marine**
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