

# INSTALLATION INSTRUCTIONS

Description: **Speedometer**

Part Number: **990C0-80002/80102**

Applications: **Suzuki Marine Boats**

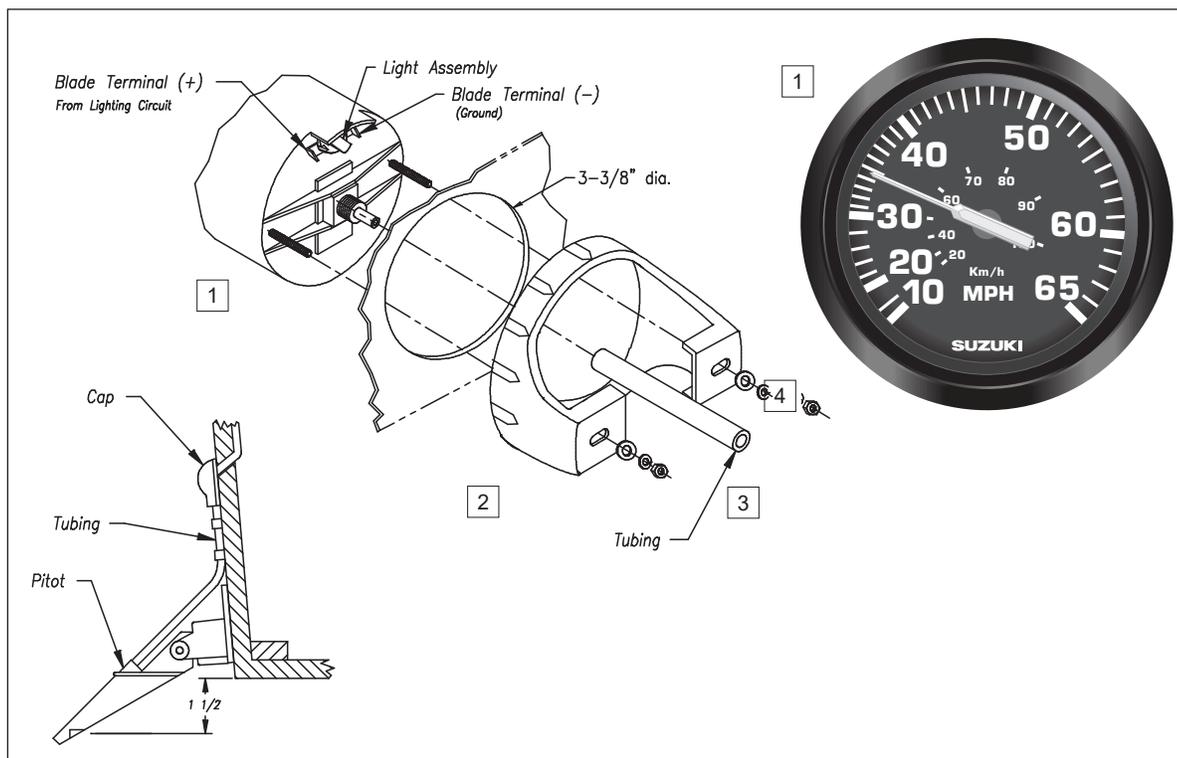
Installation Time: **1 HRS**

NOTE: **Mounts in standard 3 3/8" hole.**

Weight: **1 lbs**

## Contents

Ref.	Part Number	Description	QTY
1.	990C0-80002/80102	Speedometer	1
2.	BC0075	Mounting Bracket	1
3.	990C0-80009	Pitot Tubing 15'	1
4.	Mounting Hardware		1



## Tools Required

Ref.	Tools Description
1.	3/8" Nut Driver
2.	Suzuki Terminal Kit 09900-28701



## Important

- ⚠ WARNING**
- ⚠ CAUTION**
- NOTE**

Please read this manual and follow its instructions carefully. To emphasize special information, the symbol **⚠** and the words **WARNING, CAUTION** and **NOTE** have special meanings. Pay special attention to the messages highlighted by these signal words:  
**NOTE:** Indicates special information to make maintenance easier or instructions clear.

### ⚠ WARNING

Indicates potential hazard that could result in death or injury.

### ⚠ CAUTION

Indicates potential hazard that could result in vehicle damage.



## CAUTION

- Disconnect battery during installation.
- Tighten nuts on backclamp only slightly more than you can tighten with your fingers. Six inch-pounds of torque is sufficient. Over tightening may result in damage to the instrument and may void your warranty.
- Gasket cement or other adhesive is not required to secure tubing to fittings.

## Preparation Prior to Installation

## Installation

1. Be certain to use stranded, insulated wire not lighter than 18 AWG that is approved for marine use. It is recommended that 1/4" insulated blade terminals be used on lighting connections to the instrument.

2. It is recommended that you use the included color coded wire extension leads.

3. Locate and install the pitot tube assembly on the transom in a vertical position, at least 6' away from the propeller blade tips. The intake hole must also be 1-1/2" or more below the bottom of the hull. Do not place behind any runner or keel as this will affect it's accuracy. **SOME ENGINE MODELS HAVE INTEGRAL PITOT TUBES IN THE GEARCASE WITH HOSE CONNECTIONS AT THE FRONT OF THE ENGINE.**

4. Locate a convenient place above the water line to bring the tubing through. Drill a 1/4" hole at this location and pull the tubing through. Use a marine sealer on the cap plate and draw the plate tight against the transom using the screws provided. Press the tubing fully onto the male fitting on the pitot assembly. Gasket cement or other adhesive is not required to secure tubing to fittings.

5. Run the tubing along the inside of the boat's gunwale. Avoid sharp turns, crimping, kinking, or other forces that may reduce the inside diameter of the tubing. Fasten the tubing at regular intervals with small plastic clips supplied (again be careful to not pinch the tubing). A slight downward slope from bow to stern will help avoid trapping water. Do not coil any excess tubing as it should be cut to the desired length.

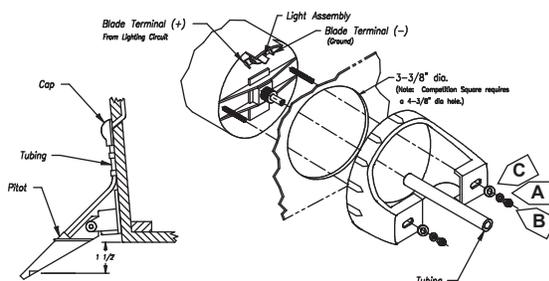
6. Cut a 3-3/8" dia hole in the dash and mount the speedometer with the backclamp supplied.

7. After installing the speedometer in the dash, cut tubing (leave a small amount of slack) and press fully onto male fitting on the back of the speedometer.

### Mounting Hardware Kit

<b>A</b>		<b>x 2</b>
<b>B</b>		<b>x 2</b>
<b>C</b>		<b>x 2</b>

Figure 1



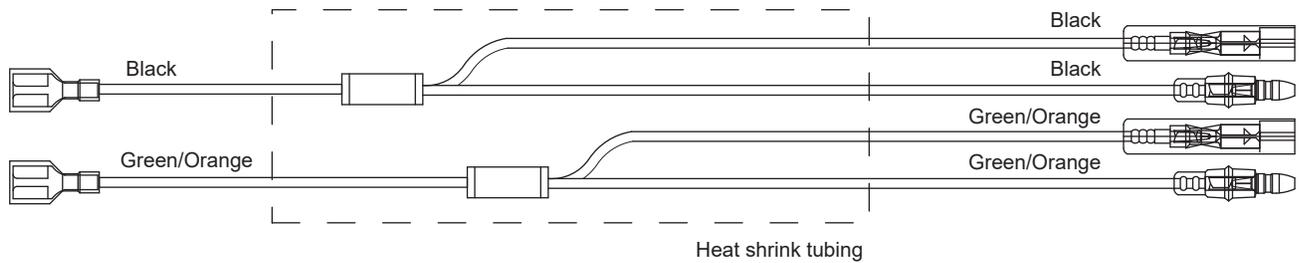
8. Connect the GREEN/ORANGE extension lead to the blade terminal adjacent to the twist-out light assembly to the positive "+" side of the instrument lighting circuit and the bullet end to the boat lighting circuit. Connect the BLACK extension lead to the negative (-) side of the instrument lighting circuit and the bullet end to the boats electrical ground (-).

9. Reconnect the battery.

**NOTE:** To change the light bulb, twist out black socket assembly one-eighth turn counter-clockwise until it pops out. Bulb pulls straight out of assembly. It is a GE No. 194 instrument lamp.

# Harness Diagram

HN0415 rev A ecr 5609 8/05



# Trouble Shooting

Trouble	Inspection	Diagnosis	Action
Speedometer does not register or sticks during operation.	A. Backclamp may be too tight.	1. Slightly loosen nuts holding backclamp. Check operation.	1. If gauge works and is not loose in panel, continue using gauge.
	B. Check pitot tubing for sharp bends or kinks.	1. Check pitot tubing for sharp bends or kinks. Be sure water can flow freely in tube.	2. If gauge continues to stick, check pitot tubing.  1. Repair leaks or kinks. If gauge works, continue using gauge.
	C. Check for breaks in the tubing and loose connections at the pitot tube and the back of speedometer.	1. If loose connections are apparent, remove tubing from the connected piece and cut back approximately 1/2 inch and reattach.	2. If gauge continues to be inoperative, replace gauge.  1. If gauge continues to be inoperative, replace gauge.

**NOTE:** Compressed air at NOT MORE THAN 20 PSI may be used to check speedometer movement for free operation. This is equivalent of approximately 40 MPH. Due to variation in air gauge this is not a valid test for accuracy.

# Maintenance /Care

1. The pitot tube should be flushed with fresh water before storing the boat for prolonged periods.
2. Any remaining water in the rubber hose should also be removed before storing the boat for prolonged periods.
3. Clean the rubber hose with a stiff wire or blow air through it.
4. Flush and clean the pitot tube with fresh water. If necessary, clean the pitot tube opening with a stiff brush.
5. Reconnect the rubber hose to the speedometer and secure with a new cable tie.
6. Reconnect the rubber hose to the pitot tube nipple end and secure with a new cable tie.

