



# STENTEN'S INSTRUCTIONS



## Installation Instructions

SSY2K2

Speedometer

Stenten's Speedometer



### General

The following provides installation instructions for the SSY2K2 speedometer system. The SSY2K2 system has been designed to fit most golf cart applications.

### Installation Steps

The installation procedure in this document has five main steps:

1. Installing the console.
2. Installing the wiring harness.
3. Installing the sensor and wheel hub.
4. Power connection and power up.
5. Calibration of the system.

### Warnings and Notices

The installation procedure uses Warnings and Notices to indicate additional information, special emphasis and possible damage to equipment, if the indicated warning/notices are not followed.

### Installation Notes

1. It is important that you complete all installation steps before operating the system.
2. These instructions are intended as a guide to installation. In some instances, due to variations in cart manufacture, it may be necessary to route the wiring harness differently for a correct fit. These operations must follow sound, standard shop practices.
3. Left and right definitions in this document are determined when sitting in the driver's seat, facing forward.

### Ordering Parts

To order parts contact Stenten's at:

Telephone: (941) 378-3993

Fax: (941) 378-3401

E-mail: [Stentens@aol.com](mailto:Stentens@aol.com)



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## Warranty

The Stenten's warranty form is enclosed in this documentation package. The warranty form must be completed and mailed or faxed to Stenten's at the time of installation for any subsequent warranty claim to be considered valid.

## System Identification Plate

the System Identification Plate is located on the back of the console unit. This plate provides information, which allows Stenten's to assist in customer inquiries and support.

## Changes and Improvements

These products and documents are subject to changes or improvements, without notice.

## Tools Required

- Tape Measure and Pencil
- Drill
- $\frac{1}{8}$ " and  $\frac{3}{4}$ " Drill Bits
- Flathead Screwdriver
- $\frac{1}{2}$ " Wrench (13 mm) for battery terminals
- $\frac{9}{16}$ " Wrench (14 mm) EZGO only – sensor clamp
- Wheel lug wrench and jack



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## Part 1 Installing the Console

1. Remove the windshield, if applicable.
2. Locate the console bracket in the desired location, behind the molding situated around the edge of the cowling. Orientate the bracket so the legs are angled back and the console is facing the driver.
3. Mark the location of the two holes in the bracket onto the cowling of the cart.
4. Mark a location 2 inches forward of the bracket, central to the bracket. This will be the wiring harness.
5. Drill the two holes with a 1/8 inch drill bit.
6. Drill the forward hole location with a 3/4 inch drill bit.
7. Position the bracket, and secure with the two pan head slotted self tapping screws.
8. If the console has been removed from the bracket for installation purposes, remount the console in the bracket.
9. Position the console between the legs of the bracket with the two button socket head screws.
10. Secure the console in position between the legs of the bracket with the two button socket head screws.
11. Console should now be mounted as pictured below; see Figure 1.

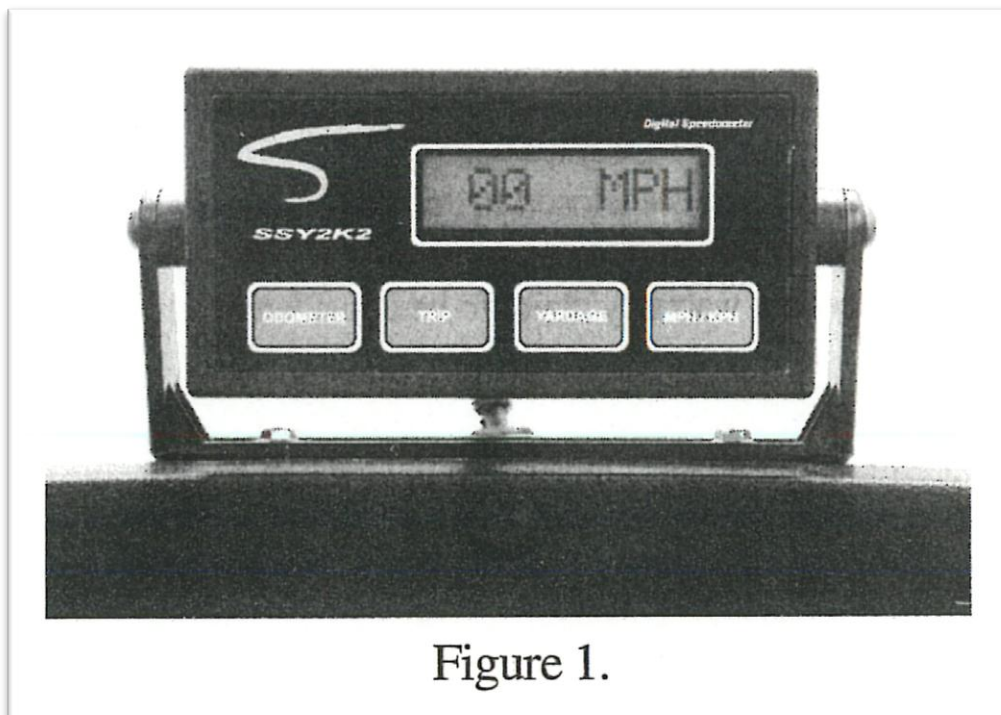
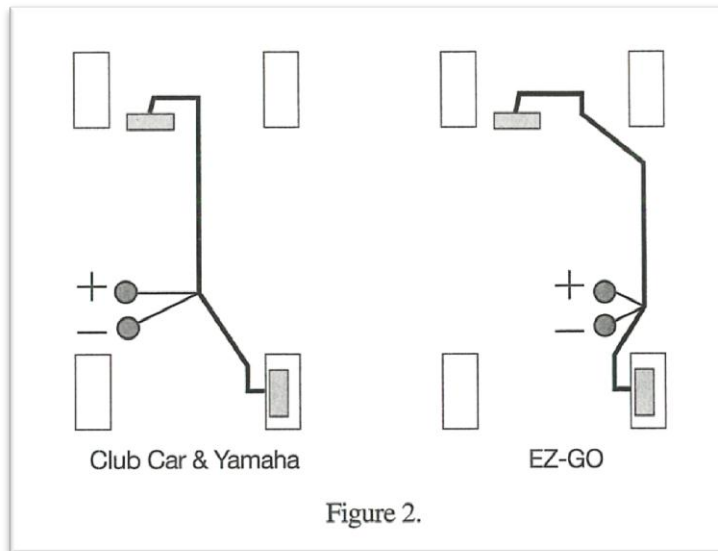


Figure 1.

## Part 2 Installing the Wiring Harness

The following diagrams are a *guide* to the routing of the Wiring Harness on electric vehicles; Figure 2.



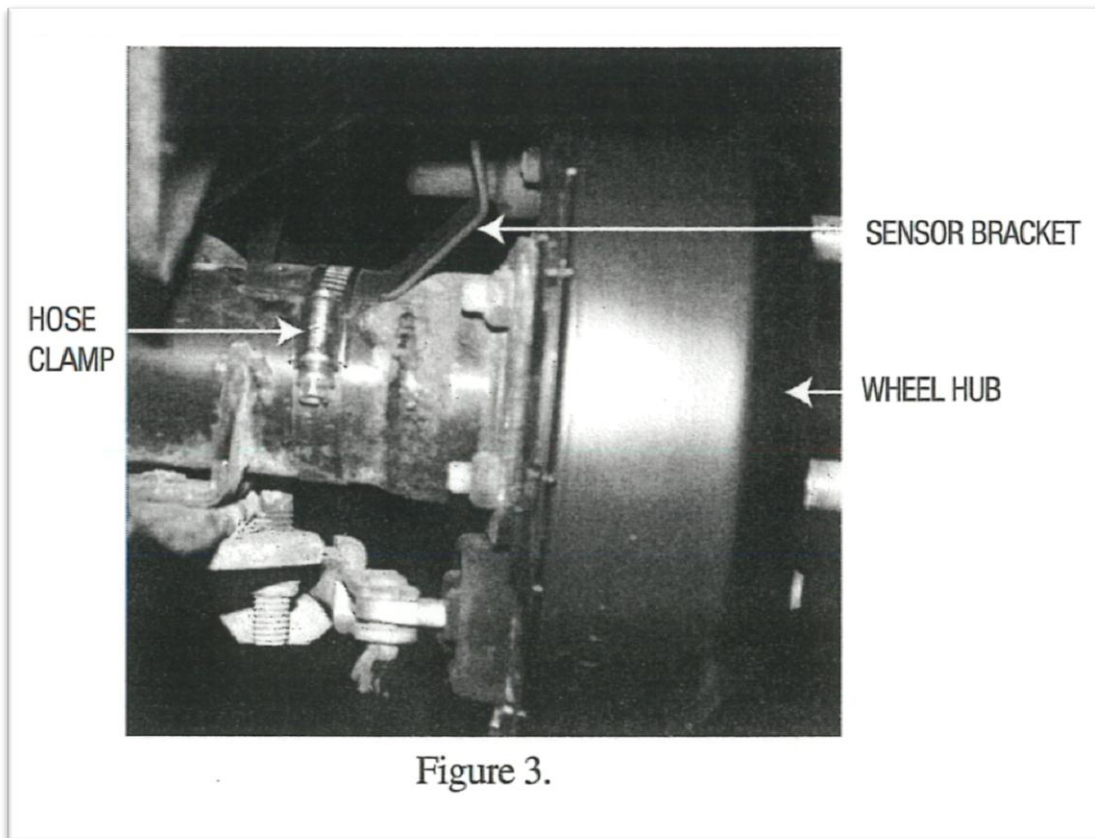
1. Feed the sensor end of the wiring harness through the  $\frac{3}{4}$  inch hole in the cowling. Continue feeding the cable through until the battery lead connectors in the center of the wiring harness reach the hole.  
**NOTICE:** On EZ-GO carts, the cover, which is located under the cowling in front of the steering system, must be removed. It is held in place by two screws and two press fit pins. Remove these fasteners and remove the cover.
2. Locate the sensor end of the wiring harness and follow the cart's **OEM wiring harness** under the cart.
3. Feed the battery lead connectors through the  $\frac{3}{4}$  inch hole, then feed the remaining portion of the wiring harness through the hole until the rubber grommet is at the hole.
4. Insert the rubber grommet into the  $\frac{3}{4}$  inch hole until correctly seated.  
**WARNING: Do Not** connect the wiring harness plug into the socket in the back of the console at this time.
5. Take up the slack in the wiring harness on the underside of the cart, route towards the rear of the cart following the OEM wiring harness. Tie wrap the SSY2K2 wiring harness to the OEM wiring harness.
6. The battery lead connectors on the wiring harness should be positioned at the front of the battery or engine compartment.
7. Route the remaining section of the wiring harness (sensor end) to the right hand (passenger) side rear wheel.  
**NOTICE:** Check that the harness is securely fastened in position with tie wraps.



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## Part 3 Installing the Sensor and Wheel Hub

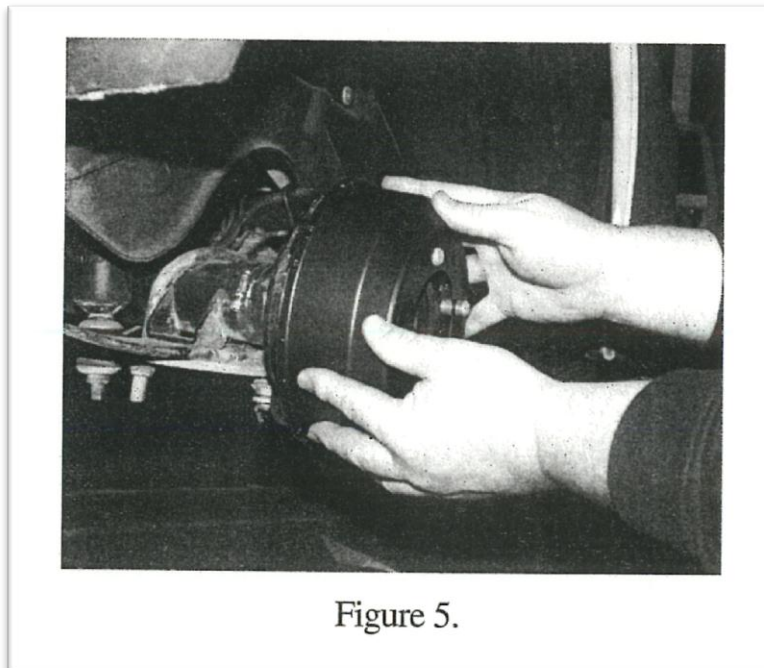
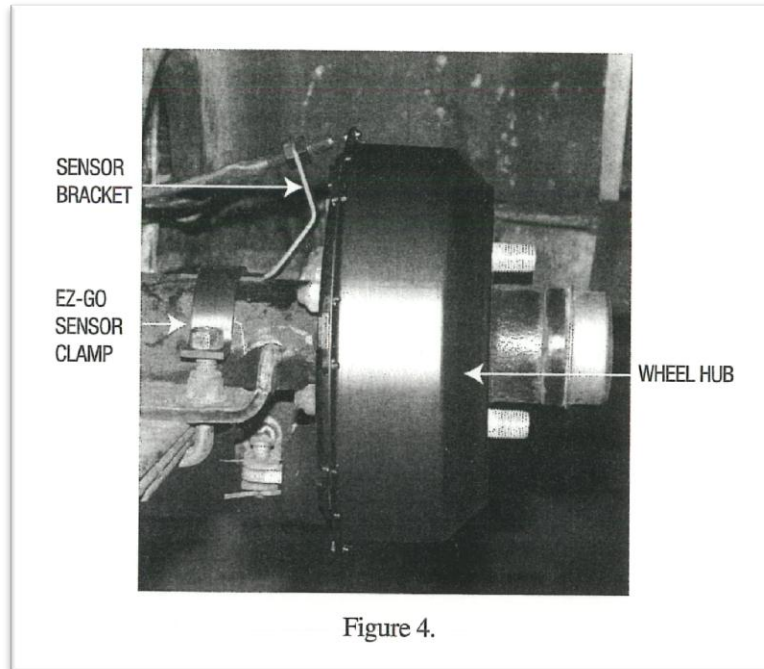
1. Raise the cart and remove the right side (passenger) rear wheel.
2. Clean any debris from the wheel rim, brake drum, backing plate and axle.
3. Locate the sensor end of the wiring harness.
4. Remove one nut from sensor.
5. Turn the remaining nut on the sensor to a location half way down the threads.
6. Feed the sensor through the hole of the sensor bracket.
7. Thread the removed nut back onto the sensor so that the sensor bracket is sandwiched between the two nuts. Finger tight only at this time.
8. Position the sensor bracket on the top of the axle with the sensor pointing towards the brake drum.
- NOTE: If an OEM brake adjuster is located in this orientation, rotate the sensor bracket around the axle until the sensor clears the adjuster.
9. Secure the sensor bracket with the hose clamp. Wrap the hose clamp around the axle and over the sensor bracket. Tighten the hose clamp until secure. (See Figure 3)





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NOTICE: EZ-GO does not use the hose clamp to secure the sensor bracket. Use the sensor clamp and the two  $\frac{3}{8}$  inch nuts which thread onto the axle studs, to secure the sensor bracket. Use the same orientation as noted in step 8, Part 3. (See Figure 4)





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10. Place the Wheel hub over the existing brake drum and slide onto the wheel studs until fully seated. (See Figure 5)
11. Adjust the sensor so that it is approximately  $\frac{3}{8}$ " away from the black magnet holders on the SSY2K2 wheel hub. Tighten the nuts.  
**WARNING: Do Not** extended the sensor closer than this as it could come into contact with rotating parts.
12. Install the wheel onto the cart and secure with the four lug nuts.
13. Rotate the wheel 'by hand' to verify that the sensor end is located  $\frac{3}{8}$ " from the black magnet holders on the SSY2K2 wheel hub. This could have changed with the installation of the wheel. Adjust the sensor if necessary.

## Part 4 Power Connection and Power Up

1. Locate the positive fused power lead (Red) and negative lead (Black) on the wiring harness.
2. Connect the leads to the appropriate batteries. Refer to the following:

Gas Carts	12 VDC
- Connect to positive and negative on 1 – 12 VDC battery = 12 VDC.	
Electric Carts	36 VDC
- Connect to positive and negative on 2 – 6 VDC battery = 12 VDC.	
Electric Carts	48 VDC
- Connect to positive and negative on 2 – 8 VDC battery = 16 VDC.	

3. Secure loose cabling.
4. Check for correct voltage on pins 1 (positive) and 4 (negative) at the plug on the wiring harness, console end.
5. Connect the plug into the socket on the back of the console and secure with ring nut.
6. System will power up and run through the initial start up sequence and then display "00 MPH" after a few seconds.
7. Install windshield.



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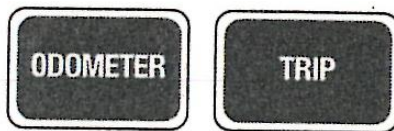
## Part 5 Calibration of the System

### 5 A – Wheel Calibration Setting

The setting for the Wheel calibration is preset from the factory at 57.00 inches, a nominal setting for tire size 205/50-10. This calibration value can be adjusted by using the following procedure:

The SSY2K2 system calibration is based on the circumference of a correctly inflated tire, which is being used on the vehicle the system is to be installed on. The recommended method for calibration is as follows:

- Mark a vertical line on the tire and transfer this line to the pavement (Line 1).
- Move the vehicle ahead one (1) complete rotation so the line is once again completely vertical. Make a mark on the pavement where the line touches. (Line 2).
- Measure the distance between the first line (Line 1) and the second line (Line 2).
- When the measurement is attained (example 56.25 inches) input this measurement into the SSY2K2 system, using the following procedure.



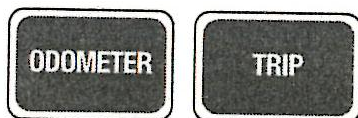
Press and release both ODOMETER and TRIP buttons simultaneously; activates the WHEEL calibration for the SSY2K2 system.



Press and release the YARDAGE button to increase the value of the calibration by a value of .01. To increase the value by .1, press and hold the YARDAGE button.



Press and release the MPH/KPH button to decrease the value of the calibration by a value of .01. To decrease the value by .1, press and hold the MPH/KPH button.



Press and release both ODOMETER and TRIP buttons simultaneously; sets and stores the WHEEL calibration into the SSY2K2 system. The display will return to the default display of 00 MPH or 00 KPH.



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## 5 B – Speed Alarm Setting

The setting for the Speed Alarm is preset from the factory for 18 MPH (30 KPH). The speed alarm can be set from 01 MPH to 37 MPH.



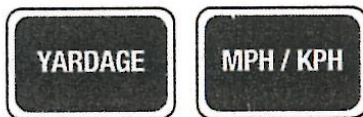
Press and release both YARDAGE and MPH/KPH simultaneously. This activates the ALARM calibration functions.



Press ODOMETER to increase (+) of speed ALARM setting.



Press TRIP to decrease (-) of speed ALARM setting.



Press and release both YARDAGE and MPH/KPH simultaneously; sets and stores the Speed Alarm setting. The display will return to the default display of 00 MPH or 00 KPH.