



**ST978**

**STEERING SENSOR INTERFACE**

**USER INFORMATION**

**(ST541102-001)**

## INSTALLATION

It is essential to ensure that these sensors are **NOT** mounted in a position, which is close to any devices, or associated wiring, similar to the following:

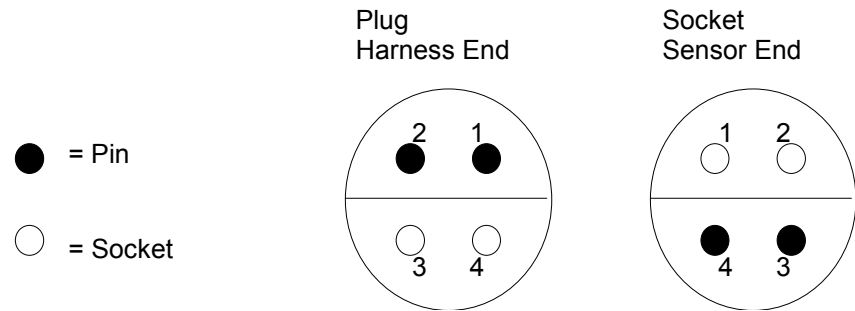
Suggested Wiring Clearances	Min space ST978
Ignition HT & coil leads	100mm (4")
Radio transmitters	75mm (3")
Fast switching inductive loads like fuel injectors, hydraulic solenoids.	75mm (3")
Any powerful source of heat	Shield with reflective material

### Sensor Connections

The ST978 connects into the ST900 system CPU via a four way, ITT Cannon Mini Sure Seal (MSS) connector. Ensure the following when installing the sensor:

- . Bending loads are not applied to the mini-sure seal connectors.
- . The Sensor wires must not be routed over sharp edges.
- . Tight radius bends should be avoided.

The following polarity is observed:



These terminals must be connected to the corresponding terminals of the selected input channel.

Pin Number	Signal Description
1	Signal from sensor
2	+5V Supply
3	No connection
4	0v

The steering sensor should be mounted parallel to the steering column. Failure to align the sensor accurately will cause the 'O' ring to creep & the resulting reading to drift. The small 'O' ring supplied can be used as a 'Tyre' on the pulley, or the large 'O' ring should be looped over a clean section of the column & the sensor pulley. If the 'O' ring slips on the steering column then loop the 'O' ring around the column twice to give it more grip.

The 'O' ring should be under sufficient tension to keep the unsupported sections straight. Any greater tension will cause the sensor to fail prematurely.

## TECHNICAL SPECIFICATION

	<b>ST978</b>
Electrical Rotation	340 +/- 4 Deg
Mechanical “	360 Deg Continuous
Resolution	> 0.1 Deg
Accuracy	1.0%
Accuracy/Temp	2.0%
Output Resistance	0 to 5K Ohms
Working Temp	-20 to +80 Deg C
Vibration	20G, 50 to 2000 Hz, 1 Octave / min, 12 Hours
Humidity	0 to 95% Non-condensing
Immersion	IP67
Shaft	3.17mm Dia 10mm long
Dimensions (mm)	L24 x Dia23
Pulley	Dia 25.4mm x 1/8th
Weight	30 Grams

