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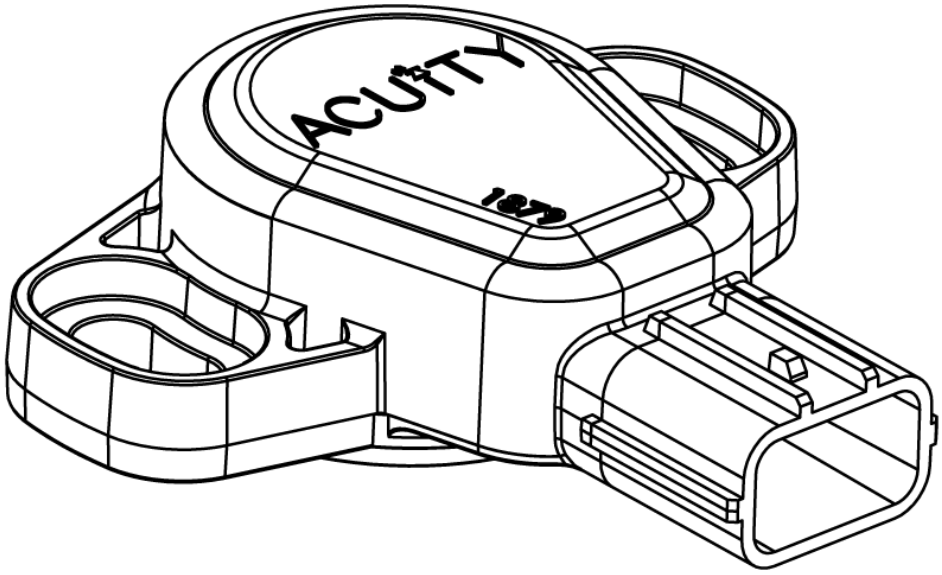


1879-A Throttle Position Sensor

Data Sheet

Applications:
2002-2006 Acura RSX Type S
2002-2005 Honda Civic Si
2002-2006 JDM Honda Integra Type R

Rev 1.3

1879-A Throttle Position Sensor

1 General Description

The 1879-A Throttle Position Sensor (TPS) was designed to be a “plug and play” upgrade over the factory TPS for the Acura RSX Type S (2002-2006), Honda Civic Si (2002-2005), and JDM Honda Integra Type R (2002-2006). The 1879-A uses an integral hall-effect circuit to monitor throttle position and provide a ratio metric voltage output. The hall-effect architecture and internal damping provide the 1879-A TPS with improved reliability and signal stability over the OEM throttle positions sensors it replaces.

Installation instructions are available at www.acuityinstruments.com/1879-A_Install

Key Features

- Hall-Effect design eliminates output instability common to OEM design
- Contactless sensing provides improved reliability
- Integral elastomer seal eliminates the need for a paper gasket
- Designed to provide a 0.48VDC-4.50VDC output after calibrating during installation.
- Tin-plated, rolled pins are stiffer than OEM and aftermarket pins, providing improved fitment during installation.
- Each sensor is provided with zinc-plated SEMS mounting screws.

TOP VIEW

BOTTOM VIEW

3 Contents

4 Specifications

4.1 Electrical Specifications

Operating Input Voltage Range	4.8 VDC to 5.0 VDC
Supply Voltage Absolute Limits	-18 VDC to 27 VDC
Resolution	0.005 VDC (0.1deg)
Supply Current	30mA Typical
Electrostatic Discharge	+/- 4kV
Actual Electrical Travel	95 deg
Nonlinearity	0.07 VDC Max

4.2 Mechanical Specifications

Total Mechanical Travel	95 deg
Weight	28g (Compare to OEM at 42g)
Static Stop Strength	72 oz-in
Operating Temperature Range	-20C to 130C
Mounting Screw Driver Size	#2 Phillips
Mounting Screw Tightening Torque	3 N-m (2.2 ft-lbs)
Mechanical Calibration Range	+/- 3 degrees minimum

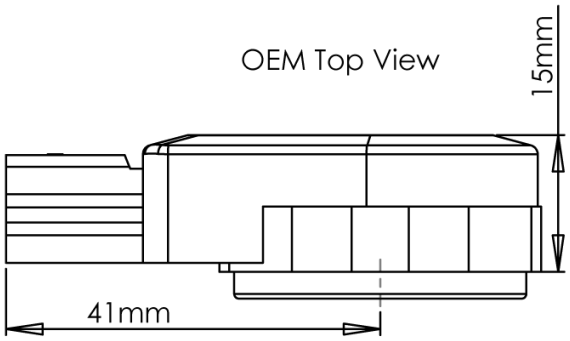
5 Troubleshooting

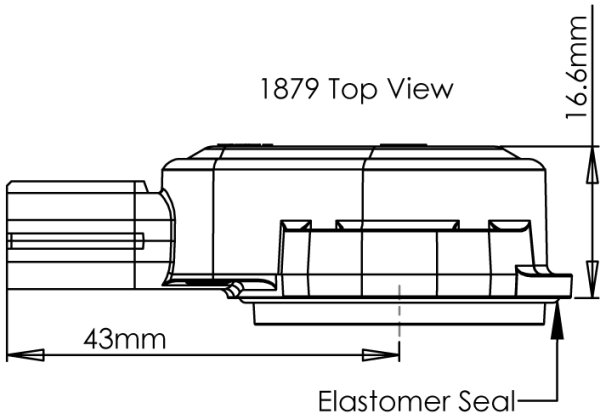
Problem: Loss of signal from sensor
Solution: Check "GND" pin for continuity with chassis ground. Also check for 5 VDC at "+5 VDC" pin

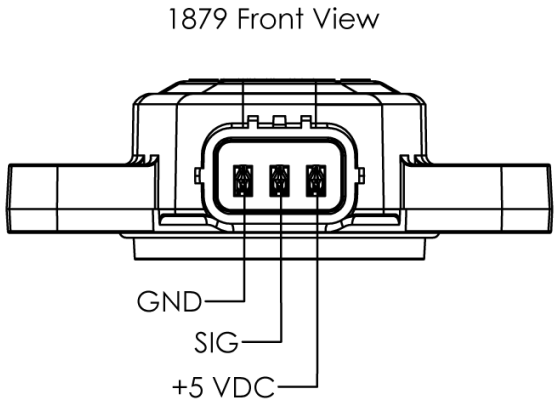
Problem: Output voltage during closed throttle event is lower than when it was calibrated
Solution: Check M5 mounting bolts for proper torque (see section 4.2 for torque value)

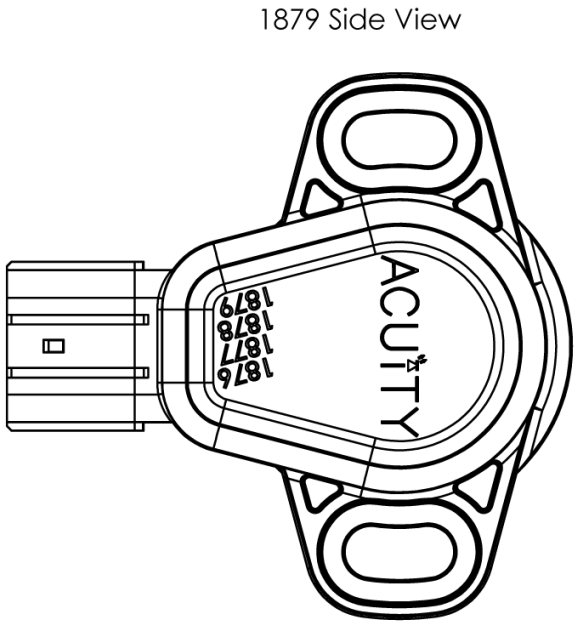
Problem: Slight stumbling during acceleration
Solution: Sensor is probably not calibrated correctly. See installation guide for proper calibration instructions.

6 Engineering Drawing





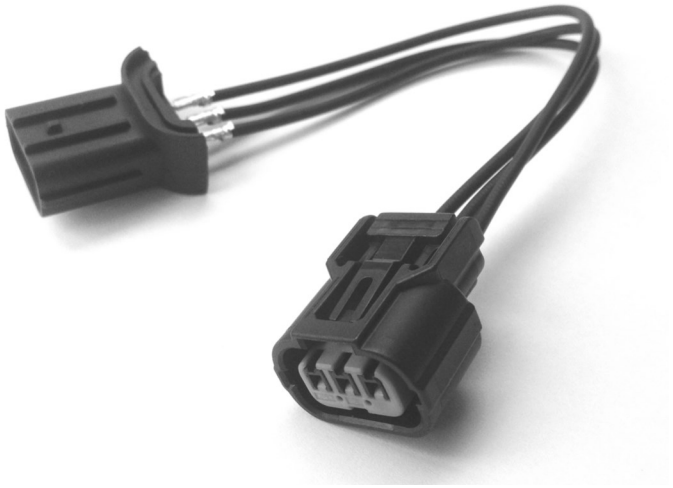




7 Related Tools

7.1 TPS Calibration Jumper Harness (Part #: 1875-A)

The 1878-A throttle position sensor is compatible with the 1875-A jumper harness. The harness measures about 6in (150mm) long and can be plugged in between the TPS and engine wiring harness. The exposed pins on the male connector provide contact points for measuring voltage during TPS calibration. This allows the mechanic to calibrate the TPS without damaging the vehicle's wiring harness using pins or wire taps to cut into the signal and ground wires. The harness is pictured below and is available through acuityinstruments.com and any official ACUITY



1875 Calibration Jumper Harness

8 Revision History

Rev 1.3
Date: June 13, 2015
Change: “Related Tools” section added

Rev 1.2
Date: June 11, 2015
Change: Added information to Troubleshooting section

Rev 1.1
Date: June 7, 2015
Change: Typo correction in “Contents” section

Rev 1.0
Date: June 5, 2015
Change: Original Document Published