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Linear Pot Sensor Installation and Calibration

Corsa part #: LS1.5 Nominal range: 1.5 inches

Nominal scale: 2730.7 mv / inch

This spring-loaded linear pot can be very convenient for measuring motion of throttle linkage or other moving parts. It can be used for suspension motion, as long as you make sure the sensor will never bottom out.

Installation:

- The body of the sensor can be glued to a flat surface, and/or attached with small screws in the notches provided. Glue or foam tape and a tie-strap is another possibility.
- The plunger should be positioned against a flat spot on the moving object or linkage. It's best if the spot is perpendicular to the plunger, and not moving sideways too much relative to the plunger, to reduce side loading.
- Make sure the sensor is mounted so that it never comes against the internal stop in compression. The sensor will be destroyed if you "bottom it out" with any force.
- Where possible, mount the sensor so the moving rod faces down or back, to reduce water and dust getting into the unit.

Hookup:

• For most uses, use Analog Port A, B, or C with the linear pots. These ports have the appropriate lowpass filter for measuring body and suspension motion in most applications. Only use port D for linear pots if you are sampling the sensor 50 times a second or faster, as for shock speed measurement.

Configuration:

In many cases the best procedure is to move the mechanism to two known points (for instance, two different ride heights, or full throttle and zero throttle) and read the sensor output. There is an example in the Corsa manual for doing this to measure steering position. Otherwise, you can enter the value shown at the top of this page, and the readout will be in inches.