NAPA® Echlin® YAW Rate Sensors

What does a Yaw Rate Sensor do?

A Yaw Rate Sensor (or rotational speed sensor) measures a vehicle's angular velocity about its vertical axis in degrees or radians per second in order to determine the orientation of the vehicle as it hard-corners or threatens to roll-over.
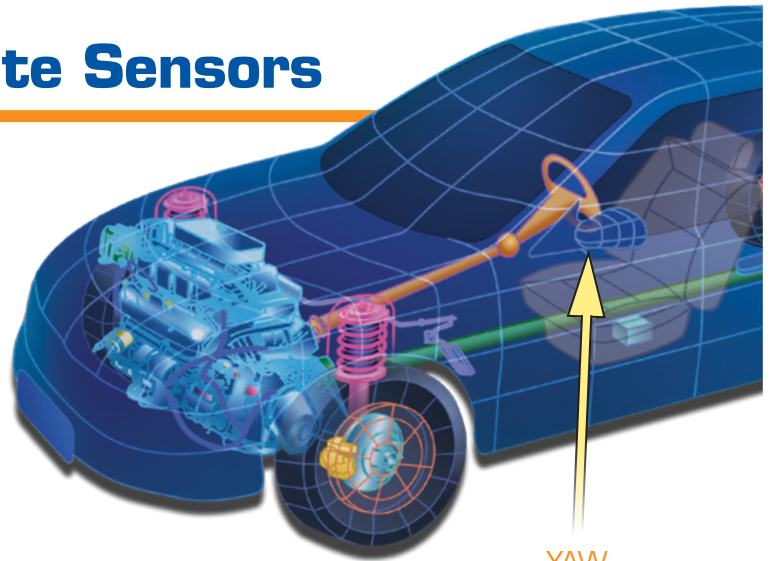
How does a Yaw Rate Sensor function?

In simpler terms, the yaw rate sensor is a key component in a vehicle's stability control or electronic stability control system. Yaw can be defined as the movement of an object turning on its vertical axis. The yaw rate sensor determines how far off-axis a car is "tilting" in a turn using gyroscopes to monitor the slip angle, the angle between the vehicle's heading and actual movement direction. This information is then fed into the vehicle's computer to evaluate the wheel speed, steering angle and accelerator position, and, if the system senses too much yaw, the appropriate braking force is automatically applied.

By comparing the vehicle's actual yaw rate to the target yaw rate, the on-board computer can identify to what degree the vehicle may be under- or over-steering, and what corrective action, if any, is required. Corrective action may include reducing engine power as well as applying the brake on one or more wheels to realign the vehicle.

Where is the Yaw Rate Sensor located?

The yaw rate sensor is typically located under the driver or

YAW
Rate Sensor

passenger seat, mounted on the level floorboard in order to access the vehicle's center of gravity. After installation, a reset/recalibration procedure is generally required.

NAPA® Echlin® leads the way.

The yaw rate sensor is a key component in one of today's vehicles' most technologically advanced systems designed to provide motorists with increased safety, security, and control even in the most difficult driving conditions. NAPA® Echlin® leads the way with new technology, delivering these high-quality, high-technology sensors.

Ford
YR301

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YR304

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YR316

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YR323

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YR308

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