

Motorcycle

ABS

Why you want
to ride with it



Insurance Institute for Highway Safety
Highway Loss Data Institute



What ABS adds to **MOTORCYCLE BRAKING**

As any rider knows, stopping a motorcycle isn't as simple as stopping a car. Most bikes have separate brake controls for the front and rear wheels, and either wheel can lock up during hard braking. On a car, a lockup might result in a skid. On a motorcycle, it often means a serious fall.

No matter how skilled a rider you are, you can't predict when a driver ahead of you will cut you off, forcing you to brake hard. Road surfaces can be unexpectedly sandy or more slippery than they look.

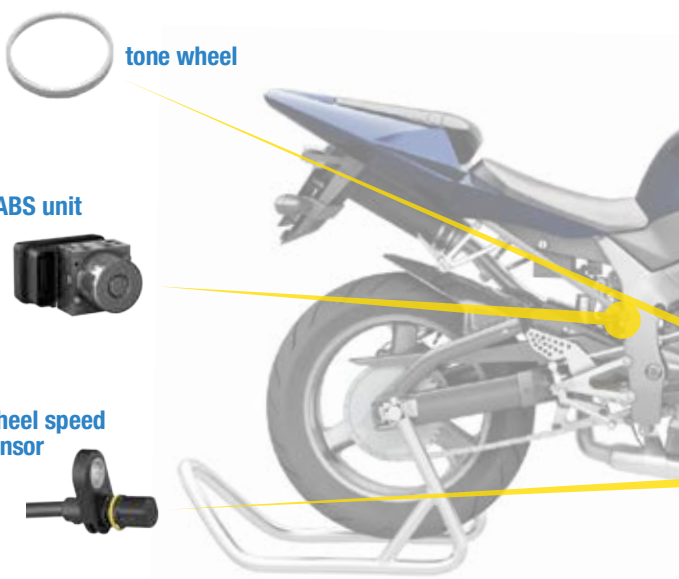
With ABS, riders can brake fully without fear of locking up. Antilocks automatically reduce brake pressure when a lockup is about to occur and increase it again after traction is restored.

About 5,000 people died in motorcycle crashes in 2016. It makes sense to reduce your risk with ABS.



How ABS works

An antilock braking system works by constantly measuring wheel speed. One common way to do this is with a small grooved ring near the brake disc often called a tone wheel. The wheel speed sensor sends the tone wheel readings to the ABS unit, which can determine whether the wheel is about to stop rotating. If it is, wheel speed information is used to adjust the pressure from the brake cylinder on the brake caliper multiple times per second.



tone wheel

ABS unit



wheel speed sensor





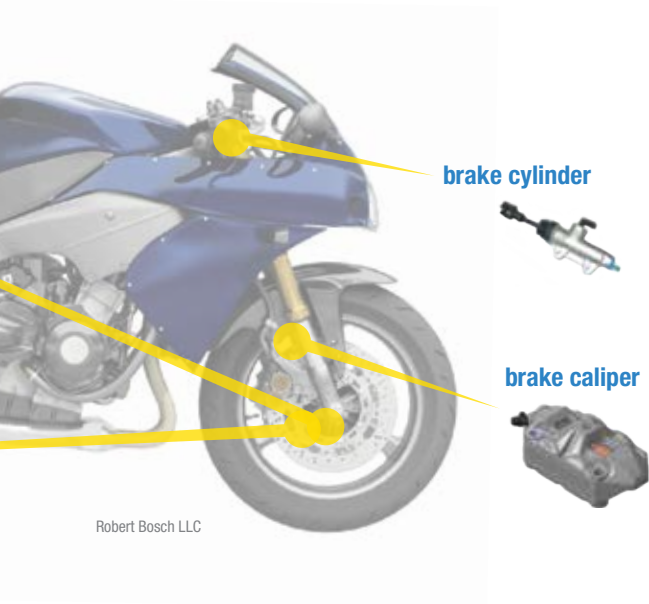
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ABS doesn't affect normal braking — you notice it only in an emergency.

Both conventional braking systems and combined braking systems, which link one or both controls to both wheels, can have ABS.

Today's systems can be as light as a few pounds, so there's no drag on performance.

Check ABS availability by make and model at [iihs.org/motorcycleABS](https://www.iihs.org/motorcycleABS)



Robert Bosch LLC

Antilock braking systems make riding **SAFER.**

PROVEN BENEFITS

Studies of fatal crashes, insurance claims and test track performance all confirm the importance of antilock brakes.

Fewer deaths

The rate of fatal crashes is 31 percent lower for motorcycles equipped with optional ABS than for those same models without ABS.

Insurance Institute for Highway Safety, 2013

Fewer crashes

Collision insurance claims for motorcycles with ABS are filed 20 percent less frequently than for motorcycles without it — 31 percent when the ABS bikes have combined brake controls.

Highway Loss Data Institute, 2013

Shorter stopping distances

On the test track, both new and experienced riders stop more quickly with antilock brakes. Stopping distances improve on wet and dry surfaces alike.

Austrian Road Safety Board, 2004;
National Highway Traffic Safety Administration, 2006



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