

Electric power steering turns the corner

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Did you know that your hydraulic steering system wastes more energy than any other system in your car and is third highest in total vehicular energy losses (right behind wind resistance and road resistance)? Or did you know that on average, a hydraulic power steering system results in about a one to three MPG fuel economy hit on a midsize vehicle compared to an electric power steering (EPS) system? Or, how about this...did you know that within six years, there will be 90 million vehicles on the road with electric-power steering?

What started out as a small enhancement on the Honda Acura NSX in 1993 has blossomed into a major industry in its own right. Now that the safety issues have been adequately addressed, the question becomes, "Why WOULDN'T you want to use electric power steering?" It won't be long before you can throw your clunky hydraulic power steering system onto the same junk pile where you left your 8-track tape player.

One final question: Did you know that TI has a wide selection of devices designed to work specifically in EPS applications? I was recently in Germany talking with some of our field applications engineers about this, when I ran into Mike Knebelkamp, business development manager for mixed signal automotive here at TI. Mike showed me a working demo of an EPS system built up with TI components. It didn't take me long to realize that Mike knew his way around under the hood when it came to automotive electronics. So I quickly grabbed my camera and recorded our conversation. You can see it here.

So if an EPS design is in YOUR future, be sure to contact TI first. With solutions ranging from power FETs, gate drivers, safety enhanced processors and supervisory components, we can help you "steer" your EPS design in the right direction. :-)

Keep those motors spinning! :-)

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