THE DRIVER'S SEAT
By JEFF SABATINI 

Speeding Through Cornfields -- at Four MPH
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When you love cars, it's always exciting to slip into the driver's seat of the latest four-wheeled wonder. But in my position, testing a different, brand-new vehicle each week, it's easy to become disillusioned by the onslaught. My time-tested cure is to log a few miles behind the wheel of something else -- my '77 Corvette, a buddy's racetrack-ready BMW M3, a U-Haul truck -- anything to break the tedium of new-car smell. So when a friend offered to arrange a test-drive on a combine, I leapt at the opportunity. Now here was the definition of something else: a Brobdingnagian harvesting machine that weighs over 42,000 pounds.

Taking a break from testing cars, our reviewer hopped aboard a Case IH combine

Giddy with anticipation during the six-hour drive to Champaign, Ill., from my Michigan home, I didn't dwell on my slight agricultural background, consisting of infrequent visits to the local farmers market and a failed attempt at gardening. Resolute in my belief that routinely being handed the keys to six-figure sports cars would somehow translate to harvesting corn, I sped south on Interstate 57 in a yellow Porsche 911 Turbo Cabriolet. The loaner car surely had a lot to do with my optimism. As I basked in the bright, autumnal sun, grinning stupidly from ear to wind-whipped ear, I remained oblivious to the fact that the only thing more out of place in a central Illinois cornfield than a $155,000 German convertible is me.

Bucket Seat

I left the Porsche in the parking lot of my hotel in favor of the truck driven by the public-relations man from Case IH, the combine's maker. The truck was red, the corporate color that serves as a foil to John Deere Green in an agricultural rivalry I'm told is as fierce as Ford vs. Chevy. Case IH traces its first combines back to models that were contemporaries of Ford's Model T, though it wasn't until 1942 that those machines, then made by International Harvester, became self-propelled. The combine's name comes from its function -- it combines the harvesting, threshing and cleaning of crops like corn, soybeans and wheat. That makes it an incredibly complex vehicle of proportionately huge size.

As I ascended the six rungs of the ladder to the cab, I imagined that this must be what it feels like for my 2-year-old daughter to climb on the riding lawnmowers outside the hardware store. The

Case IH Axial-Flow 7010 measures about 26 feet long, 13 feet wide, and 14½ feet tall, roughly the size of a dozen 911s stacked three high. The cab is luxurious by the standards of vintage agricultural equipment -- meaning that it's enclosed, air-conditioned and equipped with a nice stereo -- but you're still not going to want to spend any more time up there than you need to bring in the harvest. Even the Chinese have plusher automotive interiors than the one in this $367,000 rig.


Mark Roter
Jeff Sabatini found his skills were lacking

I sat in the center-mounted bucket seat, perched at the bow of the machine like a ship's figurehead. With the steering wheel tilted all the way down into my lap, the combine seemed two parts tractor to one part Volkswagen bus. The floor-to-ceiling windshield gave me a clear view of the "header." That's the 30-foot-wide, metal-and-plastic claw that grabs cornstalks and delivers their fruit into the guts of the combine. The violence of this action is awesome to behold -- the tall, tough stalks are mowed down as effortlessly as a child might pluck a dandelion. But this is only the beginning of the combine's work. The ears are delivered to the threshing rotor behind and beneath the cab, where the corn is rubbed from the cob and centrifugal force separates the kernels from cobs, husks and the rest. Then the corn is fed to two sieves deep within the machine, where it is further cleaned. The undesirable material gets blown out the back by a giant fan, while those golden kernels are fed by augers into a tank.

Driving by Joystick

Of course you can't see all this happening as you move along, save for glancing over your shoulder to watch the window that looks into the grain tank becoming quickly filled with corn. You can, however, monitor and control all of the combine's processes on a 10.8-inch, color touch-screen that effectively serves as a computerized instrument panel. Its multilayered menus and screens are complex enough to make BMW's nefarious iDrive seem like Pong. The screen is situated off to the right of the driver next to a button-laden joystick that controls the throttle; it looks like just the ticket to mastering Flight Simulator.

The combine does have brakes and a floor-mounted brake pedal, but they went unused in the flatness of Illinois, thanks largely to a hydrostatic drive system that uses hydraulics to provide motive power and can slow the vehicle as well. The setup also means that, unlike in a car, where a mechanical coupling links the engine to the wheels, the 7010's nine-liter, inline six-cylinder diesel engine can run at optimal, full-throttle efficiency all the time. It produces a staggering 1,230 pound-feet of torque at 2,100 rpm and a mere 403 peak horsepower. (By comparison, the Porsche I had left at the hotel produces 505 pound-feet of torque and 480 horsepower.)

Now if I had any idea what I was doing, I would have been paying attention to all the little readouts on the screen that reported on each of the processes going on behind me. I would have known to listen for the chime when the grain tank got close to full, probably even anticipating its charismatic tone. When the tractor hauling a grain cart pulled up alongside me, I certainly

wouldn't have slowed down, but instead pressed the button to activate the unloader without pause. But I didn't. Just a few minutes into my hands-on combine lesson I had arrived at an important realization -- you don't really drive a combine, you operate one, and even the driving part was proving challenging.

Sensory Overload

The combine's rear-wheel steering was tricky to compensate for, and the width of the 12-row header made it hard to gauge the arc I needed to line it up on the correct row of corn. Feedback through the steering wheel is nonexistent, and I have no idea whether my constant steering adjustments were necessary or the combine was just ignoring them. The hydraulic drive system allows for precise modulation of power, but its hair-trigger reaction to the joystick had me jerking the whole machine around like a kid who doesn't know how to drive a stick-shift.

I was scared of overflowing the grain tank or screwing up some other aspect of the harvesting operation, so I kept fruitlessly swiveling my head back to the grain-tank window like I'd just passed a cop while doing 20 miles per hour over the limit. Then there was the public-relations man riding shotgun, barking orders and reaching around me to adjust inexplicable controls. It was like being a 15-year-old during driver's training: Sensory overload made it all I could do to keep the combine moving straight down the rows at a four-mph clip.

That's not a typo. While harvesting corn, combines don't travel much faster than seven mph. But even at a slower rate, my first rip through the 9-foot-tall stalks felt like I was back in the Porsche. After a few more passes through the field, however, the controls began to seem more familiar, and the combine started to do what I wanted without complaint. The progression of the harvest became hypnotic, and the combine's windshield started to magnify the beauty of the dull, dry, earthy stalks. That stupid grin began to spread across my face, and the satisfaction of my mastery over this machine was as sweet as any.