# →NINE NEW BIKES FOR 2015!



AMERICA'S LEADING MOTORCYCLE MAGAZINE

# THE ART OF COOL

BMW R nineT

## THE RETRO BOXER'S PERFECT PUNCH

### RIDDEN

 → HONDA CBR650F
→ VICTORY MAGNUM

BIG-WHEEL BAGGER → KAWASAKI

KX450 & 250F → POLARIS SLINGSHOT

**3-WHEELER** 

## **PIKES PEAK SPECIAL**

→ CANET PODIUMS ON A DUCATI!
→ GUY MARTIN RIDES A TURBO GSX-R1100

OCTOBER 2014 Cycleworld.com PLUS THE WORLD'S MOST HATED CUSTOM

LUSIUM [EL SOLITARIO IMPOSTOR]



#### CW FIRST RIDE

# THE SLINGSHOT

Wild new three-wheel Polaris lets you carve canyons with a friend at your side **By Andrew Bornhop** 



olaris is on a roll, racking up more than \$4 billion in expected sales this year. Clearly, the Minnesota-based manufacturer can afford to have a little fun. For proof, look no further than the Slingshot, a dramatic three-wheeler that goes into production this fall. In development for three years, the Slingshot is not like a Can-Am Spyder. Rather, the



1,666-pound trike is more akin to a three-wheeled car with a pair of front wheels situated way out in front of the driver. You don't straddle the rear-drive Slingshot; you sit way back in it, side by side with your passenger, only 11.9 inches off the pavement. With its low and open cockpit, the Slingshot is said to offer the visceral appeal of a sportbike while having the entertaining driving manners of a lightweight sports car.

Beneath the polymer body resides a space-frame chassis made of tubular high-strength steel. In back, a large, singlesided cast-aluminum swingarm is controlled by a massive coilover Sachs damper. In front (where the track is a substantial

69.1 inches—some 6 inches wider than a C7 Corvette's), forged unequal-length aluminum A-arms team with coil-over Sachs shocks and a massive antiroll bar that keeps the single rear wheel as flush as possible with the pavement. While increased front roll stiffness typically would cause the Slingshot to understeer, or push, Polaris dials in a healthy amount of negative camber, 2.0 degrees, to make sure the Slingshot goes where pointed. The \$19,999 base model, in silver, wears 205/50R-17 front tires and a 265/35R-18 rear; the better-equipped \$23,999 SL, in red, is fitted with a 255/35R-20 rear and 225/45R-18 fronts.

Mass centralization creates a low polar moment of inertia.



To that end, the battery is located just aft of the driver's seat, and the GM-sourced 2.4-liter inlinefour, a dohc aluminum-block Ecotec powerplant, mounts longitudinally behind the front axle, where it sends power (a claimed 170 hp and 155 poundfeet of torque) rearward via an Aisin five-speed manual transmission, a short driveshaft, a bevel gear, and a toothed rubber belt.

Although Polaris won't reveal the exact weight balance of the Slingshot, engineer James Holroyd says the rear wheel carries between 34 and 41 percent of the weight. If too much weight is on the rear tire, the Slingshot won't want to turn. Conversely, if the Slingshot is too front-heavy, the unloaded rear will have a tendency to snap out in corners.

But that won't happen. Stability control is standard, and the Bosch system is minimally intrusive. With it switched off, the Slingshot felt neutral on the Polaris skidpad, able to be teased into mild understeer or oversteer with simple throttle and

WILD MACHINE: Big front anti-roll bar, right, keeps rear tire flush with ground.

steering inputs. Overall stability was excellent, and initial body roll was well snubbed by that meaty front bar. Moreover, simulated panic stops were drama-free, thanks to powerful three-wheel disc brakes and ABS. Lastly, the standard traction control allowed just enough wheelspin to leave a single black stripe on the pavement with each launch. With TC off, the Slingshot easily overwhelmed its lone rear Kenda, a highperformance three-season tire.

On the road, the Slingshot felt remarkably normal, not the least bit cantankerous. The weatherproof interior is a step up from a side-by-side, and although this Polaris isn't sportbike quick, it feels snappier than most cars out there, able to quickly blur that road scrolling by so close to your elbow. A tilt steering wheel accommodates most drivers, and at 60 mph in fifth gear, the engine is turning only 2,000 rpm. At that speed, the small windscreen, an option on the base model, directed air up and over my helmet, with no buffeting. And while the electricassist steering felt a tad heavier than expected, the transmission shifted with ease, aided by a lighteffort clutch and pedals arranged for easy heel-toe downshifting. In shoes, not boots.

Does the new Slingshot mean Polaris is interested in building an automobile? Not so, says the company. But what type of vehicle is the Slingshot? Polaris says it's a motorcycle and that state laws apply. In California, for instance, the Slingshot is a motorcycle with full access to the carpool lane. As such, the operator must wear a helmet and have a motorcycle endorsement on his license. In Canada, similarly, the Slingshot's also a three-wheeled motorcycle.

Whatever it is, kudos to Polaris for having the guts to create such a wild and unexpected machine.

#### SPEC

#### 2015 POLARIS SLINGSHOT

BASE PRICE: \$19,999 ENGINE: 2384cc dohc inline-4 LENGTH: 149.6 in. WIDTH: 77.6 in. HEIGHT: 51.9 in. WHEELBASE: 105.0 in. FUEL CAPACITY: 9.8 gal. **CLAIMED DRY** WEIGHT: 1666 lb. FRONT TRACK: 69.1 in. **HORSEPOWER:** 173 hp @ 6200 rpm TORQUE: 166 lb.-ft. @ 4700 rpm TRANSMISSION: 5-speed manual BRAKES: 11.7-in. vented rotors front and rear. ABS STEERING: rack and pinion, electric assist

#### WHY THE GM FOUR-CYLINDER?

James Holroyd, Polaris engineer, explains: "It has a very controllable and drivable toraue curve. We didn't want something with a peaky nature. With our architecture. we didn't want something that suddenly came on the cam at 5,000 rpm and surprises vou. We wanted a good powerto-weight ratio, and we wanted a proven package that was going to be durable and refined and easily tuned working with GM."