

Never mind that the confrontation is a year away; the shooters are already vying for high ground. Knife fighters know better than to show up at this bazooka battle. Contenders armed with anything less than a hot V-8 will be blown to smithereens.

Audi made that clear by rolling out its direct-injected 4.2-liter RS4 packing 420 hp. Lexus is finally mounting a serious challenge with the upcoming "more-than-400-hp" IS-F sport sedan. Mercedes-Benz recently retired its C55 AMG to clear the decks for a new C63, scheduled to bow later this year. Cadillac's second-generation CTS-V, powered by a strapping 6.2-liter V-8, is due next year.

That leaves BMW. Twenty years ago, when this brand mustered the gumption to offer a sport coupe equally at home on road or

racetrack, a tide of elation washed over every car enthusiast in the land. Two years ago, the buzz about a new M3 with V-8 power began.

Those who worship the Bimmer bible saw it in the scriptures. The second-generation E36 upped the cylinder count from the original four to six in the early 1990s. A displacement boost from 3.0 to 3.2 liters arrived for 1996. BMW's M department began shipping its incendiary S54 six—333 hp, 8000-rpm redline—in the third-generation E46 M3, launched in 2001. It didn't take a prophet to deduce that the E92 coupe, which rolled forth last fall with a muscular twin-turbo six under its hood, was also engineered to host a V-8.

At the Geneva show, BMW finally acknowledged what everyone already knew by presenting a supposedly conceptual M3 and hints about its engine. The new 4.0-liter V-8 is a derivative of the remarkable 5.0-liter V-10

that powers today's M5 and M6. Both powerplants share an architecture that includes aluminum-block-and-head construction, a 90-degree V-angle, a 3.6-inch (92-mm) bore, a 3.0-inch (75-mm) stroke, 3.9-inch (98-mm) bore spacing, and a 12.0:1 compression ratio.

Like the V-10, the new V-8 block is a low-pressure die casting made of an aluminum alloy with a high silicon content. The lowly Chevrolet Vega used the same material thirty-six years ago for the same reasons that BMW selected this approach. The weight and complexity of iron cylinder liners are avoided because silicon is sufficiently tough to serve as the bore surface. A honing procedure polishes the hard silicon crystals that precipitate out of the molten aluminum during casting. To improve the wear resistance of the oil-cooled, cast-aluminum pistons, their skirts are plated with a thin coating of iron.

RACY ROOF

The carbon-fiber-reinforced roof panel is finished with a clear-coat so that its woven fabric is visible to envious admirers.

TUNING FORKS

Nineteen-inch wheels front the high-performance brakes developed exclusively for BMW's M cars.

FRESH SKIN

The lights, the doors, and the glass are the only exterior parts to leap unaltered from the 335i to the fourth-generation M3.

resuscitated by a vivacious V-8. **BY DON SHERMAN**