

WORLD FIRST

The VC-Turbo is the world's first production-ready variable compression ratio engine, and will go on sale in INFINITI models in 2018

VARIABLE COMPRESSION RATIO

Using an advanced multi-link system to raise or lower the height of the pistons' stroke, the VC-Turbo engine offers any compression ratio between 8:1 (for power) and 14:1 (for efficiency)

20 YEARS' DEVELOPMENT

INFINITI has worked on its VC-Turbo technology since 1996. The multi-link mechanism, which holds the key to the variable compression ratio, was invented in 1998

TESTING

INFINITI has tested more than 100 engine prototypes to perfect the technology, with over three million kilometers of road testing and more than 30,000 hours on the test bed

FUEL EFFICIENCY

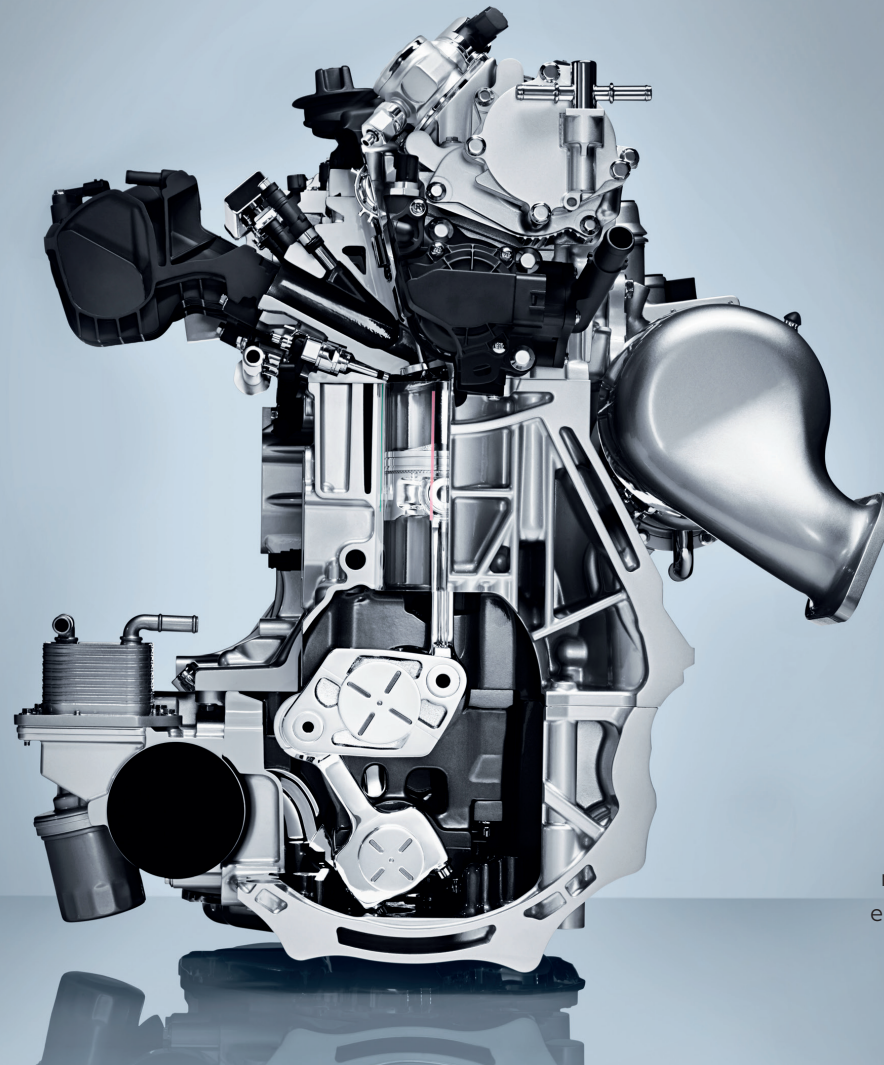
INFINITI is targeting up to a 27% improvement in fuel efficiency over similarly-powered V6 gasoline engines



INFINITI

EMPOWER THE DRIVE

INFINITI 2.0-LITER VC-TURBO ENGINE



POWER

Development teams are aiming for a 200 kW (272 ps, 268 hp) maximum power output and 390 Nm torque – higher specific power output than many other four-cylinder turbo engines

TURBO

The VC-Turbo engine uses a wide-range single-scroll turbocharger to provide seamless, instant access to power and torque

REFINEMENT

The VC-Turbo's multi-link system reduces lateral movement of the connecting rods, creating just 10dB of vibration noise – 20 dB less than a conventional four-cylinder engine

FORMULA 1 INPUT

The engine development involved the Renault Sport Formula 1 Team, calling on their deep material knowledge and expertise dealing with high RPM

PACKAGING

The VC-Turbo engine is so smooth, it requires no balance shafts – conventional four-cylinder engines require two. Removing them offsets the space occupied by the multi-link system