

“SUPERCHARGED”

FUEL INJECTION

March 20, 2022

TECHNICAL UPDATE

RE: ADOPTION OF NEW TECHNICAL TERM FOR HYBRID FUEL INJECTION (HFI)

The hybrid Electronic Fuel Injection (EFI) system for IC engines developed and patented (US Pat # 10,920,726 & others pending) by XCENTRICK INNOVATIONS Ltd. otherwise known as Hybrid Fuel Injection (HFI) is a dynamic blade displaced fully tunable air & fuel vectoring power nozzle system that factually supercharges the injection of fuel without adding a single moving part OR paying a power consumption penalty.

The pressure differential slingshot effect generated within the **BLADE UNIT** defines acceleration and velocity of flow within the fuel delivering “HYPER PORT” that substantially exceeds that of the base intake conduit charge whether it be naturally aspirated (NA), supercharged or turbocharged. This meets the definition of: **“SUPERCHARGED”**. The result is that liquid fuel is phase changed to vapor most of the time, OR, atomized & distributed well beyond high flow FI capabilities the rest of the time.

Therefore, while Hybrid Fuel Injection OR HFI is an apt technical term, the term **SUPERCHARGED FUEL INJECTION** OR SFI is an even more apt and technically correct term that will be used more predominantly and yet interchangeably with HFI from here on.



Pictured here is a cutaway view exposing the “HYPER PORT” of the new GEN III RACE-TECH/Universal SFI system mated with a “BILLET ATOMIZER 3” type racing fuel injector capable of flowing up to “1100 PPH” or enough liquid fuel to support approximately 2300 HP in a V8 IC engine. The GEN III BLADE UNIT itself can process enough liquid fuel to support up to approximately 4300 HP/8. The GEN III RACE-TECH/Universal BLADE UNIT pictured here (XIRT77-3.0) is designed to accept approximately 95% of all 14mm port fuel injectors in use today covering some 16+ known brands.