



Four breaths are better than one *TWM Induction Individual Throttle Bodies (ITBs)*

Text by Paul Rachwal // Photos supplied by IAC

As we check in with the crew at International Automotive & Custom to see progress on their all-motor drag Integra, we find they've been keeping busy upgrading the H22 (aka Prelude) motor. This time around, the go-fast bits come from TWM Induction, and their 52mm H22 Individual Throttle Bodies (ITB) specifically.

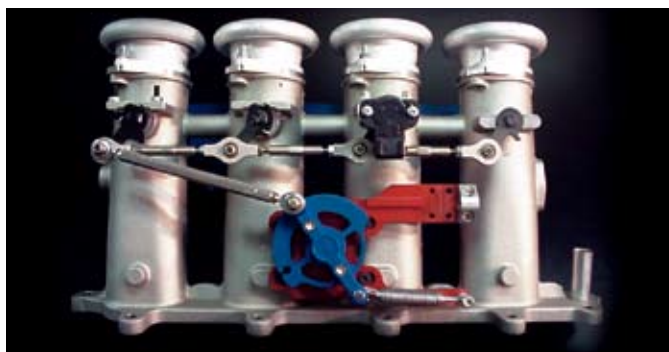
The 2000-series kit comes complete with a fuel

rail, and replaces the intake manifold and throttle body, thereby saving a few precious pounds and adding ponies to the bottom line, not to mention a crisp, ultra-responsive throttle. The weight of the set-up, including the fuel rail, is a scant 6.2lbs.

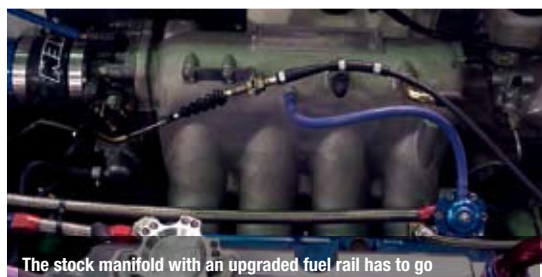
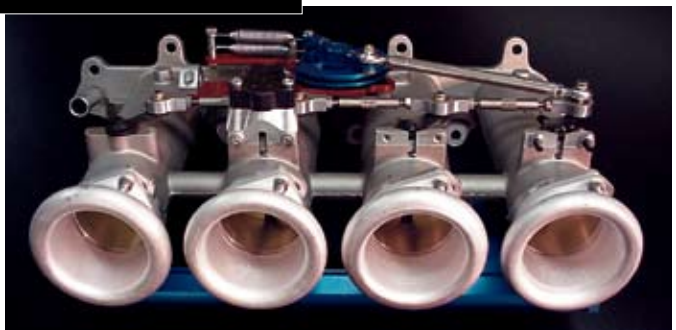
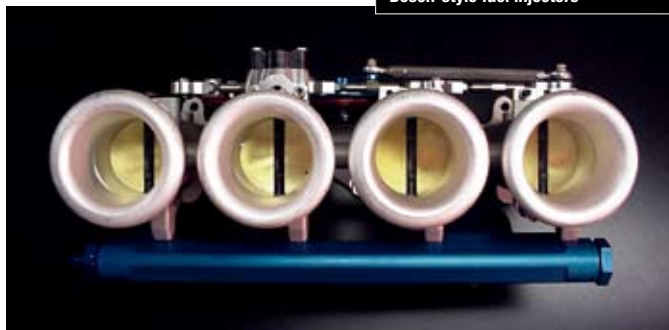
The beauty of ITBs is the elimination of plenum air volume and equalized flow to all cylinders. By placing a single throttle plate in each runner, the dead volume is decreased and equalized across

all cylinders. Stock induction systems are designed for low- to mid-range driveability, whereas ITBs take advantage of short runners tuned for intake ramming at high engine speed to maximize power. The end result is crisper throttle response, improved cylinder filling and maximum top-end power.

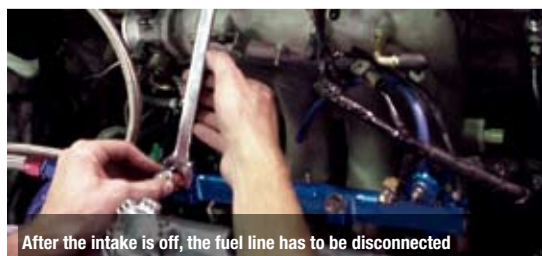
Another benefit of an ITB set-up includes the improved fuel injector positioning further up-



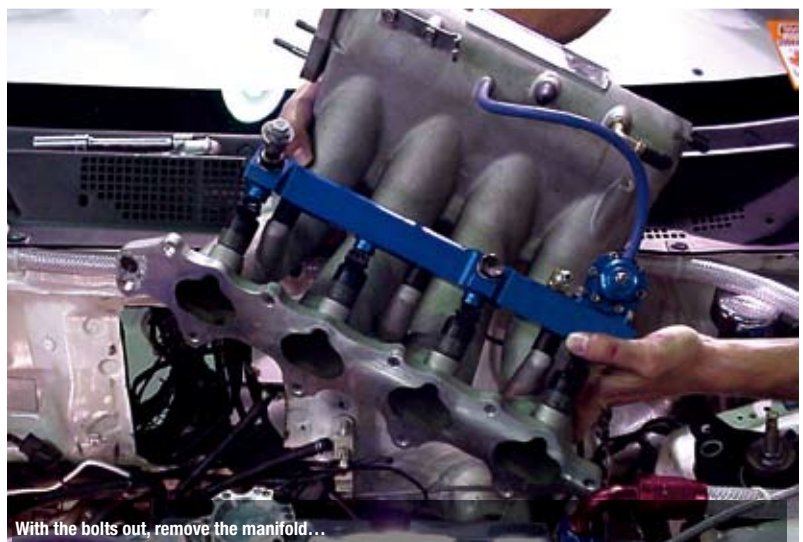
This is TWM's 52mm 2000-series kit for the H22, complete with fuel rail to fit Bosch-style fuel injectors



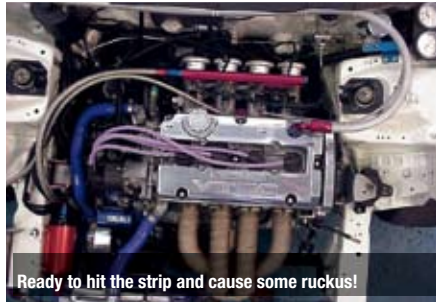
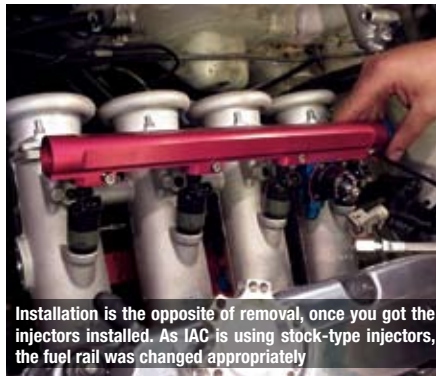
The stock manifold with an upgraded fuel rail has to go



After the intake is off, the fuel line has to be disconnected



With the bolts out, remove the manifold...



stream to allow for better mixture preparation at high engine speeds. It's necessary to use a modified ECU to take full advantage of the added airflow abilities.

For race proven results, one needs to look no further than pro drag cars that are in the NHRA and NDRA's naturally aspirated Pro Stock and All Motor classes, respectively. These guys are running TWM's ITBs on the K-Series powered drag cars, however these motors differ significantly from IAC's H-series, as the intake is on the less efficient end, near the firewall.

TWM says the kit is for serious race / rally applications and should not be considered until the engine is making maximum horsepower with the stock manifold.

The ITBs come with TWM's billet throttle linkage that is fully adjustable for fine tuning and TWM's full-radius air horns are also part of the package. **PAS**

// For more visit www.pasmag.com

The Source:

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