

INJECTIONEERING RE-ENGINEERED THROTTLE BODY

MOTOCROSS
ACTION MAGAZINE

WHAT IS IT? It's a throttle body and butterfly modification for your fuel-injected CRF450 that increases performance below a quarter turn of the throttle.

WHAT'S IT COST?
\$225.00 (plus shipping.)

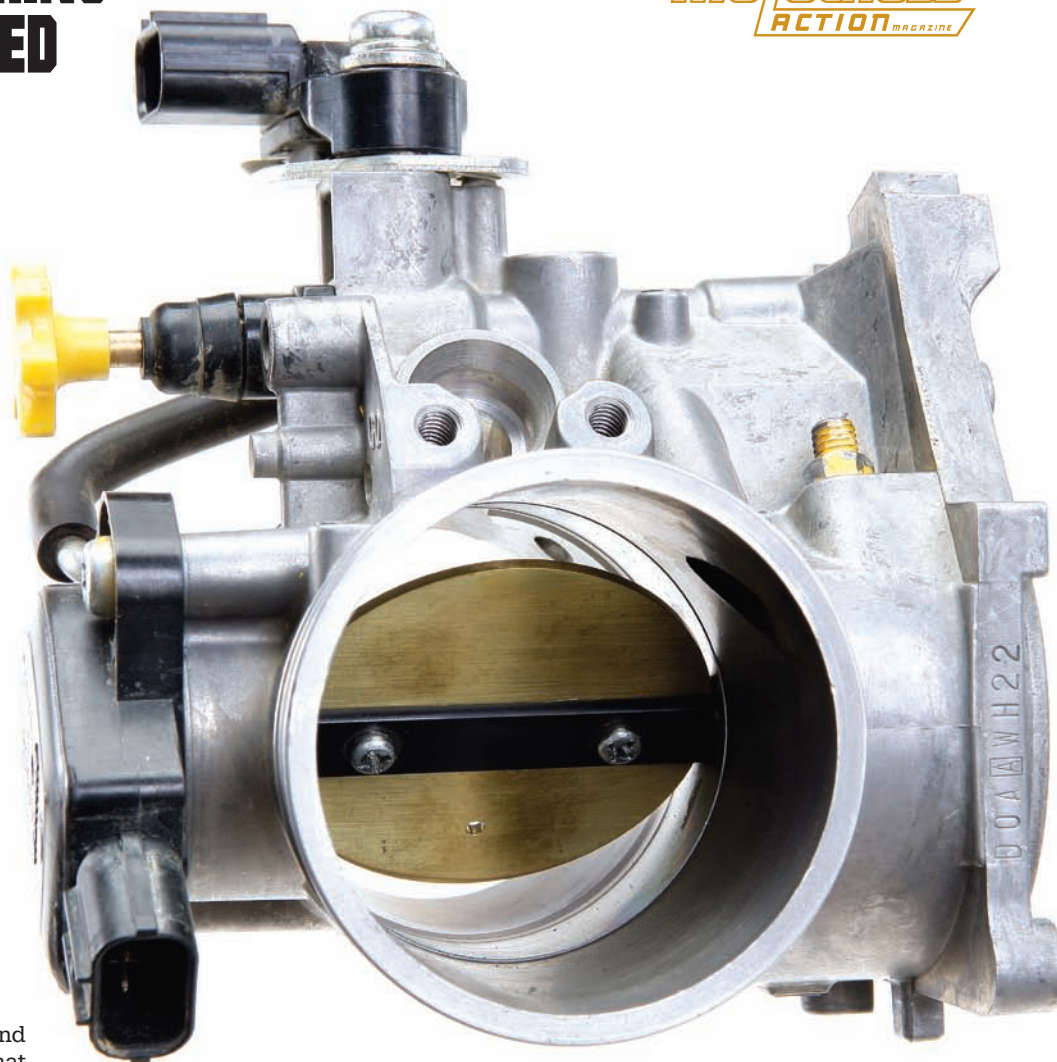
CONTACT?
www.injectioneering.com or
(310) 953-2915.

WHAT STANDS OUT?
Here's a list of things that stand out with Injectioneering's Re-engineered Throttle Body.

(1) Design. Wade Wilcox of Injectioneering spent countless hours developing his modification and almost as much time explaining to us how it works. Make no mistake about it, this modification is very complex. Wade confided every secret angle and specification to us, trusting that we wouldn't divulge his secrets to any potential copycats, but we'll tell you the general idea. When the stock butterfly closes in the bore of the throttle body, it doesn't close at a 90-degree angle, but at a less-than-vertical tilt. Wade's mod allows the butterfly to close much closer to perpendicular. Combining a steeper butterfly angle with a pressure compensation hole in the butterfly itself means that the airflow is smoother and starts sooner than with the stock butterfly valve. The more linear airflow of the modified throttle body allows the operating sensors, which work on a linear algorithm, to perform better. It's more complicated than that, but we aren't taking a college course in fuel injection—we just want to ride.

(2) Installation. Your throttle body must be sent to Injectioneering. They promise a 48-hour turnaround. Removing and reinstalling a throttle body is different from doing the same procedure with a carburetor, and extra care must be taken with the fuel lines and electrical connections.

(3) Performance. The stock CRF450 has a snappy response to small throttle twists. Too snappy for many people. With the Injectioneering throttle body, the throttle response starts sooner, picks up quicker, rockets out of corners and is a tremendous improvement. Every *MXA* test rider was amazed by the improved pickup of our CRF450. Although the Injectioneering throttle body



only affects the first 25 percent of the throttle position, the surge off the bottom helps the power carry better into the midrange. This is an impressive mod.

(4) Flame-on. At any ability level, testers appreciated the absence of flameout. The CRF can still stall, of course, but the dreaded cough after chopping the throttle is gone.

(5) Compatibility. We tested the Injectioneering throttle body on different CRF450s (from stock to slightly modified to full race) and with three different test riders (a novice, intermediate and pro). The Injectioneering throttle body worked well on each bike and for all three skill levels.

WHAT'S THE SQUAWK?

Three minor quibbles: **(1)** Shipping and installation will keep you from riding for a few days. **(2)** Trying to get the CRF450 air boot back on the throttle body is a challenge. **(3)** If you change your mapping, you may have to retune it with the Injectioneering throttle body.

MXA RATING



Incredible. Worth every penny. Great. The Injectioneering throttle body makes power in places that no aftermarket mod ever thought about. This thing works.