

THE SHOCKING ALL-NEW TM 300 TWO-STROKE!

MOTOCROSS

JULY 2025

www.motocrossactionmag.com

MAGAZINE



SMOKE IN THE AIR!

**THE 2025 TWO-STROKE WORLD CHAMPIONSHIP
MAKES ITS TRIUMPHANT RETURN AT GLEN HELEN**

**GASGAS MC450 FACTORY EDITION:
HOW CLOSE TO BARCIA'S BIKE IS IT?**

**LIVING WITH A
MODERN TC125**

IN THIS ISSUE

✓ MXA TEAM TESTED LUXON MX YZ450F RUBBER-ISOLATED HEAD STAYS

MOTOCROSS
ACTION



WHAT IS IT? Luxon MX is best known for its innovative triple clamps, but now the engineering firm out of San Diego has officially entered the aftermarket engine-mount realm with an industry-first, rubber-isolated head-stay and engine-mount concept for the 2023–2025 Yamaha YZ450F.

WHAT'S IT COST? \$379.95.

CONTACT? www.luxonmx.com or (858) 586-1100.

WHAT STANDS OUT? Here's a list of things that stand out with Luxon MX's Yamaha YZ450F rubber-mounted head stays.

(1) Concept. Luxon MX already uses rubber bushings to reduce vibration and improve hand feel in their bar mounts, and they took the same concept and applied it to their head stays. It's common practice in the automobile world for cars to have rubber engine mounts, and rubber damping is used in many other areas on dirt bikes to improve comfort. Fasst Company's Flexx handlebars, utilize elastomer damping in the handlebars without affecting the steering column. Urmosi and Mako360 make elastomer bar mounts that flex every which way. Fasst Company also makes rubber inserts for footpegs to reduce vibration. Xtrig has PHDS handlebar mounts, which also absorb vibration, and grip companies make thicker hand grips to do the same thing.

However, rubber-isolated head stays have never been used in motocross. Why not? Limited space is one of the main reasons it is difficult to design engine mounts and head stays with built-in rubber dampers. Dirt bike engines and frames are intricately designed to be weight- and space-efficient. Plus, aftermarket engine mounts and head stays are a relatively new mod for dirt bikes. Up until now, FCP Racing and Works Chassis Lab were the only two brands making them.

(2) Design. Luxon machines all of its products in-house in San Diego, California. The mount kit comes with four precision-machined 7075-T6 aluminum brackets with three different bushing options—soft, medium and hard. The upper head stays are rubber-isolated, while the

bottom engine mounts aren't. The mounts are available in blue and black, and are currently only available on the YZ450F. Because the rubber bushings take up extra space, future applications will depend on whether there is room between the engine and frame to make the rubber mounts or not.

(3) Performance. Coming into this test, Billy Wight, the owner of Luxon MX, was unsure how the rubber-mounted head stays would work. He asked us not to post any photos until the concept was proven. Our test riders started with the red (stiff) dampers installed and immediately they noticed a difference. They knocked the "edge" off the bumps, improving hand feel and comfort while making the suspension feel plusher. We tried the yellow (medium) and green (soft) dampers as well, but surprisingly, our testers didn't notice a difference. The big change was going from the stock head stays and engine mounts to the rubber-mounted Luxon MX options.

The Yamaha YZ450F is already known for having a comfortable chassis. Compared to the Honda, KTM, Husky, GasGas, and Suzuki offerings, the YZ450F is better at absorbing bumps. It has great Kayaba suspension and a frame that can be twitchy at times, but is rarely deemed to be stiff or harsh. Kawasaki is the only other brand comparable to Yamaha in terms of frame comfort.

With the rubber-mounted Luxon MX head stays, the YZ450F became more compliant and comfortable. We wouldn't recommend this for Supercross, but we'd recommend it for off-road racers and any motocross racer who would appreciate a smoother ride.

WHAT'S THE SQUAWK? No complaints.

MXA RATING

We were skeptical at first. Too much flex can sacrifice lean-in precision in corners and can feed in some unpredictability under high G-loads. This was not the case with the Luxon mounts. The small rubber elastomers cushioned the ride in the harsh chop without a negative effect.