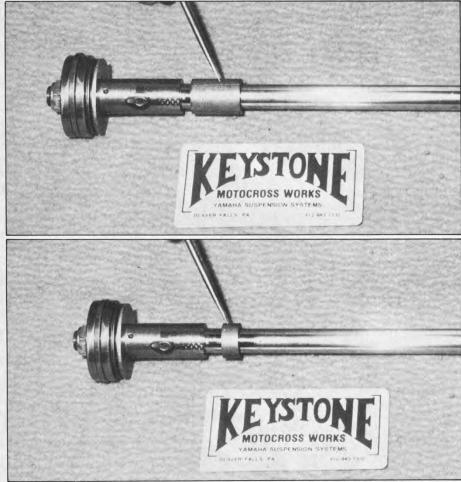
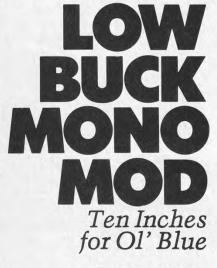
LONGER LEGS FOR YAMAHA ITS



For the Keystone Travel mods, the large stock spacer on the damping rod is replaced with a smaller one.



By Rondo Talbot

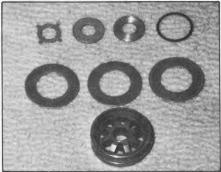
Let's say that you have a two year old IT Yamaha that's running great. Maybe you're on your third set of rings, but the engine is still basically sound. You've ridden the new bikes and they're not much faster than your bike and besides, they cost a fortune.

But, you have to face up to the fact that you're getting beat to death in the rough stuff. You know that seven and a half inches just ain't cuttin' it any more. And money is a problem, or you'd just go out and buy one of those shiny new machines.

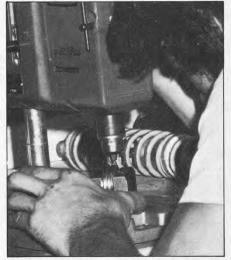
This leaves you with modifications. But sensible, low cost ones. After all, it doesn't make sense putting four hundred bucks into a five hundred dollar bike.

Up front, we highly recommend a Terry fork kit. It's the only logical choice. Trust us on this. For under fifty bucks, you can end up with as much as ten inches of travel. And the right kind of travel. We have yet to be disappointed with the performance of any Terry front end kit we've installed.

Now for the rear end, you might



Keystone's Stage II monoshock includes a full rebuild of the damping unit, with all new washers.



For better rebound damping, the damping piston is drilled out to relieve back pressure.

want to consider the Keystone IT Shock Modification. Working out of Beaver Falls, Pennsylvania, George Quay is the man behind Keystone Motocross Works, and while the bulk of his mono modifications are on the latest YZs, he does a good number of jobs on woods bikes.

Because of the nature of woods riding, George recommends not much more than ten inches of travel. More than that, he says, and you're pawing at thin air over every log and rock. It's too dangerous.

We agree. For enduro work, if you're an average-size rider, with average skills, about ten inches should be max.

To try out Keystone's Stage II mod, we sent George an entire shock from a 1980 IT250G. However, his modifications apply to ITs as far back as the 1977 models. We weren't after much more travel with our bike. Stock, the IT250G comes with just a hair over nine inches at the rear axle. We wanted another inch, but more importantly, we wanted superior action and a smoother ride. The older the IT, the



A large spacer is inserted onto the spring to compensate for the longer travel.

less inches stock travel. For example, the IT400F had only eight inches, and would benefit even more from the longer length, as well as the superior performance.

Here is what they did. First, the whole shock was disassembled, and inspected for wear.

If travel mods are required, then the stock spacer on the damping rod is removed, and a smaller one slipped on. The size of the spacer determines the length of travel; the longer the spacer, the less travel; the shorter the spacer, the more travel.

For better damping action, the stock unit is taken apart, and the piston and two large washers are saved. All of the other pieces are discarded. Next, the type of bike, riding, and rider weight are calculated, and the correct new washers are selected for proper damping in the first and second stages of the stroke, as well as the right preload. Then the piston is drilled to relieve backpressure on the rebound stroke, and give better rebound damping.

With the damping unit completely



Here's what the new damping unit looks like fully rebuilt.



Terry Feits and George Quay hold the completed Keystone Stage II mono.

modified for Stage II, the new unit is put back on the shaft assembly. What the new washers will do is regulate the oil flow at different stages of the stroke, progressively changing from a one-washer opening in light stutter bumps, to a three-washer setup in a rough, whooped-out section. This keeps the wheel following the ground, and keeps the rear end from kicking up, or bottoming.

Now the rebuilding process begins. A special Bel-Ray SE series oil is used, with one of the highest heat and wear index factors known. The shock body is then reassembled, and charged with 200 psi of nitrogen. A spacer is added under the spring to compensate for the longer travel, and the spring is put on and set according to the type of riding to be done, and the body weight of the rider. Finally, the clicker is adjusted for the correct rebound damping, and the Stage II Mono is complete.

The cost of the mono shock Stage II modifications are \$75 for the ITs and \$91 for a YZ. If you also want to extend the travel, that is another \$20 extra.

Now, for under a hundred and fifty bucks, you have a competitive IT once again. That's just a fraction of the cost of a new bike, and you'll be able to handle any bump they can. \Box

WHERE TO GET IT AND WHAT IT COSTS—

KEYSTONE STAGE II MONOSHOCK

Available for: All Yamaha 125, 250, 400, 465 YZ models from 1977 to 1980, 1977 IT 175, 250, 400 1978 IT 175, 250, 400 1979 IT 175, 250, 400 1980 IT 175, 250, 425 Price: All YZ Models \$91.00 All IT Models \$75.00 Travel Mods: Add \$20 Remote Reservoirs: Available, most models

KEYSTONE MOTOCROSS WORKS 1426 21st Ave. Beaver Falls, Pennsylvania 15010 (412) 846-8361 Ask for George