TYRAN 125 MX

It Could Be A Helluva Bike, A British Challenger So To Speak. Too Bad It's Hampered By Lack Of Attention To Detail.

Cycle World Road Test

■ SOME OF THE world's finest motorcycle components have originated in England, as well as a few of the world's best motorcycles. And, England was first to enter the specialized frame game with such builders as the Rickmans and Eric Cheney.

A logical extension of this custom component approach is the Tyran 125 MX. The Tyran has all the trick components of a custom, but you don't build them into a bike. A factory does that for you.

This is a good approach, but not a new one. Sprite (producers of the Tyran frame) built a very similar machine for this country a few years back. It was called the American Eagle, and, like the current Tyran, about the only Sprite manufactured part was the frame. The engine was a German Zundapp and another English company, R.E.H., built the front forks and the wheel hubs.

The Eagles were very fast and handled well, but were somewhat fragile in certain respects. Rough California desert racing brought out the weak points: rear sub-frames broke just behind the seat, fork tubes proved to be too thin walled and bent easily, wheel hub flanges were too thin and the spokes often pulled through. Even the frame downtubes cracked on occasion, although this was a rare occurrence.

The bikes broke, all right, but one thing was clear. Eliminate that breakage and you'd have one helluva bike. The Tyran 125 MX, with Sprite chassis, is the attempt to produce that bike.

Like the original, the Tyran offers two things—speed and handling. Let's consider the portion responsible for the speed, first.

The engine is the Sachs 1251/6 B model which features an aluminum alloy cylinder and cylinder head with the sunburst fin arrangement. In a further effort to ensure cool running, there are cooling fins cast into the bottom of the crankcase. Heavy-duty ball bearings support the crankshaft and full circle flywheels are employed. Typically, a helical gear drive is used from the crankshaft to the clutch, a robust unit which always disengages completely and is highly resistant to slippage.

Both ball and roller bearings support the transmission shafts, and we are happy to report that the shifting mechanism on the later Sachs engines is superior to the earlier models. It's still possible to miss shifts unless care is used when changing gears, but as the machine began to loosen up, shifting became easier and those missed shifts became few in number.

The closeness of the transmission ratios makes clutchless shifting easy and relatively safe, but using the clutch will prolong gear life.

Even though the Sachs engine is one of the hottest setups going, the highpoint of the Tyran 125 MX is the frame. It's a conventional single toptube, double cradle frame, but it's manufactured from Reynolds 531 tubing.

Reynolds 531 tubing was originally developed for racing motorcycles where lighter and stronger frame tubing was required. An added benefit is 531's high resistance to fatigue, even after brazing or bronze welding, which on the Tyran's frame is beautifully done. The choice of Reynolds 531 tubing and the use of many aluminum alloy parts helps keep the weight of the machine down to 190 lb., ready to race.

In addition to using super tubing, the unit is very neatly put together. Twin downtubes are welded to the steering head and pass downward, forming a cradle for the engine. These bend upward behind the engine and terminate just in front of the top mounting holes for the rear suspension units.

The rear subframe is used both to support the seat and the rear fender. Under the gasoline tank is a hefty toptube which joins the steering head, beneath which is a smaller diameter horizontal toptube. Rear chain adjustment is accomplished via an eccentrically mounted swinging arm which is relocated by rotating an adjustment plate on each side of the machine. These plates have no in-between settings between locking holes, so it's impossible to get the rear chain out of alignment, either when adjusting the chain or while riding the machine.

A 31-deg. fork rake, adequate trail and a generous 54-in. wheelbase make the Tyran one of the more stable contenders in the 125 class. Only the front suspension needs improvement to make the machine really good.

Even after a lengthy break-in period, front fork action was decidedly limited and somewhat stiff for a 150-lb. rider. But the clincher was that the forks stuck several times in the fully compressed position. This did no great harm to the forks themselves, but riding back to the truck with a completely rigid front end was no fun at all. Raising the front wheel off the ground and tapping downward on the front axle with a hammer freed the forks and they wouldn't stick again until a steep downhill with a sharp runoff was tried.

Rear suspension chores are handled admirably by a set of Girling components, but here again the spring rate is a little on the stiff side and rebound damping is a touch heavy for a light rider.

The long wheelbase and good steering geometery make the Tyran a ball to ride on fast, fairly smooth tracks, but the suspension could be softer for really rough going. Jumps can be taken with ease and berms slammed around with complete confidence.

Prolonged riding, however, brings out another flaw. Padding on the seat is very thin and the seat is very narrow where a person would normally sit. Combine the hard seat with stiff suspension and a kidney belt becomes a necessary part of rider apparel.

Single leading-shoe brakes are used in each wheel hub and are more than adequate for stopping the Tyran in motocross competition. The rear brake was much too sensitive, however, making it all too easy to lock the rear wheel when braking on rough ground. This tendency could be reduced by relieving the >


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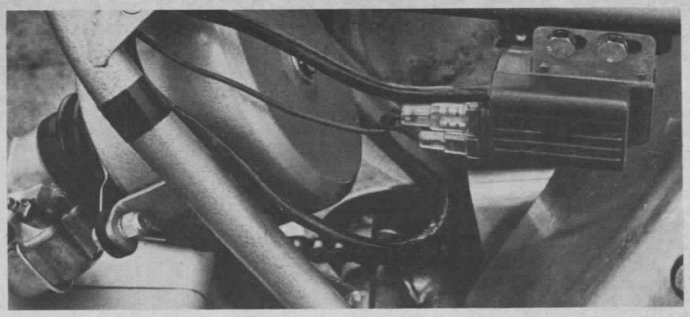

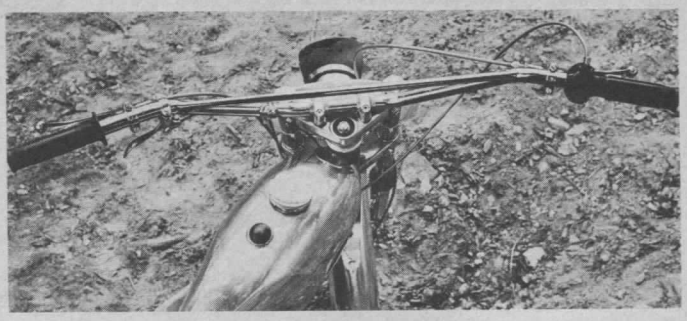

leading edges of the brake shoes with a file, but this should have been done at the factory.

The front brake works well, too, but the brake return spring is too stiff and the cable is too long, both adding to the effort the rider must put out during a stop.

The riding position is quite good for smaller riders, but 6-footers will find the handlebars a trifle too low and the footpegs a little too high to make the standing position really comfortable. The gasoline tank, though, is one of the narrowest we've seen, especially at the rear. This allows the rider to keep his knees in close, but his shins will probably bump on the cylinder head fins.

Several other small points could be improved on. The air cleaner, for example, is one of the popular dry treated-paper types, but the air inlet is open toward the front of the machine, which will allow water and mud to be thrown into the air cleaner opening. Putting the opening at the rear would place it in what just happens to be an excellent air box, formed by the seat at the top, the aluminum side covers and the rear fender. In dry going it's fine like it is.

Another small gripe we had was that the kickstand stop is not too strong and will bend if someone sits on the bike and places his weight on the stand. A stand is a necessary item, but it should be strong enough for the job with some safety margin built in.

It also seems strange that the Tyran is delivered without a silencer. England has noise laws which are just as rigid as the ones we have in America. This was evidenced by several British riders not being allowed to compete in championship races because their machines were too noisy. In addition, the exhaust stinger is angled outward from the expansion chamber so that when an accessory silencer is bolted on, it sticks out so far that falling on the left hand side of the machine will almost assuredly break it off.

The expansion chamber is tucked under the engine and is flattened somewhat to add to ground clearance. It is well designed and works in conjunction with the engine's port timing to begin developing good power fairly well down the rpm scale. There is no sudden rush of power as the engine comes up on the pipe, which makes the machine more predictable and somewhat easier to ride.

Appearance wise, the Tyran is just about as businesslike as you can get. Both fenders and the gasoline tank are highly polished aluminum alloy, as are the front fork legs, triple-clamps and side covers. The frame is finished in a deep metallic blue, the wheel rims are chrome plated steel and the wheel hubs are polished alloy. Really, it's one of the more handsome motocross machines.

There has been some lack of attention to detail in assembling the motorcycle, but some time spent carefully breaking the engine and front forks in, shortening the front brake cable and making a few small changes here and there will turn the Tyran into a winning 125. At present, whether the Tyran wins or loses depends a lot on the owner.

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SPECIFICATIONS

List price	$943 poe East Coast
Suspension, front	telescopic fork
Suspension, rear	swinging arm
Tire front	2.75 x 21
Tire, rear	3.50 x 18
Engine, type	two-stroke Single
Bore x stroke, in., mm	2.13 x 2.13, 54 x 54
Piston displacement, cu. in., cc	7.5, 122
Compression ratio	12:1 (uncorrected)
Claimed bhp @ rpm	18 @ 8500
Claimed torque @ rpm lb.-ft.	N.A.
Piston speed @ rpm ft./min.	3015 @ 8500
Carburetion	27mm Bing concentric
Ignition	flywheel magneto
Oil system	oil mist
Oil capacity, pt.	oil in fuel
Fuel capacity, U.S. gal.	1.2
Recommended fuel	premium
Starting system	kick, folding crank
Air filtration	dry treated paper

POWER TRANSMISSION

Clutch	multi-disc, wet
Primary drive	helical gear
Final drive	single-row chain
Gear ratios, overall:1	
6th	11.90
5th	13.70
4th	16.51
3rd	20.74
2nd	28.13
1st	44.16

DIMENSIONS

Wheelbase, in.	54.0
Seat height, in.	31
Seat width, in.	5-9
Handlebar width, in.	35.0
Footpeg height, in.	12.3
Ground clearance, in.	8.2 (at silencer)
Curb weight (w/half-tank fuel), lb.	190
Weight bias, front/reat, percent	46.5/53.5