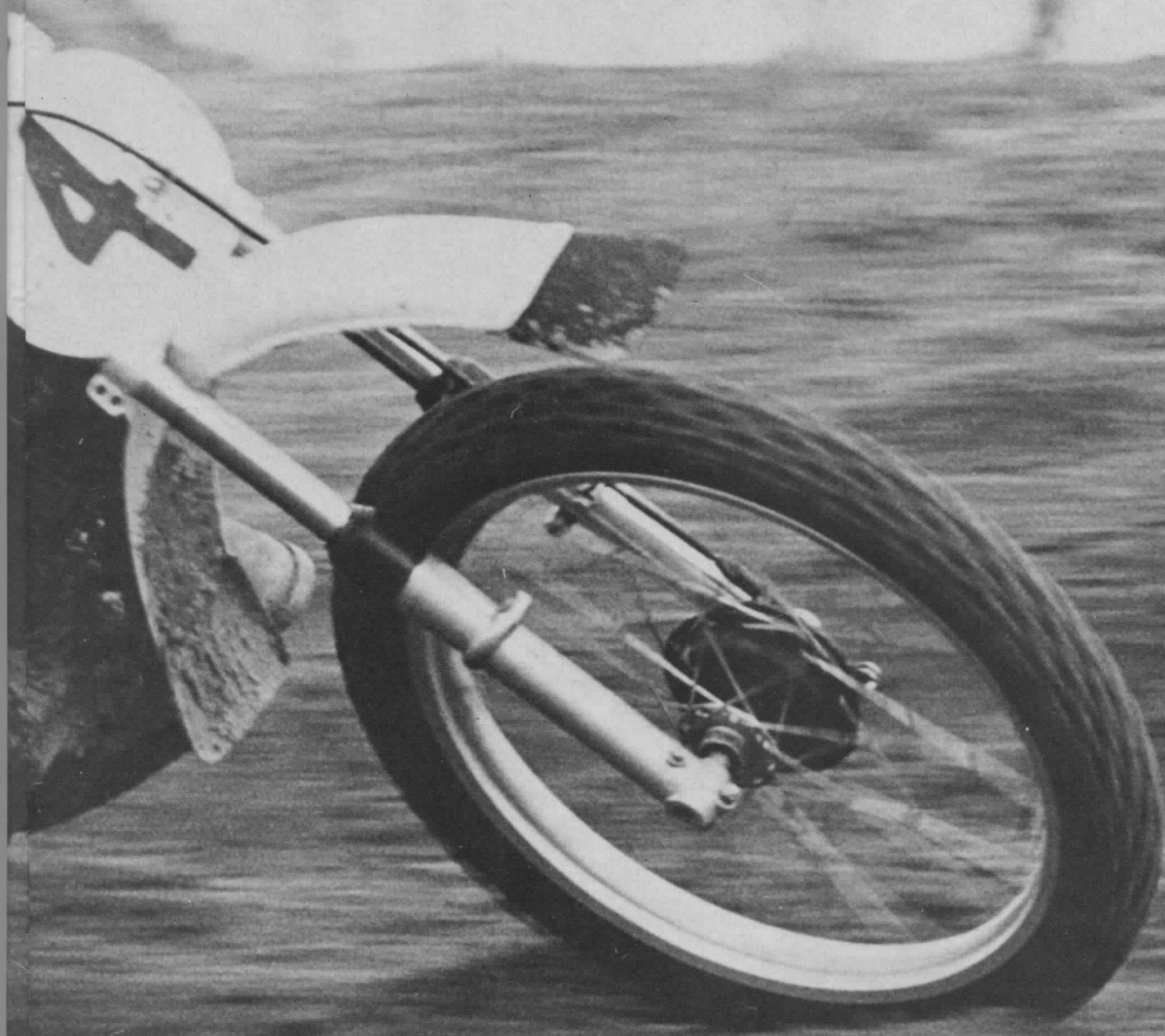


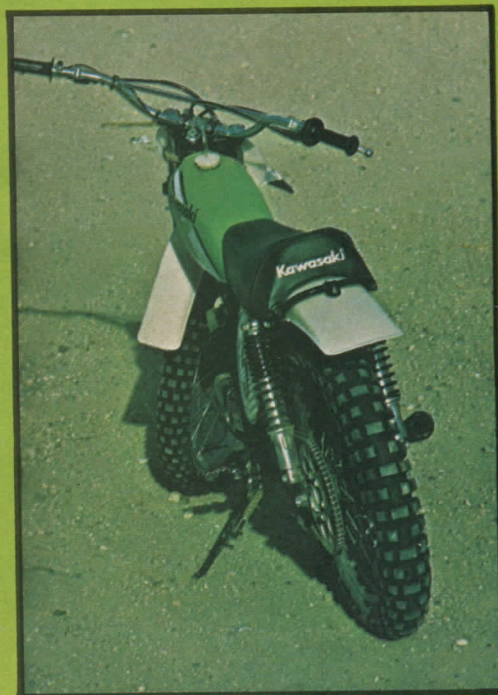


THE KAWASAKI KX-125

IN THE MARCH, 1975 issue of *Mini-cycle Action* we conducted a test on the Kawasaki MC 1M. If you read that test you'll remember that we found the MC 1M a pleasant, well built bike with a lot of potential; a bike with very good









The stock KX-125 (right) and Jeff Wecker's modified machine. Aside from careful jetting and tuning on Wecker's racer, the engines are identical. The major modifications are in the suspension department.

characteristics for trail riding, but somewhat lacking in the area of pure competition. The MC 1M can be made into a competitive racing machine but it takes a lot of time, money and effort.

Just the reverse is true of the latest Kawasaki, the 125cc KX model, to fall into our grubby little hands. The KX 125 is not the ultimate one-two-five class machine, but it's darn close!

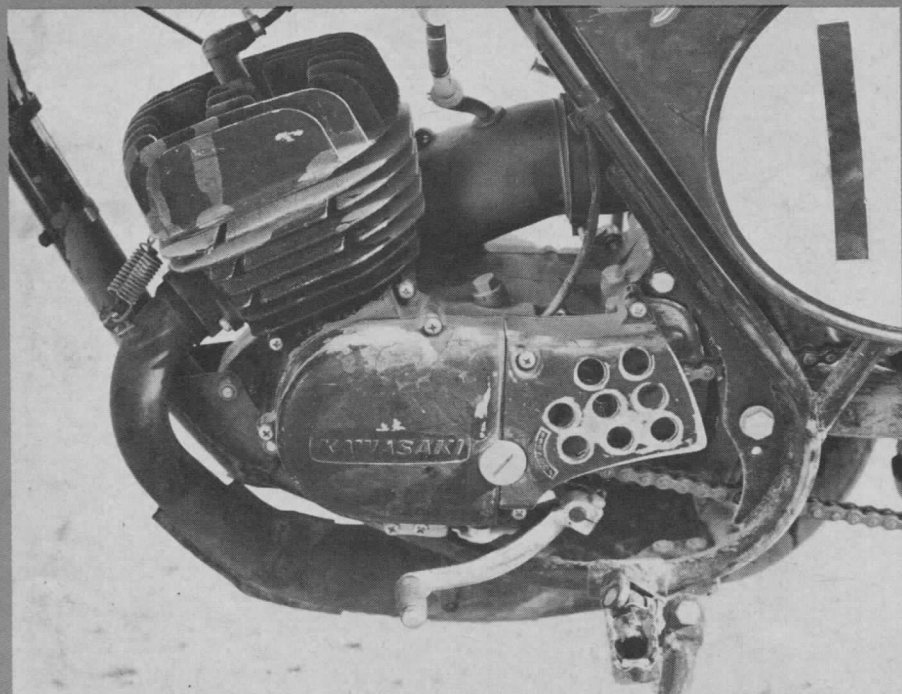
The KX 125 is a very attractive motocross racing machine with clean lines and an uncluttered appearance. The only real color on the bike is on the tank which is finished in (what else?) Kawasaki green. A diagonal stripe of white paint lends an attractive accent to the tank. The fenders are made of a nylon material that really does seem to be unbreakable. Plastic side panels cover and protect the air cleaner chamber, and also act as number plates. The rest of the KX 125 is just

The Kawasaki powerplant pumps out 22 horsepower at 9750 rpm, and has the widest powerband of any machine in the one two five class.

pure, serious, uncompromised motocross racer.

When we tested the KX 125 we were fortunate to have a guest rider along. Jeff Wecker, a Kawasaki sponsored expert rider, who campaigns very successfully in the hotly competitive 125 class. Jeff brought his personal bike along, and allowed us to compare it to the stock unit. The main differences between the stock Kawasaki and Wecker's bike were in the suspension department; the one department in which the KX 125 is lacking.

The front forks have 6.3 inches of travel, which is not bad for a 125 machine providing the forks "work." Unfortunately, the forks on the Kawasaki don't work well at all. Our test riders complained that the forks topped and bottomed, and offered little in the way of damping. It wasn't a matter of the forks getting hot and losing their damping . . . the darned things were poor right from the start. About the only thing that can be done to improve the front end action is to experiment with various weights of oil. Each leg holds 153cc of oil and the factory recommends the use of 5W20 weight; which is a pretty light oil. A heavier weight of oil will cure the topping out problem, and create another. The heavier the oil



used, the more unresponsive the forks become.

The suspension on the rear of the bike is only slightly better than that on the front. Each shock is fitted with two springs and pre-load on the springs can be adjusted to any of three positions. The back suspension works fine until the bike has been ridden long enough for the shocks to get hot. When that happens the damping disappears and you find yourself riding around on a pair of springs. Until the shocks get hot, the rear end behaves very nicely. The bike tracks straight and true when powering over the rough stuff, and handling through the turns and off the berms is good. But, like we said, when the shocks get hot everything changes and the ride can become very "interesting!"

Wecker has solved the suspension problems on his bike by installing a set of Betor forks on the front, and fitting a set of Koni shocks on the rear.

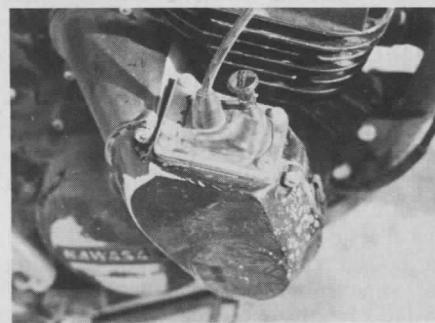


Wecker has also moved his shocks forward to increase wheel travel. We feel that, for the average rider, simply replacing the shocks will be enough to get the rear end sorted out.

So far all we've done is bad mouth the suspension on the KX 125. What, you might ask, about the rest of the bike? How about the adjective, "WOW!"

Our test crew felt that the Kawasaki KX 125 is as fast as anything currently running in the 125 class. And, that it has the widest power band of any 125cc racing machine! It's that spread of power that makes the KX 125 so impressive. Usually, the smaller the engine the more you have to rev it to obtain good power. That's why many of the one-two-fives have five- and six-speed gearboxes . . . you keep the bike in the proper rev range and shift constantly to keep the thing working.

The logical bike to compare the Kawasaki 125 with is the Honda 125 Elsinore. The dyno chart in the shop



manual furnished with the Kawasaki shows that the KX 125 is developing five horsepower at 4,500 rpm. Maximum output of 22 horsepower occurs at 9,500 rpm. Beyond that point power drops off very quickly. Dyno charts on the Honda show that the Elsinore hardly tweaks the needle at 5,000 rpm, and doesn't really start to pull until it's turning 6,000 rpm. The Honda too tops out at about 9,500 rpm. What all of this means is that the Kawasaki rider has about 2,000 more revs to play with

. . . and that can create quite an edge out on a race track.

In a straight drag race, the Honda and the Kawasaki will run just about dead even, but it's out on the course that that extra 2,000 rpm will pay off. In the turns you've got to keep a bike like the Elsinore spinning at peak revs, roll off the throttle for even an instant and you find the engine bogging down. When this happens you jab wildly at the shift lever, looking for a lower gear. This can be very time consuming;



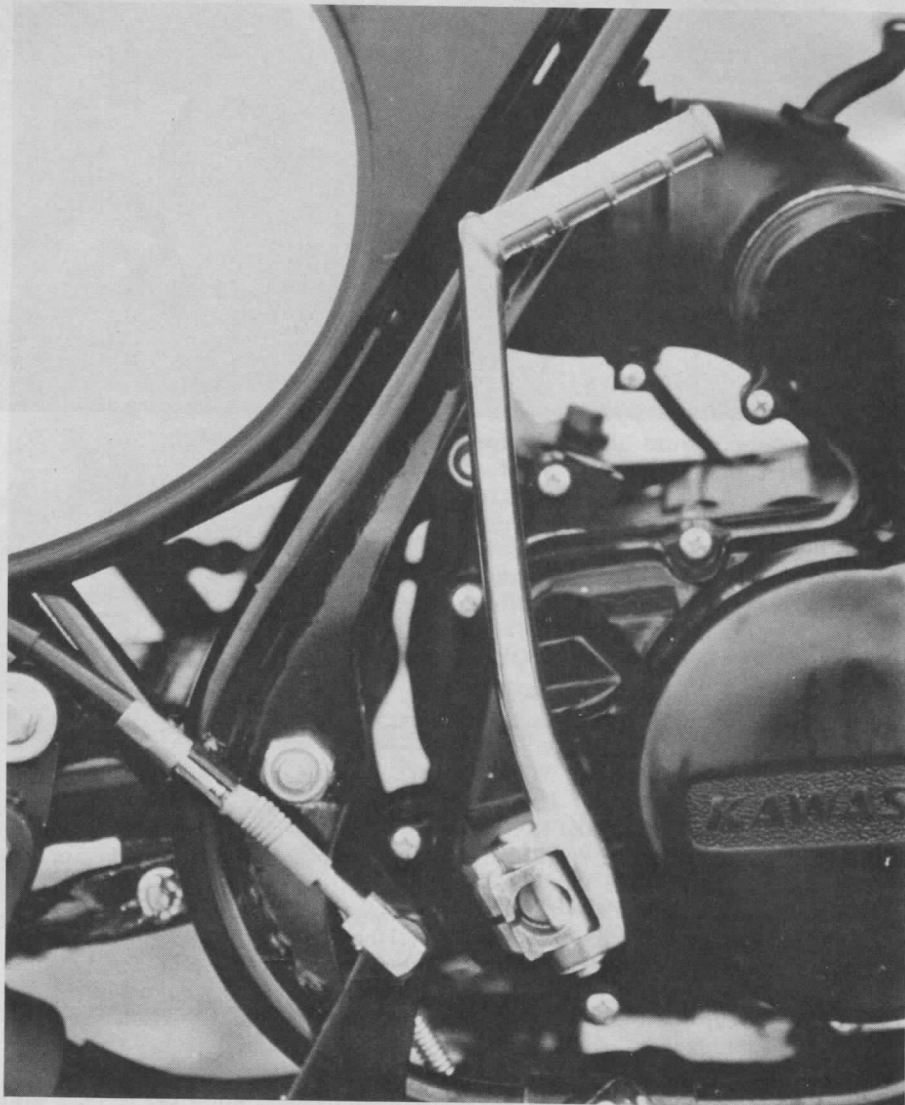
The fork action leaves a lot to be desired. On rough terrain the forks bottomed and topped. Experimenting with different weight oils might help the problem.

and it's the reason that so many races are lost in the turns.

Those extra 2,000 revs give the Kawasaki rider quite an advantage in the turns. He can, for whatever reason, roll off the throttle and then whap it back on with the assurance that his engine is still operating in the power band. A guy on a Kawasaki will usually come out of a turn a gear, or even two, higher than the Elsinore rider and that means that he's in good shape for the drag race to the next turn.

In designing the powerplant for the KX 125, Kawasaki stayed with a concept they're very familiar with—the rotary valve engine. The major drawback with this type of engine is its width. Anytime you hang a carburetor on the side of an engine and then build a housing to protect it, you're going to come up with a pretty wide unit. By using a relatively small carb, and mounting it high on the cases, Kawasaki has managed to create an engine that is well within acceptable width limits.

Most 125 racers come with a 28mm or 30mm carburetor, yet the Kawasaki gets by (and gets by quite well) with a 26mm Mikuni. While the carb is



The kick starter lever gave us some trouble. Dirt would get into the pivot and make it nearly impossible to pull the lever out. When we oiled it it got super loose and would sometimes flop out on its own accord.



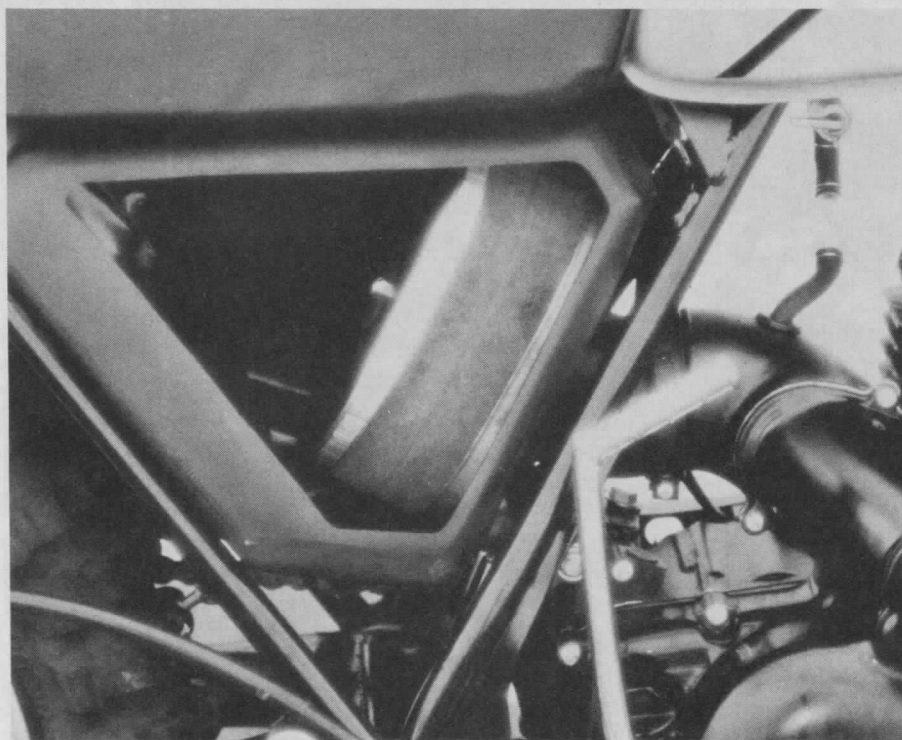
No nonsense handlebars: a throttle on one end, a kill button on the other, plus the usual levers. The grips are much too hard and get slippery when wet.

As it is the Kawasaki 125 is already plenty fast; we'd suggest that any owner go along with the shop manual and leave the engine alone.

Both the cylinder and the head are cast from light alloy, but the cylinder is a little out of the ordinary. Most racing cylinders are either cast alloy with a pressed-in iron liner, or cast alloy with a hard chromed coating on the cylinder walls. The Kawasaki has neither an iron liner nor a chromed lining. Instead, a hard metal coating is applied to the raw alloy cylinder walls. This hard metal coating is very thin and it makes for good heat dissipation. Kawasaki warns that the ELEX (that's what they call the coating process) cylinder cannot be bored or honed.

The bore of the engine is 56mm and the stroke is 50.6mm, giving a total capacity of 124.8 cubic centimeters. Compression ratio is 8.0:1 and a maximum 22 horsepower develops at 9,750 revolutions per minute. Spark comes from a CDI magneto carried on the left side of the engine. The wet, multi-plate clutch is on the right side of the engine and it couples up with a six-speed transmission. The KX 125 gearbox features Primary Starting, meaning that you don't have to go back to neutral when you happen to stall the engine . . . just pull in the clutch lever and

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Furry foam filter nestles in its plastic air box. The element can be cleaned and reused. Sealing between the air cleaner and the carburetor chamber is excellent.

mounted on the side of the engine, the air cleaner is back where you'd expect to find it: under the seat. A large diameter tube connects the carb housing to the air box. The element is a foam-type unit that can be cleaned and re-used, but the manual recommends that the oil be changed after every fifth race. Obviously, the racer who buys a KX 125 is going to become really skilled

at removing and replacing his expansion chamber.

On the very first page of the manual there appears the statement: "Your new KX 125 is a highly tuned production racer, and thus does not require tuning modification for participation in racing events." That's a polite way of saying, leave the engine alone!" There seems to be good reason for this warning. Several people we've checked with told us that trying to modify the KX 125 engine usually resulted in a blown powerplant.

KX-125

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wail away on the kick starter. Primary starting is becoming pretty common, but it's really appreciated when you have a bike with a six-speed box.

Starting the Kawasaki engine is simple! When it's cold you pull up on the choke rod that sticks out of the top of the carburetor housing, turn on the gas tap, and give the kick starter a couple of prods. It will usually fire by the

third or fourth kick. Once the engine is warmed up the bike is a one or two-kick starter. Underway, two things impress you: the width of the power band and the smooth way in which the trans functions. Having those six speeds on hand makes it very easy to keep the engine operating in the proper rev range, and the transmission is about as smooth as any we've ever tested. You just kind of think about a gear change, and you find yourself in the desired cog. Very smooth!

Because of the rather marginal handling it was a little difficult to determine just how well the chassis worked. Fortunately, we did get a couple of rides

on Jeff Wecker's bike which has extensive suspension modifications. After riding Wecker's bike it was obvious that the Kawasaki KX 125 has some pretty sound basic frame geometry.

The frame itself is very simple in design. A large diameter front down tube drops from the steering head to the front of the engine where it splits into two smaller cradle tubes which support the engine. An equally large backbone tube passes under the gas tank. At the point where the backbone ends two smaller diameter tubes descend behind the engine to connect up with the cradle tubes. A second, smaller diameter tube parallels the backbone and it, along with gusset plates, really helps stiffen up the front end.

The rear half of the frame looks pretty ordinary. An upper loop supports the seat and fender, and diagonal tubes connect the loop to the cradle members. The swinging arm pivots on tabs welded within the curves of the cradle tubes; a good feature in that it moves the pivot point as close to the countershaft sprocket as possible. A sturdy chain guide keeps rocks and other nasties from knocking the chain off the sprocket. A cross brace, just aft of the pivot tube, strengthens the arm and keeps it from flexing. As a matter of fact, the whole Kawasaki frame impressed us as a beautiful combination of lightness and strength.

Alloy rims are laced to alloy hubs (the front; conical, the rear; full width) and both hubs have brake wear indicators. The knobby tires, a 3.00 x 21 on the front, a 4.10 x 18 on the rear, have a rounded profile . . . a feature that tends to make them wash out when you push the bike hard into a turn.

The KX 125 is a real lightweight. Dry, it weighs 178 pounds. Even full of gas (it holds 1.7 gallons) and oil the bike still tips the scales at under 195 pounds.

Everything on the Kawasaki 125 is tucked in well out of the way of the rider, making the bike a lot easier to ride. (On a machine this size you have to move around a lot to get it to really work; forward on the tank, way back on the seat, etc.) The seat is super comfortable, but the grips are super hard and, if your gloves get wet from sweat or whatever, very slippery. The bars are set back slightly, which forces larger riders to ride a little farther back on the machine than is ideal. A smaller rider won't be bothered by the bars but he should replace those grips.

If it were properly suspended the Kawasaki KX 125 would be the best machine going in the one-two-five class. It's as fast as anything going and that wide power band gives it a decided edge on the race track. It also makes it a decent cow trailing bike; something that can't be said about the other, super peaky, 125 racers.

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