

SORTING THE SUZUKI TM 125

**MAKING IT
HANDLE**

By Fernando Belair

If you own a Suzuki TM 125 and you followed the instructions in the Super Hop-Up story in last month's issue of POPULAR CYCLING, you now own a still ill-handling yet much faster Suzuki than what you started out with. Unless you enjoy playing ostrich and ending every moto with your head buried in the sand, the following handling modifications are an absolute must for your scoot.

Although you might think that the TM's forks, because of their limited (5.7 in.) travel, would be at a disadvantage, a few inches of properly dampened travel is much better for stability than several inches of poorly regulated compression. In stock form, the TM possesses fair hydraulic dampening, but it could be better. What makes it better is a competition front fork kit from Fun 'n Fast in Northridge, California. The kit consists of two specially machined dampener rods that are hard ground to within .0005 in. of the stock factory items so you are assured of the snuggest possible fit. The rods feature much narrower flow holes which restrict oil movement within the fork and create slower compression and rebound characteristics. The rods are manufactured from mild steel and retail for \$24.95.

Once the Fun'n Fast kit is in place, take it out to your favorite track and experiment with different oil viscosities. Varying terrain and changing temperatures will make the Suzuki's front end behave differently in different areas. Fun 'n Fast suggests 30-wt. oil to start. Also, try using 130cc of oil rather than the standard 110cc.

With the front end sorted out, the rear end should be the next object of your attention. Although the swinging arm on our test Suzuki (Nov. '73) did not flex, several Suzuki riders we know have complained that with use, fatigue sets in and the arms start misbehaving. There are two things that you can do to alleviate this problem. One would be to weld a gusset on the underside of each fork of the arm. Be sure that the gusset runs the full length of the arm. If the material selected is of high quality, such as chrome moly, then the gusset need only be 1/4-in. thick and about 1/2- to 3/4-in. tall. Also, be sure that the weld runs up both sides of the gusset and that it isn't just spot-welded into place.

The other remedy for the flexing arm is to take it off completely and install an aftermarket swinging arm such as those offered by MISI, 2409 1/2 Apache, Tulsa, Oklahoma 74100, or by Red Line Engineering, 18265 Parthenia Ave., Northridge, California. These arms are manufactured from chrome moly

and come with all the hardware necessary to slip them right onto your Suzuki. Both swinging arms extend the wheelbase of the little TM and slow down the handling appreciably. The only modification which must be made is to add a few links of chain and make sure that the rear brake cable is long enough.

The TM 125 with the extended wheelbase handles much better than the stock version even if the original shock absorbers are used. But to get the ultimate in handling, a pair of aftermarket shock absorbers should be purchased. Girlings work very well but have short life spans. Konis cost a little more, but they work just as well and last almost indefinitely. Desert riders might prefer Curnutts. Be sure, when selecting an accessory shock absorber, that proper consideration is given to the increased travel and the resulting additional tire clearance. Also, try to purchase shocks whose lengths are as close to the stock length as possible.

If the idea of an extended wheelbase appeals to you now that the front end of your souped-up TM wants to constantly paw the air, but the cost of a new swinging arm sends a cold chill through your wallet, you can extend the stock swinging arm and save yourself some of the expense a custom-made arm would incur. All Season Sports Center in Boise, Idaho, the same people who devised the hop-up versions in last month's issue, have a simple method by which the stock Suzuki arm can be extended two inches. This extension is a simple operation whereby a 1-7/8 by 2-in. insert is welded into the rear swing arm tab. This is done after the tab has been separated from the rest of the arm by an L-shaped cut made where the factory originally attached the tab (see photos). If you decide that this is the route you want to go, be sure you gusset the swinging arm,



This swinging arm is a product of Red Line Engineering. It extends the wheelbase of the TM and will not flex like the stock arm. The one pictured is an early model. Production units will be nickel-plated.



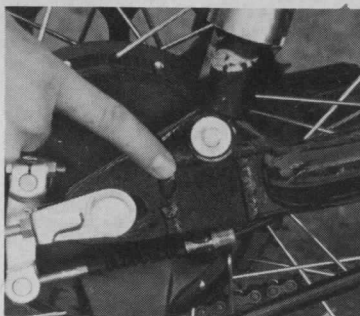
These two dampener rods from Fun 'n Fast, and 130cc of the proper weight oil, will transform the front forks of your TM into very well behaved units.

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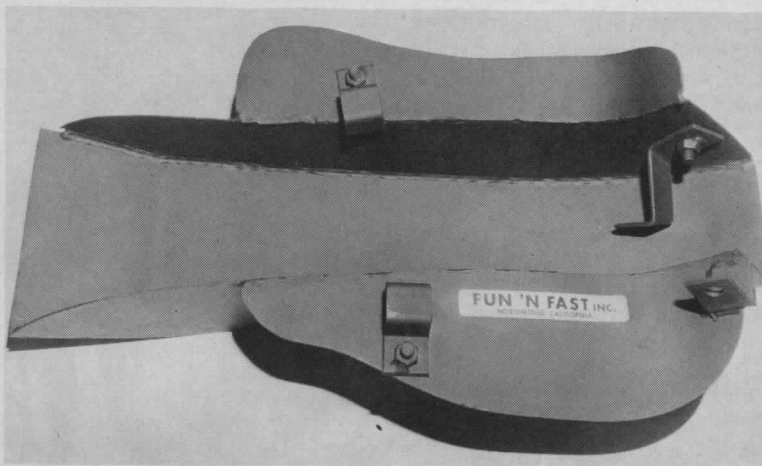
With the fork kit installed, the front end will treat potholes like they weren't even there. Yet, there is no externally noticeable difference between this manageable front end and a standard springy one.

To extend the stock swinging arm, cut along the scribed line. Be sure to use either a hacksaw or a cutting torch and don't try cutting the arm while it is still bolted to the frame.



After obtaining the Suzuki swinging arm extension tabs from All Season Sports Center (or you can make up your own pair), weld them into place as shown. Be sure to gusset the arm as now it will want to flex more than ever.

This Fun 'n Fast skid plate will protect the TM's vulnerable exhaust pipe from rock damage.



as previously explained, since the extended arm will have an even greater tendency to flex than the stocker.

The modified engine, whether you went the reed valve route or just hopped up your stock piston port, will gobble up much more fuel than the stock mill ever did. For those three motos on Sunday, the stock tank will hold more than enough. Besides, it can be refilled between heats. But for those of you who enjoy long weekend treks out on the nearest thing to the Sahara, running out of gas is the last thing you want to happen. For you, PMC of Burbank, Calif., offers a handsome 2.9-gallon unbreakable tank. The large tank doesn't interfere with either rider movement or steering crown travel, and allows engine work to be performed while the engine is still bolted to the frame. Even if you didn't modify your TM according to our specs, the larger tank offers a highly increased distance range so that you can take much longer excursions than ever before.

Also for desert pilots, and something that can be just as easily utilized by motocrossers who frequent rock-laden courses, is a skid plate. We found two different ones that are designed for the TM 125. One is from Fun'n Fast, the

manufacturers of the fork dampener kit. It is manufactured of mild steel and protects the lower side of the outer case as well as the expensive Suzuki exhaust pipe. The other is the product of Belcher Designs and may be obtained from All Season Sports Center. The Belcher bash plate is made of break-resistant, heavy-gauge plastic and it bolts to the frame with very little hassle.

Now that all of the major modifications are out of the way, you might start looking towards some of the minor stuff. The footpegs on the Suzuki are grim. Not only are they poorly designed, but they are not spring-loaded. Most of the many accessory manufacturers have pegs that either fit or can be slightly redesigned to fit the TM. Springs, so the pegs won't fold by themselves, are available at any hardware store. The standard handlebars should be replaced with something that suits your personal riding style a little better. If the stock bars feel at home to you, then just leave them alone, but if you want to make this change, then try to find some bars that are made from chrome moly. Not only are they strong, but you'll find that these bars are lighter than stock. The TM is not heavy, so anything you do to make it lighter is like icing on the cake. While you're at it, find some grips and levers that are more comfortable, especially if you ride for extended periods of time.

The final modification is to change the tires. The standard tires on the Suzuki are poor. It's terribly frustrating to have spent all this time and energy modifying the engine and handling of your TM only to lose races because you can't deliver enough power to the ground or corner hard enough to keep ahead of the rest of the pack. Keep the two sizes the same, but get some rubber with healthy-size knobs.

Now you're ready. Go out to the track and find the guy who laughed at you the last time your TM pitched you into the weed patch. Then blast by him in the rough stuff and bury him with your roostertail.



Belcher Designs markets this lighter, heavy-gauge plastic bash plate for the TM 125. Also note the large 2.9-gallon plastic tank made by PMC.