

## KTM Set-Up Tips

# NEW LIFE FOR AN OLD MUD-RUNNER

Bringing a much-neglected Penton/KTM  
back up to snuff: how and why

By Paul Clipper

I'm sure we've all had occasion to find, tucked away in the corner of a garage, something that we had almost forgotten we owned. Maybe it was a barbecue, in perfect repair, that was put away one fall and promptly forgotten about. Or maybe a croquet set; they're always getting lost, thankfully enough. There's nothing worse than having those little striped wooden balls under foot all day long, and they're always covered with cobwebs.

What I'm getting at, is the basic fact that there are more bikes tucked away in cobwebby corners these days, than ever before. Either in yours, or a friend's, garage, storage shed or what have you, there's likely to be an old wreck gathering dust. And with all the parts and accessories available today, there's no reason for a good bike to sit idle.

What with having to buy the latest in long-travel everything, I wound up pushing a 175 Penton into a corner a few years ago, and promptly tried to forget about it. Time went by, and I was happy as a lark, until one day when I stepped off the high side of a long-travel wonder in the middle of a severe uphill. This wasn't the first time it had happened, but it got me thinking about what life would be like with a shorter bike. One thing led to another, and out came the KTM. A minor amount of expense, and a lot of cleaning and tuning, and it was once again road-worthy.

So, for the benefit of all the Penton/KTM owners, everybody who's got one in a dusty garage, or just pur-



chased one from same, I am listing all the different things we did to an old 175, just to give you some ideas about how you can treat yours. With the exception of the motor, everything listed should work on any size model that features a high-breather frame, this one being of 1975 vintage. A lot of the parts and tricks mentioned will fit *any* bike, or are easily adapted.

And now, a few words about suitability. You say you don't have a KTM in the garage, but you *do* have an old Ground Thrasher 260 MX, and will it be worth it to fix it up? That all depends. If it needs a new motor, and parts were discontinued back in '71, I'd say no, it's not worth it. Don't try to

renovate something that's going to cost an arm and a leg; it's only going to break you in the process, and probably won't work right when you're done. If you own an old Husky, Maico, or a European mount such as that, by all means drag it out—these were good-handling bikes stock, and with a little bit of luck, you might be able to make it better. A lot of the old Japanese bikes, on the other hand, *don't* work too well, and you may have to put more bucks into it just so it satisfies you. But parts are plentiful and relatively cheap, so let your wallet be your guide, and try not to bite off more than you can swallow.

### Motor

We didn't have a whole lot of work to do to the motor, so we just brought it up to specs. The piston had a few seize marks on it, after about 2400 miles, so the top end was freshened up. We called Wiseco and found out that they don't make a piston for this bike anymore. There are a few dealers and/or distributors who have Wiseco pistons left in stock, but if you go out looking for one, don't expect them to be in plentiful supply. KTM still has all the parts, and although they are a little more expensive, they wear like . . . er, iron, although they're not quite as heavy. We used a KTM piston, and will offer a couple of suggestions: Don't forget to drill the little lube hole in the exhaust side of the piston, as per instructions; and please check the deck height of the piston carefully. The base gaskets for the bike are available in various thicknesses. All this and more





The Terrykit comes with air valves, just in case you want to install them. Just drill and tap the caps and fill in the vent hole.



To perform the pipe surgery, first cut lightly at the rear weld—just go through one thickness of metal . . .



. . . and when you knock it off, the end of the pipe should look like this. You'll be cutting off the stinger . . .



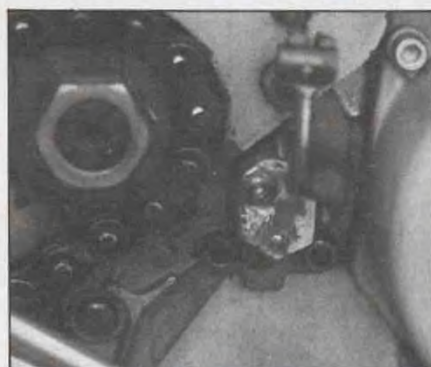
. . . and about four inches of the rear cone. Keep cutting and fitting a little at a time until it sits straight and flush, and then weld it up. Use a Super Trapp mounting kit to hold it up.



For the most complete waterproofing, tape or silicone seal the air box holes under the seat.



Sometimes it's necessary to slip a little piece of shim stock in around the swingarm bolt. Whatever works—keep it tight!



Suggested location for clutch actuating mechanism grease fitting. Be *very* careful if you choose to do this; you may ruin the housing.



Finished pipe is very sanitary—it takes a second look to realize that the bike isn't stock. Rear frame rails is one suggested place for the Girling reservoirs; they'd look a lot better mounted in the front, but space is at a premium up there.

is explained in the instruction manual, and if you don't have one, the instructions are with the piston. I would strongly suggest that you get a shop manual, though.

There are a few modifications you can perform while you're fooling with the motor. One: The clutch actuating mechanism is said to suffer from a slight lack of lubrication, causing it to wear rapidly after a certain point. This can be cured by installing a grease fitting after you have taken it apart and determined the best spot to drill the hole. There's a photo here that will give you a better idea of what I'm talking about. If you do it, *be careful*, there are a lot of little parts that can be ruined very easily. Give the zerk fitting

a *light* shot of grease after every ride, and you'll have no problems.

Two, install a Preston Petty mag cover. I think it seals better than the stocker, and it's certainly more durable. The Motoplat ignition never has to be fooled with after the timing is set, but remember to keep it dry and clean. If you suffer from a blown mag seal, by the way, it can be replaced without splitting the cases. Just pull the Motoplat out and remove the retaining plate, and the seal is easily replaced. Wish it was this easy on every bike.

#### Carburetion

The carb on the stock Penton is a 30mm Bing, and the ballpark jetting

should be a 150 main, 30 pilot, 276 needle and an air screw opening of one to one and a half turns. Depending on what kind of altitude you mostly ride in, you may have to go down on the main or pilot, and fiddle with the needle. I doubt if it's necessary to tell you that the Bing is very sensitive to altitude changes, but it is. And another thing it happens to be sensitive to, is slide wear, and if the bike is a little worn and it just doesn't want to run right at idle, take the slide down to a dealer and match a new one up. I don't know why it works, but it does.

Since most of our riding is at a rather higher than normal altitude, we chose to forgo all the following and use a

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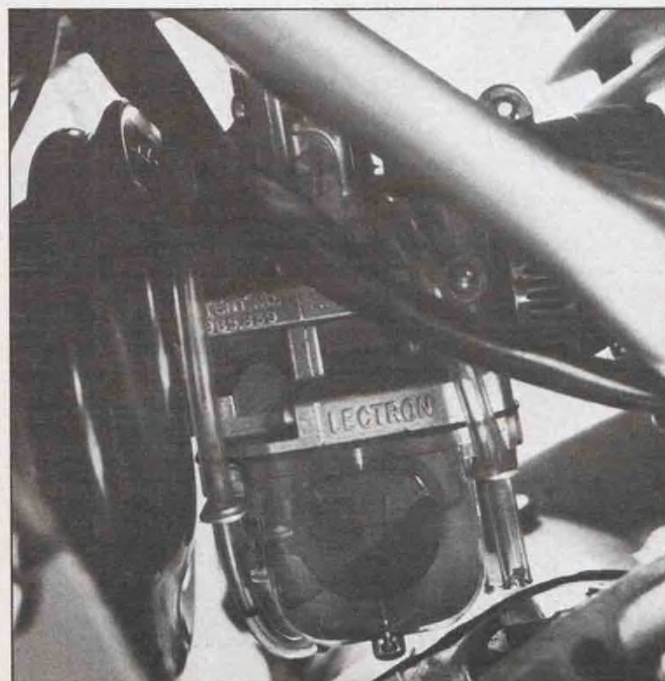




Tank fits like a stocker, and can be held down by the stock method. We used one of the old tank cables to anchor the front of the tank bag. Clarke tank only uses one petcock.



Magura ISDT levers are used; they can save a lot of time with emergency cable adjustments. The MTD/Twister throttle has a smooth, effortless feel, and should save us a lot of throttle cables.

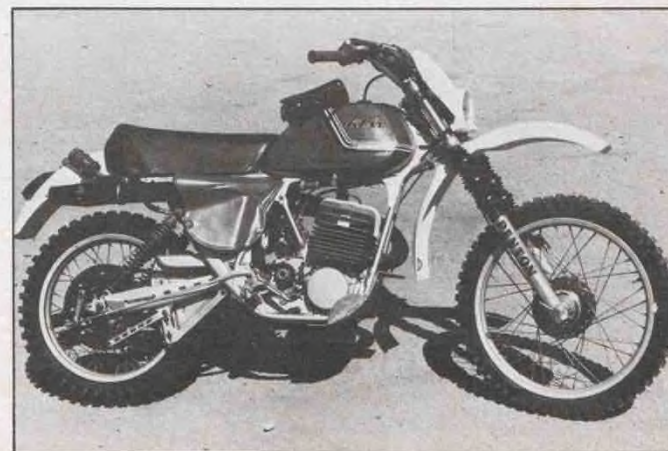


The Lectron will just squeeze in, if the manifold is modified to accept the spigot mount carb. Underside of pipe should be dinged slightly to increase clearance.



#### APPROXIMATE PARTS PRICES

KTM piston kit, 175	\$55.07
Preston Petty mag cover	\$20.00
36mm Lectron Powerjet carb	\$99.50
Super Trapp weld-on silencer	\$27.95
Girling shocks, remote reservoir	\$129.99 pair
Terrykit fork kit, large leg Ceriani	\$59.00
Sun rims, 18-inch WM-3/21-inch WM2	\$34.50 each
Clarke Penton/KTM tank	\$65.00
Hi-Point tank bag	\$37.95
Tsubaki 530 chain, 108 links	\$30.00
Preston Petty MX front fender	\$10.00
Preston Petty IT rear fender	\$19.00
Preston Petty headlight/number plate	\$18.00
O'Neal plastic seat base, KTM	\$12.50
MTD/Twister throttle	\$19.95
Tumbleweed Enduro Jug	\$9.95
Oakley grips	\$4.25 pair





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Lectron carb. It is a 36mm Powerjet model with a turned-down bell, and fits with a minimum of modification. We cut approximately 1/4-inch off the stock intake manifold, and mounted the Lectron with a two-inch length of 1 3/4-inch radiator hose. It will mount right up to the air box connection, although it's a tight fit; you may consider cutting down the big end of the air boot.

Ours is jetted correctly with a 3-2 metering rod and a #50 Powerjet at sea level, but we expect to do a little fine-tuning at higher altitudes. The nice

thing about the Powerjet carb is that the top end is tuned by a Mikuni pilot jet, available almost anywhere. The Lectron is very easy to tune, saves gas, smooths out the powerband, and is a lot easier to live with than the stock Bing. Oh, and if that isn't enough, the bike starts a lot easier, doesn't load up anymore, and it will even idle lying on its side. If you can pop for the bucks, it's really worth the money.

### Exhaust system

The stock pipe on a Penton is one of the quietest and most efficient systems made, and if yours is intact, I would heartily suggest that you leave it alone.

Of course, it's all right to repack it when it starts getting noisy, and the various cracks that open up now and then should be welded up. And, if it hasn't cracked yet, it probably will—quiet pipes have to put up with a lot of abuse.

But, what do you do if you entered the Moonshine enduro and, in a moment of discretion, jumped off the bike in the middle of a sloppy downhill and wound up smashing the rear section of the pipe flat? I've seen this happen to one person. He thought about all kinds of solutions, and then finally cut off the outer housing and about four inches of the rearmost cone, and welded on a Super Trapp one-inch, weld-on silencer. Hopefully there'll be room for the photos of this delicate operation. Using an accessory resonator, a Quiet-Core insert and five discs, there's plenty of breathing room and the pipe is nicely quiet and is a U.S. Forest Service-approved spark arrestor. A good investment.

### Frame

There is no need to try anything other than a stock frame, although the swingarm may be a different story. Oh, there's nothing wrong with it, but if you let the bearings dry out and the through-axle get loose, you may think you wrecked it. The bearings are an absolute horror to remove, so just have someone cut them out with a die-grinder (porting tool) and save yourself a whole lot of grief.

If the axle got loose, the threads on it are shot, but at least this area of the frame holds up well. All you'll need is a new bolt—it and the bearings are available from KTM. For ease of maintenance, replace the oil plugs in the swingarm with zerk fittings and grease hell out of them, and next time, remember to keep the pinch bolt tight, try shimming it, and use Loctite.

The only other really critical part of the frame is the steering head. Keep the bearings tight and greased, or it's possible to deform the bearing cups. And if you screw them up, I don't know what you're going to do. Sell the bike, I guess.

### Suspension

Back in its heyday, the Penton boasted of eight-inch forks, and a maximum of 7 1/2 inches in the rear. And with the good old six-position swingarm you could put the shocks through any kind of torture you wanted, and it actually worked pretty fine, once you got the shocks dialed into their position. But, in the 7 1/2-inch position the punishment is severe, and you'll need a good shock to keep up with it. Everybody has their own ideas about shocks, and there are all kinds that will fit, but we are going to try a

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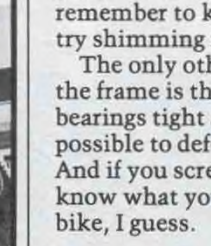
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pair of gas Girlings, in the lay-down position. Two main reasons why we went with this choice: They are quite inexpensive, \$129.95 a pair at Knobby Shop International, and we were impressed with their performance on the Can-Ams. We're using a pair of #6050 remote reservoirs with 76/132 springs. Make sure you get the right bushing sizes. And don't consider the standard shocks. If you're using the lay-down position—they just won't hold up. We're getting eight inches of travel using the Girling shocks.

All we did to the stock forks was add

a Terrykit to improve the damping. With the kit, we are also getting 8 3/4 inches of travel. That's not a whole lot of stroke, but it's enough. Did you ever have a problem with ground clearance when using leading axle forks? I've had the bars knocked out of my hands a couple of times when the fork tube hit a rock, or got hung up in the mud. It's not enough of a gripe to condemn leading axle forks, but if you have a set of straight legs that can be made to work well, by all means use them.

Or, if you have to have a new set of forks, see your Hi-Point dealer. He can order you a set of Ceriani or Marzocchi forks that will bolt right on.

## Wheels/tires

The stock hubs are laced to Sun rims, and we chose to use rimlocks instead of the bead pins. If you use the pins for enduro work, you should use rimlocks also—if you have to ride on a flat tire the pins alone will destroy it. Tires are a matter of choice, or what you have lying around. We're using Yokohama rim saver tires; good, sturdy units. Metzlers are the stock tires, and they're excellent, if you can afford them.

## Controls/miscellaneous parts

Gas tank is a Penton/KTM desert model, available from Clark Mfg. It uses the stock petcock and has a real nice non-leaking cap. The decals are available from KTM, and it's held down with a Hi-Point tank bag.

The chain is a quad-staked Tsubaki from Sudco Distributing, one of the strongest and least expensive on the market, and by using a 530 chain, you should never have any problems with it. The sprockets are from Circle.

Plastic fenders and headlight are Preston Petty items, the acknowledged best, and all the lights work, including the brake light. No sense putting them on if they don't light up.

A few more plastic items: The seat base is an O'Neal Distributing item, a little lighter than the stock fiberglass and a whole lot stronger. See our article on seats in the July issue.


An MTD/Twister throttle from International Motorsports pulls on the throttle cable. It's made entirely from plastic and is a true straight-pull design. It should save a lot of wear on cables. The other red thing on the bars is a Tumbleweed Enduro Jug, strictly a comfort item. It holds a quart of whatever liquid you may want to put in it.

Magura quick-adjust controls found a home up there, too. Not quite as popular as the MX models, but they can save you a lot of time in an enduro, allowing you to adjust your brake and clutch as you're rolling along. The Oakley grips are a natural around here; we use them on all our brakes, just 'cause they feel so good!

Hanging under the motor is a Hi-Point bash plate that's seen quite a bit of action and is still in one piece. Highly recommended.

## And now...

We have a bike here that, after a long period of rusting, is capable of going out in the woods again. Is it worth it? Of course it is. If you spent \$400 on completely shaping a bike up again, and that saved you from going out and plunking down two grand for a new one, it must be worth it. It may not be the latest and trickiest of machinery, but it can still run rings around a surprising amount of late-model bikes. And you may find that it handles a whole lot better. □



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