

MR250 SET-UP TIPS

Red Rover Once Over

Story and photography by Larry Langley



Who in the blazes is Larry Langley and why is he saying all these things about the MR250? Thumper enthusiast Langley, a National Enduro winner, is a veteran competitor and free-lance writer.

Honda's introduction of their MR series proves they're serious about building genuine enduro-type machinery. The MR250 is a fine first effort, but is burdened with inadequate suspension for expert level competition and an exhaust system which chokes off an otherwise adequate powerplant. Here's what we did to correct these deficiencies.

Previous experience had sold us on Tim Witham's S&W fork kits for Hondas. A mite expensive at \$59.95 plus springs, until you consider the cost of new forks. S&W springs replaced the stock units which tend to sack under hard use. The forks were disassembled and cleaned and



new seals installed. The S&W damper units dropped right in with no modifications required. The S&W units use no topping spring,

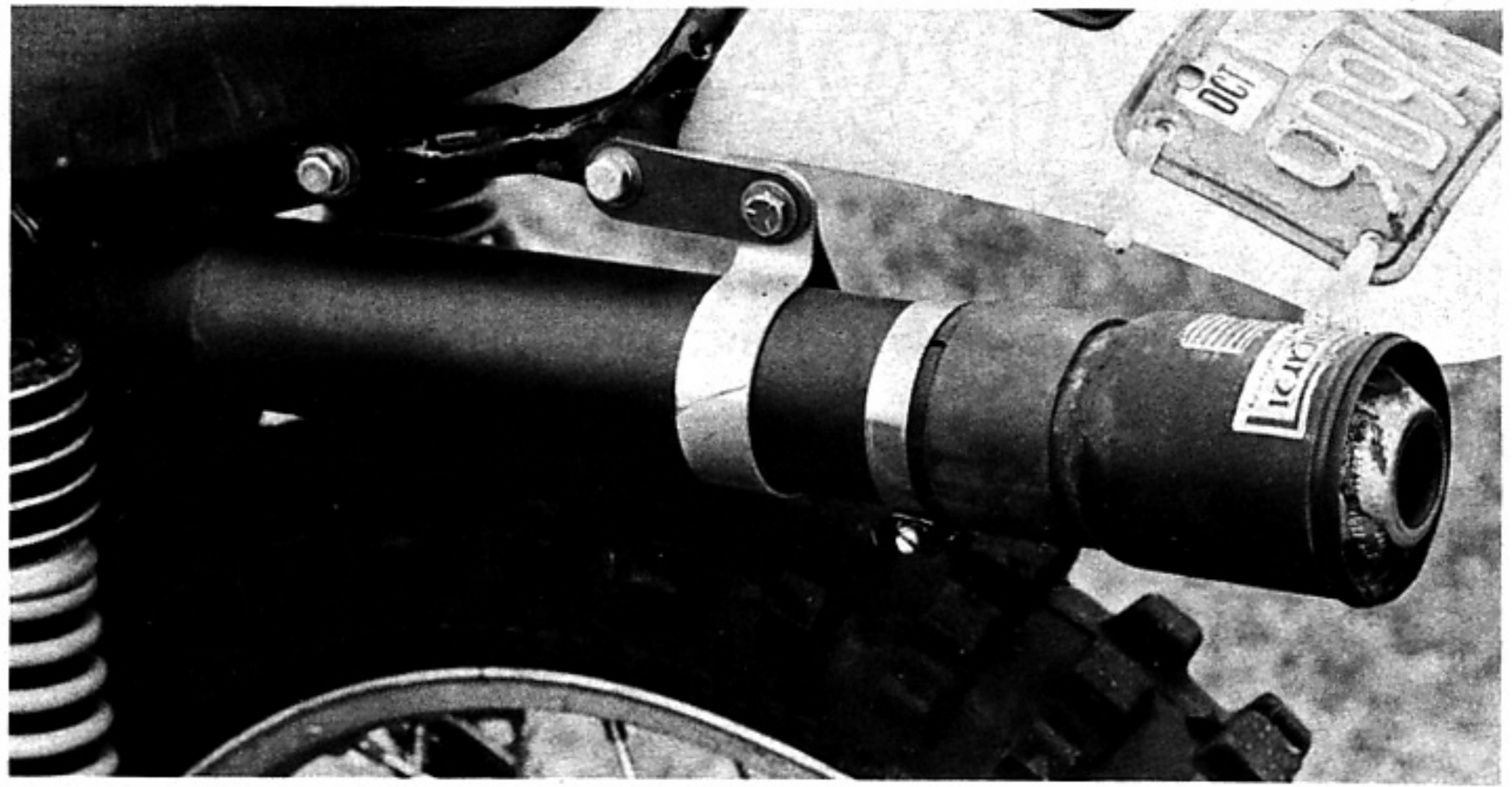
depending on hydraulic lock to prevent fork topping. The latest kits do have a topping spring. 195cc of Torco fork oil was added along with Malcolm Smith fork boots.

Next we turned our attention to the stock shocks. Under hard use the shocks fade easily and are vague at their best. We motored on over to Number One Products (the inventors of those TricKit fork kits) and asked Brian Fabre if anything could be done to make the shocks livable. Brian promptly whipped one of the shocks on his sophisticated shock dyno and traced the rebound and compression pattern on his scope. The shock doc diagnosed the problem as inadequate compression damping. Rebound damping was OK. With the flair of a skilled surgeon, Brian tore into the boinger. "Aha, here's the culprit," Brian exclaimed, with the foot valve in hand. "The compression hole is too big." With his trusty micrometer he

took measurements of the tiny hole and retired to his office to play with his computer cleverly disguised as a pocket calculator. After a few minutes Brian proclaimed that a #55 drill size should fill the bill. He then brazed the hole shut and drilled a new smaller hole with the #55 drill bit. Next he reassembled the shock and mounted it in the dyno, and voila! Instant compression damping, but it still faded.

Our next step was to install a set of Skyway Freon Gas Bags in the shocks. The gas bag is a simple Freon-filled cellophane bag which is installed in the outer chamber of the double-walled shocks such as the Honda and Mulholland-type shocks. Using the supplied oil (other oils are not recommended due to possible non-compatibility with the bag), all air was pumped out of the shock. For a measly \$9.95 the bags are a true bargain.

We were now satisfied with the Honda shocks, but wanted to try some of the new Works Performance shocks we had heard so much about. Gil Villaincourt fixed us up with a pair of his blue sprung wonders. Surprisingly, they work well with either a 170- or 200-pound rider. The secret is that the damping



does most of the work. Gil firmly believes the springs are there just to hold up the weight of the motorcycle, nothing else. We're not arguing either, they work. A unique valving system is used to compensate for the shocks working under any condition.

It was time to enter the bike in an enduro. We couldn't believe the difference. It could now be flogged through the whoopers flat-out in fifth gear. The MR geometry is basically good; it's the same as the CR but with the mild steel frame, XL-type hubs and steel gas tank adding about 25 pounds to the bike.

Next we turned our attention to the power. The pipe was choking things off. The first to go was the humongous silencer. We still weren't satisfied. We thought of using the CR pipe since it was single-walled, less baffled and lighter, but decided against going to an MX pipe. Bassani Mfg. solved our problem by building a prototype pipe. A quick ride convinced us they had the answer. They even managed to salvage the bottom end and mid-range. The pipe definitely was ready for production.

Now we had a bike that would run with anything in the 250 enduro



Another MR250 set-up. This one by Steve Holladay and Wayne Cook, for cross-country desert racing. The fellows were fresh off winning the 250 class in the Parker 400. What you see here is their set-up for the Mint 400.

Optional MR kit: 36mm Keihin carb and cylinder. They used a 148 main (stock is 158) with the needle in the middle and all other jets stock. Optional 13/49 sprockets aid top speed capability. The spark arrestor was removed, the stock pipe kept. The rear pipe mount was boxed to make it stronger. The stock air filter was retained.

Suspension. An S&W fork kit up front and S&W shocks, 14 $\frac{3}{4}$ inches long with 5 $\frac{1}{4}$ -inch travel fork in back. The top shock mounts were moved forward four inches and the bottom mounts were advanced about 1 $\frac{1}{2}$ inches, by Dan Murphy at California Moto-Sports, giving them about nine inches of rear wheel travel. The S&Ws have ball joints, a prototype feature that will probably be introduced to the production boingers.

Case saver bars were added to the frame, which was stress relieved, shotpeened and Y-gusseted. A Petty Muder up front. K&N HR2 bars. For night running they use a Malcolm Smith K&N aluminum headlight mount. The fellows recently switched from the Cibie Super Oscar to the KCJ8 model from KC Hilites. (12v, 130 candlepower, five-inch light.) The seat got some padding from Don Memmott.

The bike was set up at Tom Sawyer Honda where Wayne works.

Prices: Optional barrel: \$136 (Sawyer will port the stock cylinder to specs for \$60). Optional carb: \$51. S&W shocks with springs: \$84.50. Works Performance shocks with springs: \$115. Seat: \$25. Handlebars: \$17. Frame (shock mounts) modification: \$110.

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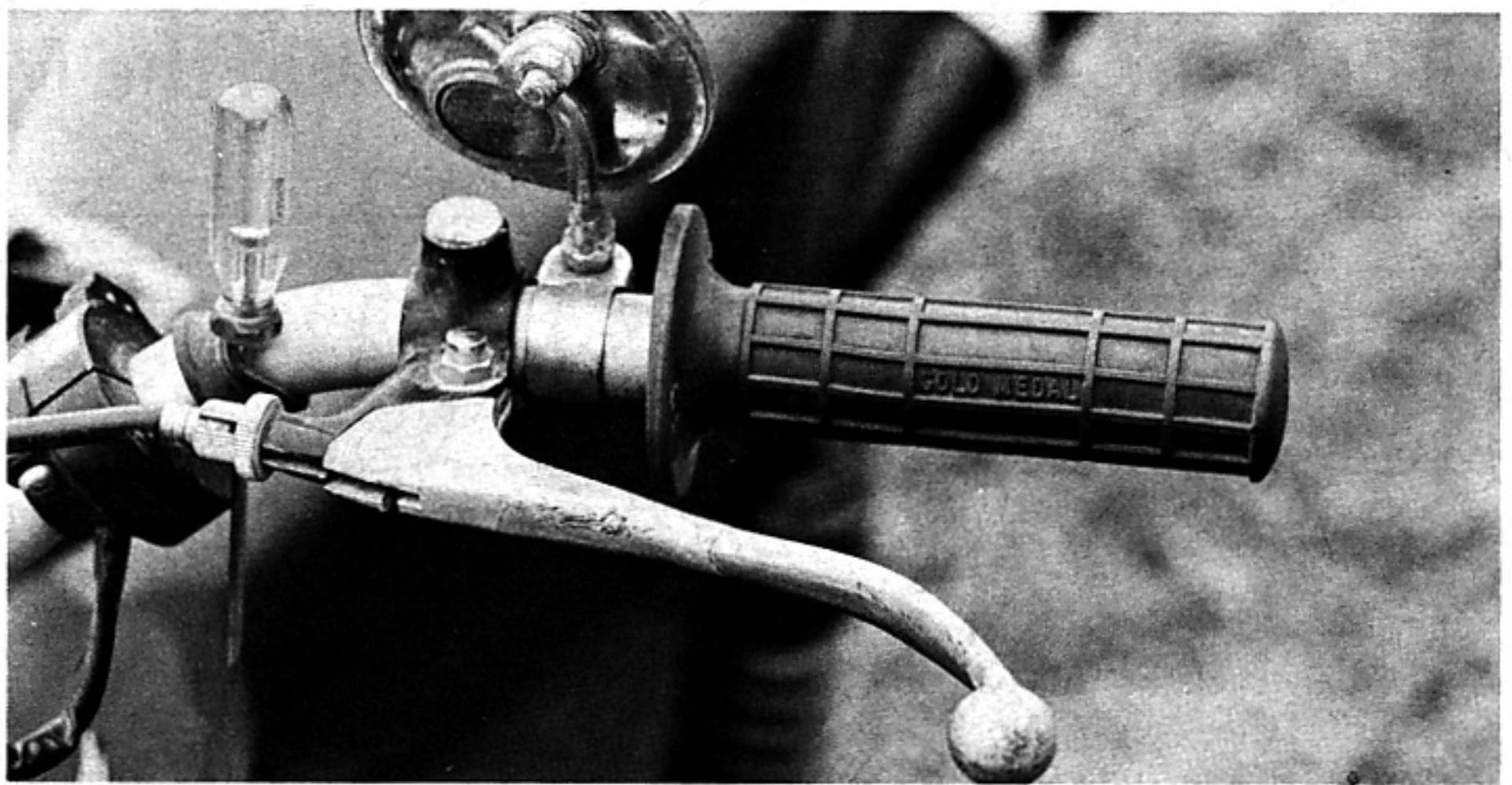
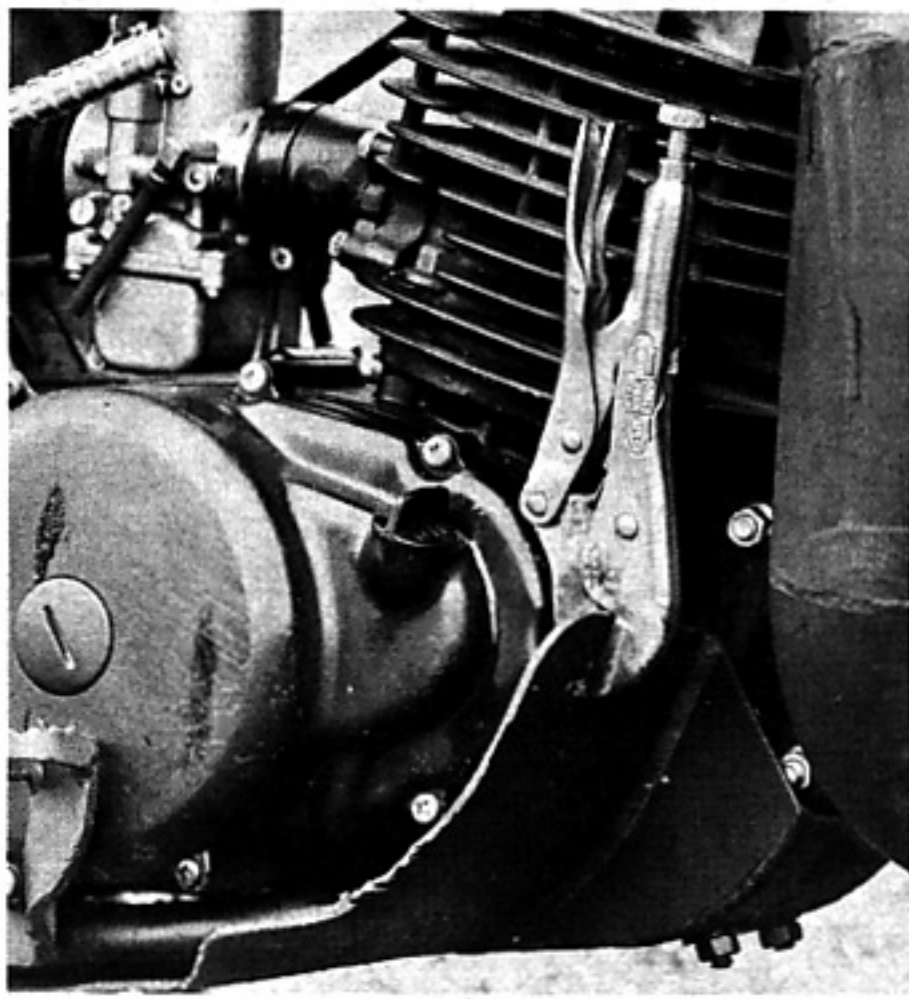
Hi-Point Accessories
3709 W. Erie Ave.
Lorain, Ohio 44053
(216) 244-4101
(See your local Penton dealer)

Mettco
1528 S. Santa Fe
Compton, California 90221
(213) 632-0143

Skyway
12300 Gladstone
San Fernando, California 91342
(213) 365-3172

Works Performance Products
20970 Knapp St.
Chatsworth, California 91311
(213) 998-1977

S&W
(See your local dealer)



class. We started adding personal touches. A Graham's Sheet Metal skid plate to protect the magnesium cases was bolted on. A Hi-Point folding shift lever was welded on. By shortening the lever a tad, it now tucked in behind the case bulge for extra protection. Malcolm Smith Pro Grips, J-Bars (solid aluminum flexible type), gas tank and behind-the-seat tool bags were added. The countershaft sprocket cover was cut away for easy access. A 14-tooth countershaft sprocket replaced the 15-tooth stocker for more low end, still providing a top speed of 70 mph.

The bike was entered in the Shamrocks M/C Two Day Qualifier held at California City in the great Mojave Desert. Two days and 360 long, arduous miles later, tired and whipped by the rugged desert course, I was all grins. We didn't exactly challenge Mike Hannon, the class winner, but earned a Gold Medal. The bike was flogged, pure and simple. I screamed it up some of those uphill in second gear, full throttle to the stops. I came out of

the event with a new outlook on the bike. I was beginning to be impressed. One week later, teammate Terry Swets rode the bike in the Tecate 500, a super-rugged enduro through Baja, with only 84 finishers. A first in the 250 class earned our total respect for the MR. A teardown of the engine after six tough months showed the Bel Ray oil mixed at 60 to one was doing its job. Rings needed replacing, but that was about it.

In the meantime we have ridden Harry Keast's MR250, which Harry campaigns in Southern California enduros. Harry had Fred Hayes at Metco (the same outfit who set up the factory MR175s) clean up the ports and install a 34 Mikuni carb. We liked the way the engine pulled, really smooth, and it seemed as fast as our MR. We decided to let Fred do the same on our engine, but left the stock Keihin carb on. Fred didn't carve any drastic metal out of the ports, just a real basic cleanup and a little piston trimming. Didn't want to hurt that good enduro powerband, he explained.

Next effort for the project MR was the annual 500-mile Greenhorn Enduro, which runs from the town of Pasadena (site of the Rose Parade and Bowl), through the mountains and out to the desert and back. Part of the enduro was to be run at night; return leg would start back at 12:30 a.m. Sunday morning! We already had to get the MR "street legal," as public roads would be used; now decent lights had to be added as the stock 25 watt — six-volt MR headlight figured to be inadequate for any fast night desert riding. A Honda CB750 headlight was mounted and transposed right into the stock MR wiring. The 750 light put out 55 watts at 12 volts, providing more than adequate light. A quartz element could have been added, but testing proved the 750 light to be OK. A license plate light mounted above the instruments, clock, and roll chart also served as a resistor to prevent an overload on low beam. A loud Freon horn and a bicycle mirror were added to provide the illusion of legality. The MR finished the Greenhorn with absolutely no problems.

Short of replacing the MR frame with the chrome moly CR frame, some weight can be shaved off by using a plastic-base CR seat and a plastic gas tank. It might be better to start with a CR and put the MR flywheel and transmission in it. But after six months of riding the bike and campaigning it in some of the toughest events around, we have come to really like it. It is a genuine enduro threat with the suspension mods and comes alive power-wise with a pipe. The MR250 is available at a very attractive price — making it a cost/performance bargain. We can recommend it.

