It works like it was designed for the wide open spaces

ELSINORE DESERT CONVERSION

By Fernando Belair

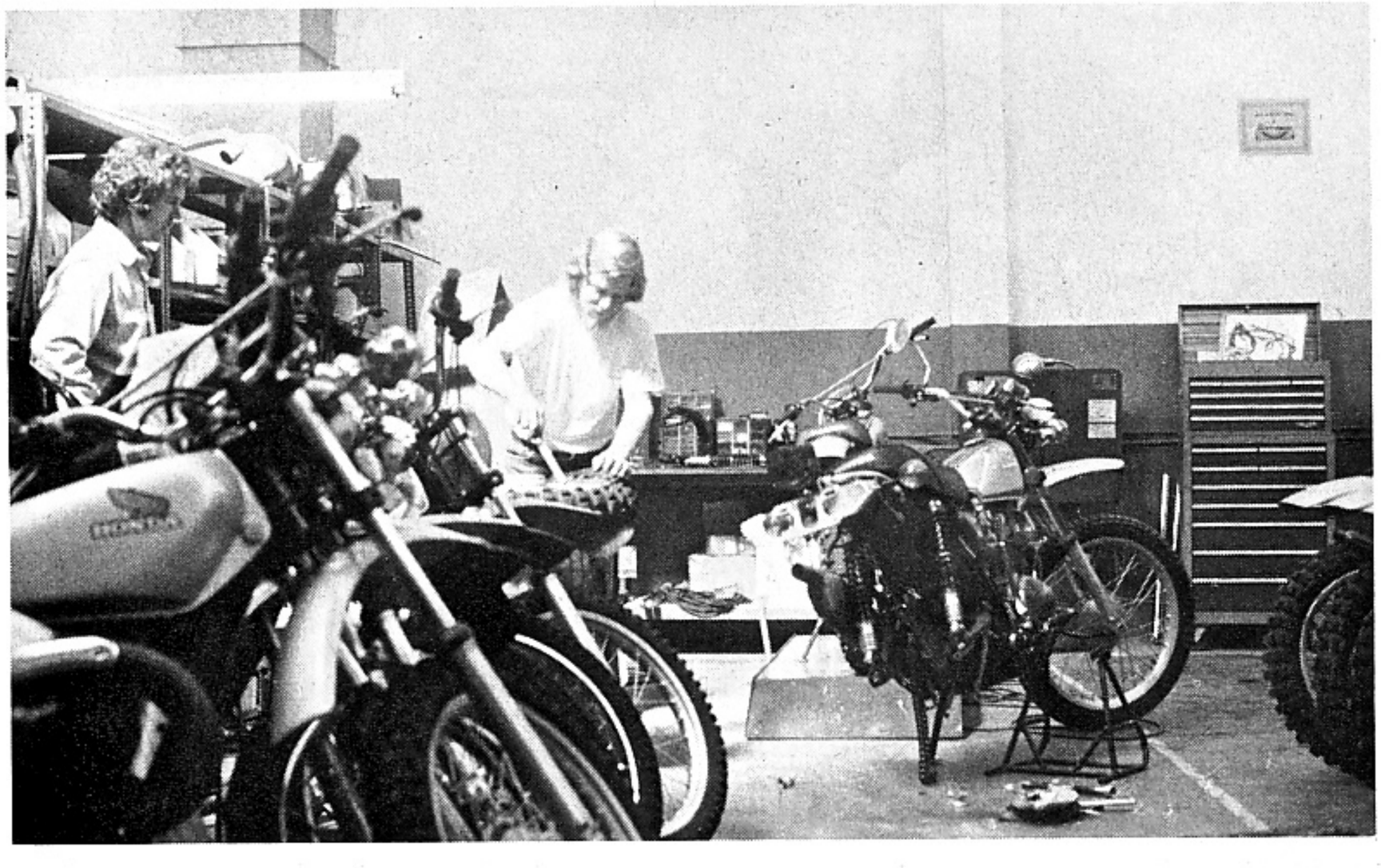
We can remember when George Ethridge from Product Testing & Development Department of American Honda first dazzled us with the two-stroke, super-quick motocrosser —the Elsinore. It was all that Honda touted it to be. Unfortunately, not everyone is into the motocross scene. There are those people who prefer cow-trailing and others who would rather fight the dust along with a thousand other riders in the desert. So what does one do with a specialized motocross machine when his heart lies in desert riding? Honda Elsinores are not designed for desert riding as they come off the showroom floor. But by instituting the changes we're about to show you, the Elsinore becomes not only a highly competitive desert mount, but one capable of winning overall in puckerbush land.

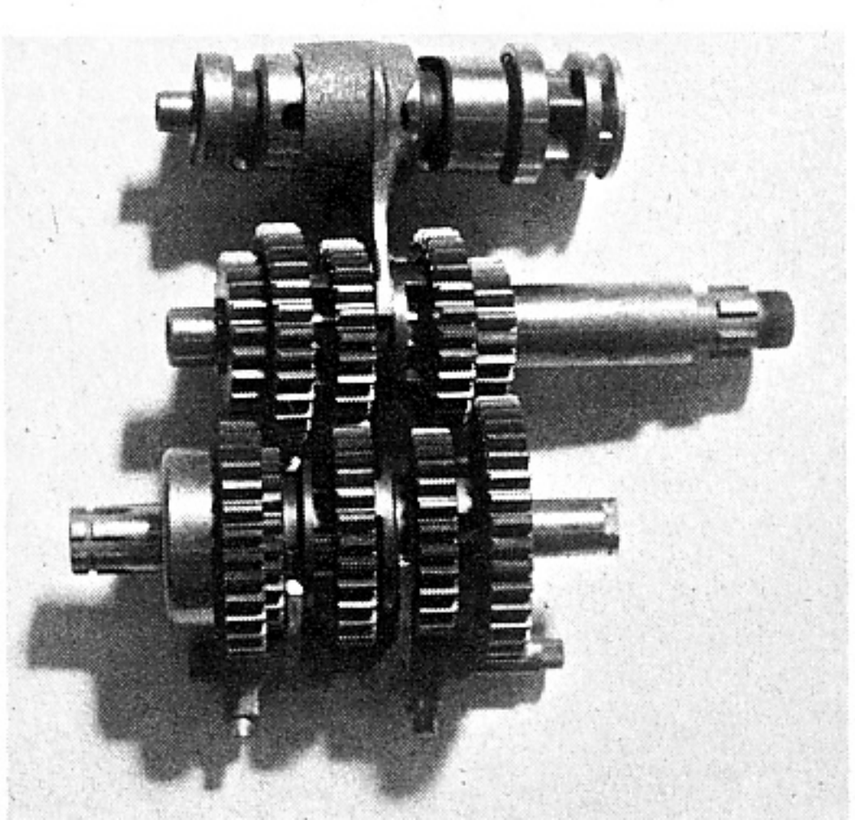
As soon as the Honda hit the dealers' floors the desert crowd found Elsinores in their midst. Owners were saying if it's good for motocross, then it's got to be good for the desert. WRONG! While the CR 250 is quicker than greased lightning, it also has a relatively low top speed, an extremely close-ratio transmission, and a nearly non-existent flywheel effect. The two assets it does possess for desert racing are its suspension and a powerband that just won't quit.

Naturally, Ethridge noticed that a percentage of the Elsinores were being sold to desert riders. Knowing that this machine was not designed for such competition, he set to remedy the situation.

Ethridge decided to first get rid of the narrow ratios in the tranny and to substitute something else. He then substituted the gear clusters from the new MT 250 enduro bike. Since both the MT and the CR use the same cases, the swap was a simple "pull this out and put that in" exchange. Yet it still lacked something. The engine didn't have the

The modified Elsinore in its new habitat. Apart from the skid plate, there was no way to tell that this was a desert machine until you rode the bike.



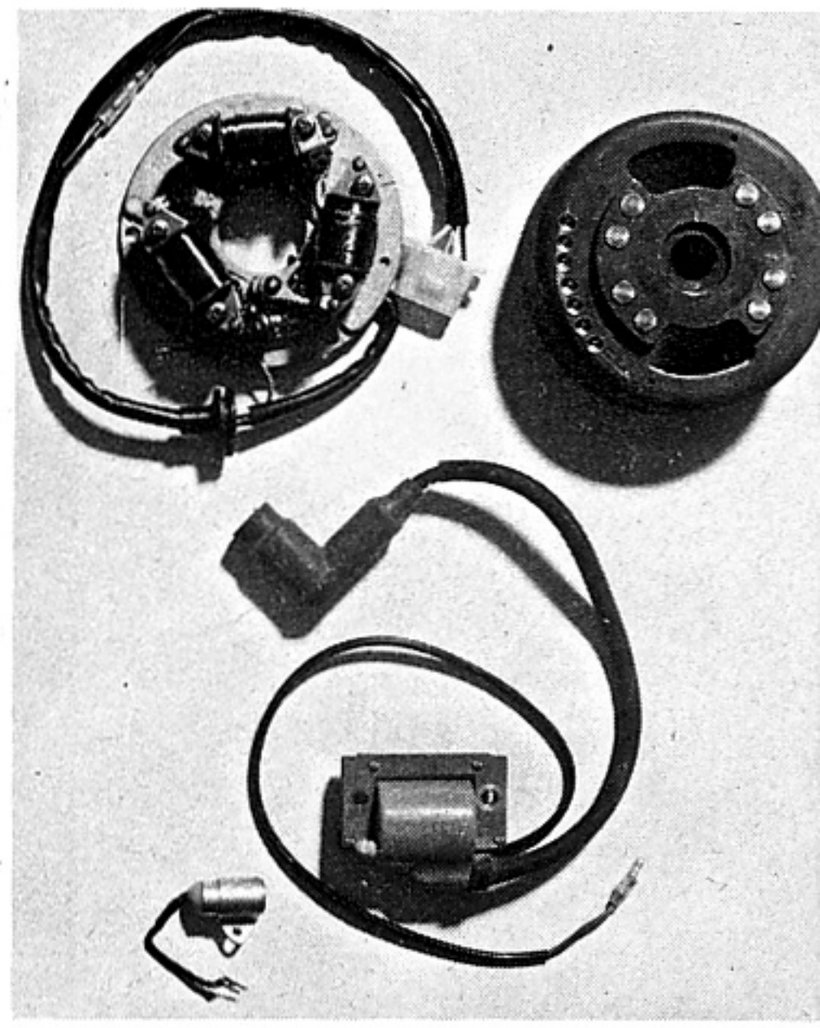


This is where it all gets put together, the Product Testing and Development Department at American Honda.

This is what transforms the CR 250 into a WR (wide ratio), an MT transmission. The swap is a simple chore requiring no machining at all.

tractability to pull smoothly across the sand without spinning the rear wheel every time the throttle was rolled on. To correct this the MT ignition, with its heavier flywheel, was slipped on to the end of the crankshaft. Not only did this yield the desired effects, but it transformed the machine into a playbike as well. The added flywheel weight made the CR capable of plonking around just as well as the MT. It also was able to deliver more of its power to the ground because the rear wheel slipped less. An aluminum skid plate to protect the expensive exhaust pipe finished off the project.

But Ethridge wasn't through. What about the people who bought MTs and decided that they wanted more power? Either for play purposes or for racing in the desert? For them the alteration would be different altogether. Installing a CR piston, cylinder, head, carburetor and pipe is a simple bolt-on assignment. But the rest of the engine can also be reworked to accept the increased power load. The clutch springs from the CR are slightly longer than those on the MT and fit right on. Ethridge feels that you might be able to get away with using the stock MT springs, but the cost of the CR clutch springs as opposed to the cost of a new MT clutch makes the springs worth the investment. This next step is only for



In order to give the Honda the extra tractability desert riding requires, the MT ignition with its heavier flywheel was installed. It, too, flips right in without modification.

Mint 400 winner Mitch Mayes rode the Desert Elsinore and found it very much to his liking.

those who are going racing. Swap clutch hubs and primary pinions. The MT comes with helical primary gears. While these gears deliver smoother power and

run quieter than straight cuts, they absorb up to five percent of the engine's power in the form of side load. The straight-cut primary gears will eliminate the small power decrease. The final modification for either conversion is the mounting of a new tire. The guys at Honda's Product Testing and Development Department all swear by the new, low-profile Dunlop 4.60-18.

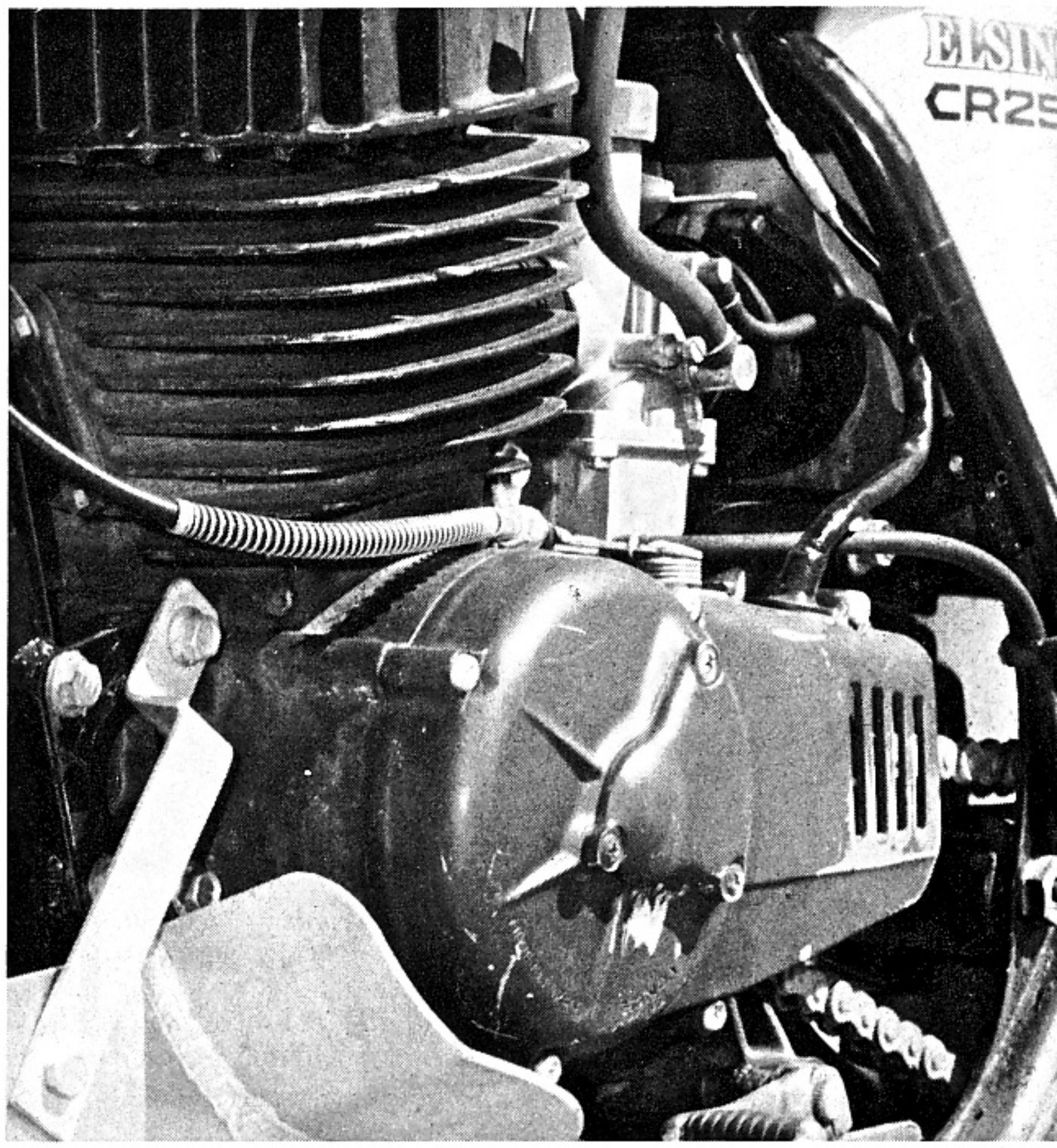
When completed, the Desert Elsinore finds itself with a first gear lower than stock and a fifth gear with a top speed in the area of 90 mph. If that doesn't grab you desert riders right in the gut and make you drool at the mouth, then what does? As a playbike, the modified Elsinore chugs as well as before, has gobs more torque, a lot more beans on top end, and, if you want, you can run lights off the MT ignition.

Now that we've told you what to do with the bike, we're going to tell you how it runs. We rode the thing for a full day out in the desert. Now although we pride ourselves on being fairly competitive riders and we thought the thing was out of sight, we aren't experts. Enter Mitch Mayes. Mitch, as you'll recall, was part of the winning Mint 400 team and also has taken home class gold in Baja. This year he wrapped up the number one desert plate in his district.

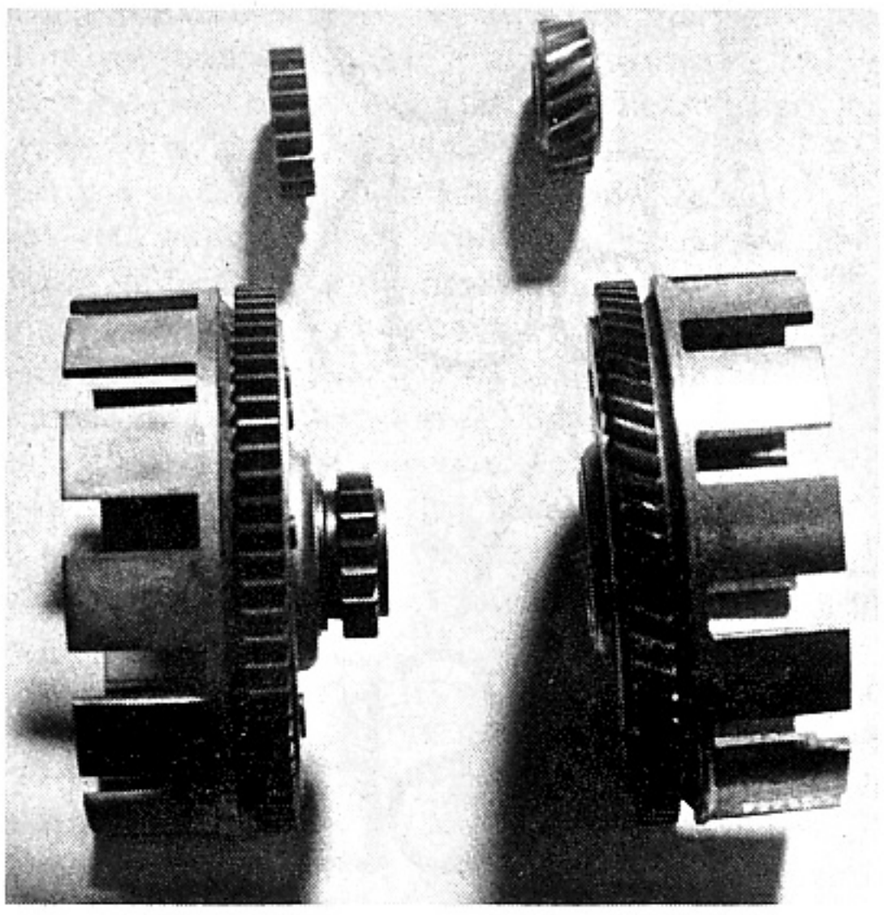
Mitch got on the bike for the first time and within a few minutes was blasting across the terrain like there was no tomorrow. Wheelies for hundreds of yards are no problem for him, and the bike seemed up to the job. The wide ratio tranny shifted cleanly without any power lag between gears. The only problem encountered was that the bike wanted to fight the rider if he held it at top rpm in any gear. If the rider shifted up a gear and made the engine pull, the machine tracked as true as any. We found that the bike handled best when geared up and kept on the torque rather than letting the engine's horsepower do the work.

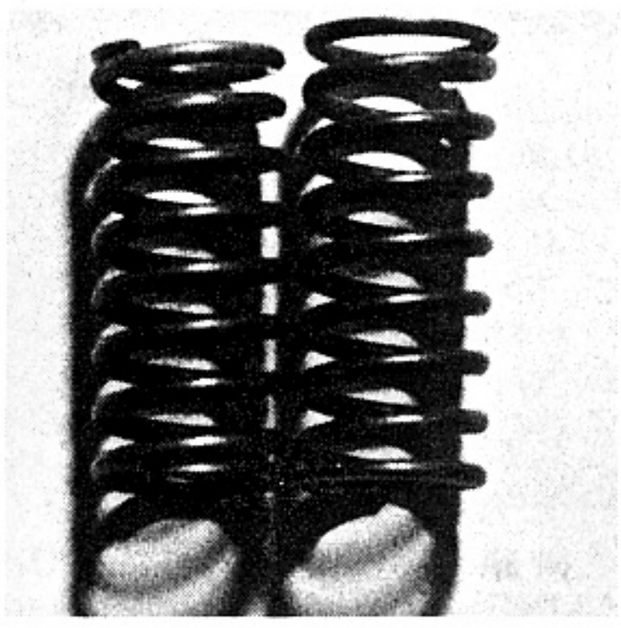
Also, during the time we spent out in the desert we were allowed to ride another Ethridge creation. A stock CR 250 with a frame modification that not only made it handle better in the rough, but eliminated the Honda's vicious washout tendencies. At present we're sworn to secrecy. But in a month or two we'll be able to reveal the secret without incurring the wrath of the folks at Honda.

In order to accommodate the MT transmission, a left side cover from the enduro model must also be used.

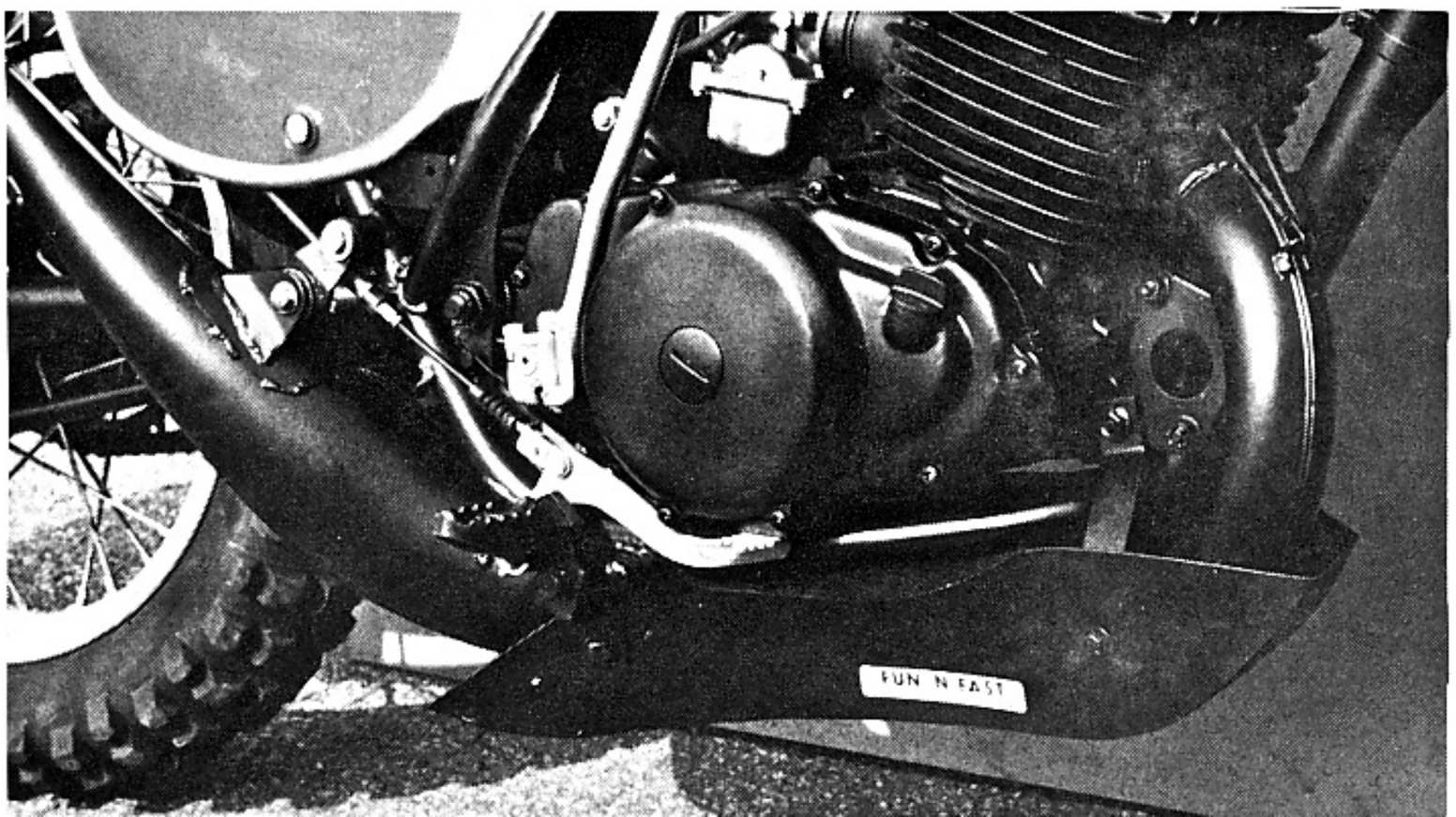


BELOW RIGHT— If you modify your MT by using Elsinore top end parts, be sure to install CR clutch springs (right) which are longer than the MT spring at the left.





LEFT— For an extra power boost in your MT, use the clutch hub and pinion gear from the CR (left) to replace the helical gear arrangement standard on the MT.



TRANSMISSION RATIOS

GEAR	CR	MT
First	2.055	2.235
Second	1.571	1.571
Third	1.250	1.160
Fourth	1.037	.896
Fifth	.862	.718

This heavy gauge skid plate made by Fun'n Fast protects the expensive Elsinore pipe from damage by the elements.