

product evaluation

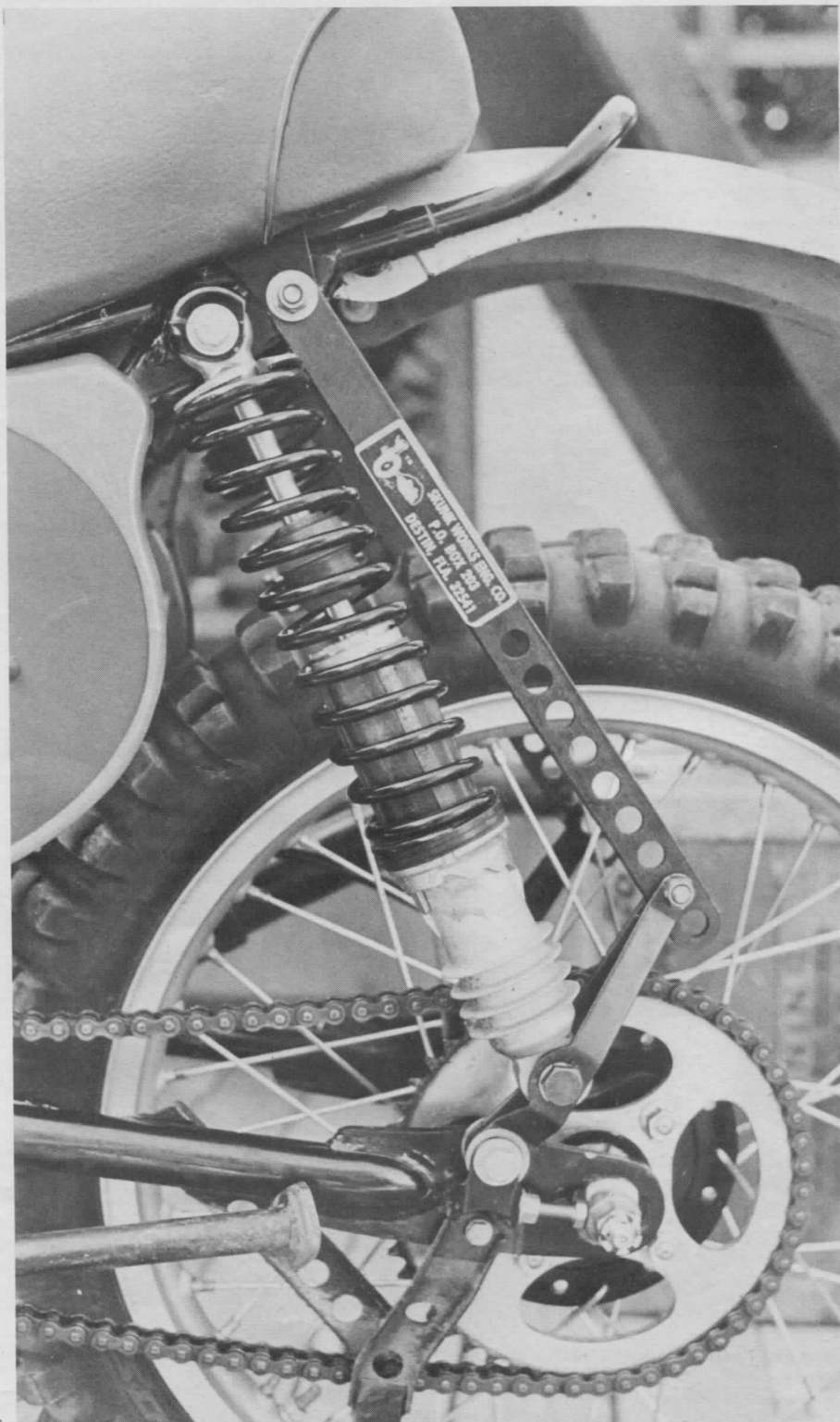
SKUNK WORKS ULTIMATE SUSPENSION

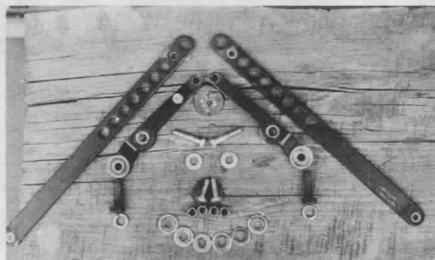
*It gives you
the inches,
but inches
aren't
everything*

The industry has shifted its emphasis to the development of trick suspension. Fork kits of every description are improving front ends while the speed shops are offering rear end modifications for laydown and forward mounted shocks. A novel approach to long travel rear suspension has been introduced by Skunk Works Engineering Co. It works on a double lever system to multiply the stroke of the shock and thus increase rear wheel travel. They call it the "Ultimate Suspension," and advertise up to seven inches of rear wheel travel, bolt-on installation, improvement of handling, traction and braking and an increase in shock life compared to forward mounts. It's also supposed to minimize rear wheel hop and will fit all bikes "from minis to monsters." It costs \$29.95 plus \$1.25 for shipping. Florida residents must add their tax.

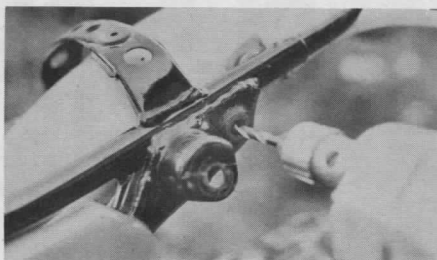
We got one, installed it on a CR125ME Honda and raced it. We found the following:

1. Everything you need to install the kit comes with the package, including excellent illustrated directions.
2. The seat mount holes on the CR125 have to be drilled through to bolt on the upper strut. If a bike doesn't have seat mount holes behind the upper shock mount, tabs must be welded to the frame.
3. The kit indeed bolts on easily.
4. All pivot points work on nylon bushings that can be easily replaced.
5. Components are made from





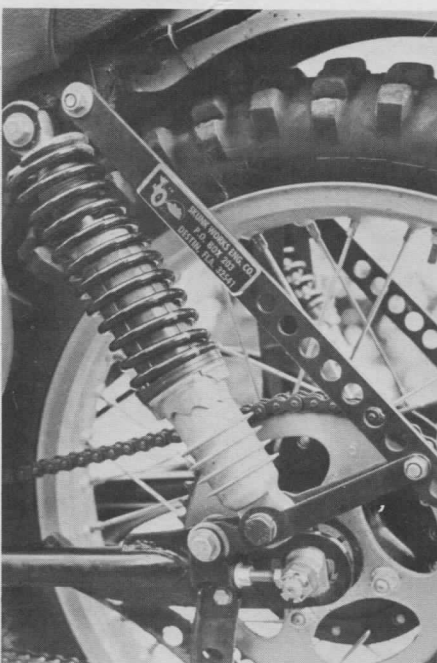
The kit comes with everything you need.



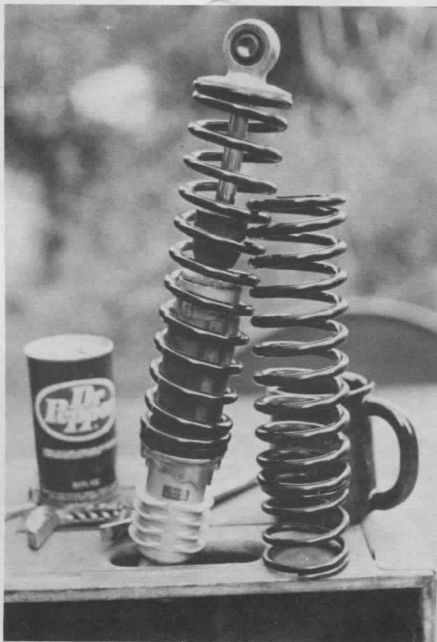
You have to drill out the seat mount hole or else weld a tab behind the top shock mount.



This is how it works. The swingarm and kit act as a double lever to multiply the stroke of the shock.



At full stroke the shock bangs into the axle and a spacer must be placed on the shock shaft to limit travel.



Special springs from Al Baker R&D have to be used.

quality materials. Nothing bent and nothing broke.

6. The kit increased the CR125's rear wheel travel to 6¼ inches using the stock shocks. However, since the shock bottomed out against the axle, we inserted a ¾-inch spacer (not included) on the shock shaft to reduce the travel to 5¼ inches. This procedure is outlined in the instructions.

7. The stock shocks and springs will not contain the extra leverage. We had to go to special 110-pound springs that fit Honda shocks. These springs are available through Al Baker R&D, 15174 Raymer St., Van Nuys, California 91405.

8. It does improve the ride over bumps and whoop-de-dos because of the extra travel. It does not improve braking because the short levers do not exert enough downward pressure at the beginning of the stroke and the rear wheel hops even more under hard braking. It does not improve side hop because it does not add rigidity to the frame as a forward mount would.

9. We can't see how it would improve shock life over forward mounts because the leverage is the same.

10. It should fit any bike and would probably give up to seven inches of travel if set up right.

Our overall estimation of the Skunk Works kit is that it is a good idea that has its applications, but not within the framework of serious motocross competition. One of the biggest advantages of forward mounted shocks is that they locate the suspension stress points closer to the rigid center of the frame and give the axle a stiffer platform to work on. The Skunk Works kit in effect hangs the shocks further back. Also, on many bikes the placement of axles and swingarm hardware would hang up the mechanism before the full stroke of the levers could be realized. Seven inches is a design feature that does not necessarily work out in practical application.

You can order a Skunk Works suspension kit or get more information by contacting Skunk Works Engineering Co., P.O. Box 203, Dept. 50, Destin, Florida 32541.