

DG HONDA CR125



More of Everything Plus a Change of Tire Makes the DG Racer Worth the Extra Money

Honda continued building their old style 125CR motocrosser until virtually no one would buy it. Major rework was required to make a CR125 Honda competitive. Finally, an all-new 125 was introduced for 1979. Honda's new model was good but didn't exactly date the competition the way the first CR125 did. The 23 in. front wheel brought mixed reactions and the much advertised Claw Action tires were criticized by many. One of the biggest complaints about the CR125R during our 125 shootout (June, 1979) was a problem with the front end skating and a tendency for the front to saw when entering corners. Was the problem caused by the 23 in. wheel, or the claw tires, or a too-short swing arm, or the rake angle, or . . . ?

DG Performance Products in Anaheim, California acquired one of the new 125s and started experimenting. Their goal was to make the CR125R handle better and to increase horsepower. Both goals were met, but a lot of time and effort went into the project.

The handling problem was a combination of all the above. Our DG-modified test machine had a longer aluminum swing arm, KYB F Series shocks, IRC tires and air caps on the forks. These mods cured the CR's bad manners; the head shake and skate both disappeared.

The gold anodized aluminum swing arm is manufactured by DG and offers less weight, one in. more wheelbase, more strength and stability.

Probably the biggest problem with a 23 in. front wheel is the limited choice of tires available. IRC has recently introduced an alternative to the Bridgestone Claw. Their model designation is G45Z. Our bike was equipped with a 4.10-18 rear and 3.00-23 front. The difference in performance and rider confidence was phenomenal.

Suspension mods at the front were limited to a change of oil and DG air caps. The stock travel is 11.0 in. and damping good, so nothing else was changed. The air caps allow adjustability for different tracks and varying conditions. We ran 10 weight oil and 6 psi of air.

The stock rear shocks aren't too bad. The problem is they can't be rebuilt. DG's solution was the installation of KYB's latest air/spring F Series shock. They have two separate rate internal springs, adjustable rebound damping, and oil volume and weight adjustability. Air pressure can be adjusted from 0 to 152 psi and oil volume from 164 cc to a maximum of 213 cc. We found the stock oil volume, and weight, 174 cc of KYB #3 (SAE 5w), and 40 to 55 psi combined with the softest rebound setting worked well on our test tracks. KYB recommends using their oil or >





Stock tank is protected from abrasion by DG decals.



Aluminum swing arm is 1 in. longer than stock. KYB F Series air spring shocks are adjustable and rebuildable.



Bel-Ray LT-100 shock oil, never regular motor oil. The KYBs are completely rebuildable and each pair comes with a manual explaining operation, adjustment, rebuilding and oil changing.

The KYBs use a rather large 35mm shaft and like other shocks with large shafts, they need a metal guard placed between the drive chain and shock shaft.

To bring the engine up to the chassis' new standards, DG installed what they call the Pro Kit: ported cylinder, radially finned head, 34mm Mikuni with Stage II air cleaner and an exhaust pipe and silencer designed to work with the other modifications.

The port work is semi-secret, with reason. Most of the time, especially when the tuning is done with more enthusiasm than knowledge, adding power to the top of the rev range takes it away from the low end, something 125 motocross bikes already have a problem with. As another hazard, the CR125R comes with a chrome bore, a

nice touch except that a careless grinder can ruin the barrel with a nick in the wrong place.

DG wizard Harry Klem has some magic of his own. As you'd expect, this low-volume conversion of stock cylinders is done carefully and the chrome bore isn't damaged.

As we didn't dare expect until we rode it, the ported cylinder makes more power on top and in the middle, and doesn't destroy torque at low revs.

How does he do it? We aren't privileged to say. To furnish blueprints and specs, that is, the exhaust port is raised or lowered so much, the intake is changed like this, would be a license to use DG's work without paying for it, or could lead to unhappy home tuners who botched the job and grumble about how CW told them how to do it. So, for this occasion, we'll say that DG reworks the ports and makes them work with the new pipe and carb.

DG's head is an aluminum extrusion



DG pipe is formed from die-stamping.





New IRC tires work well. The front is a 3.00-23, the rear a 4.10-18.

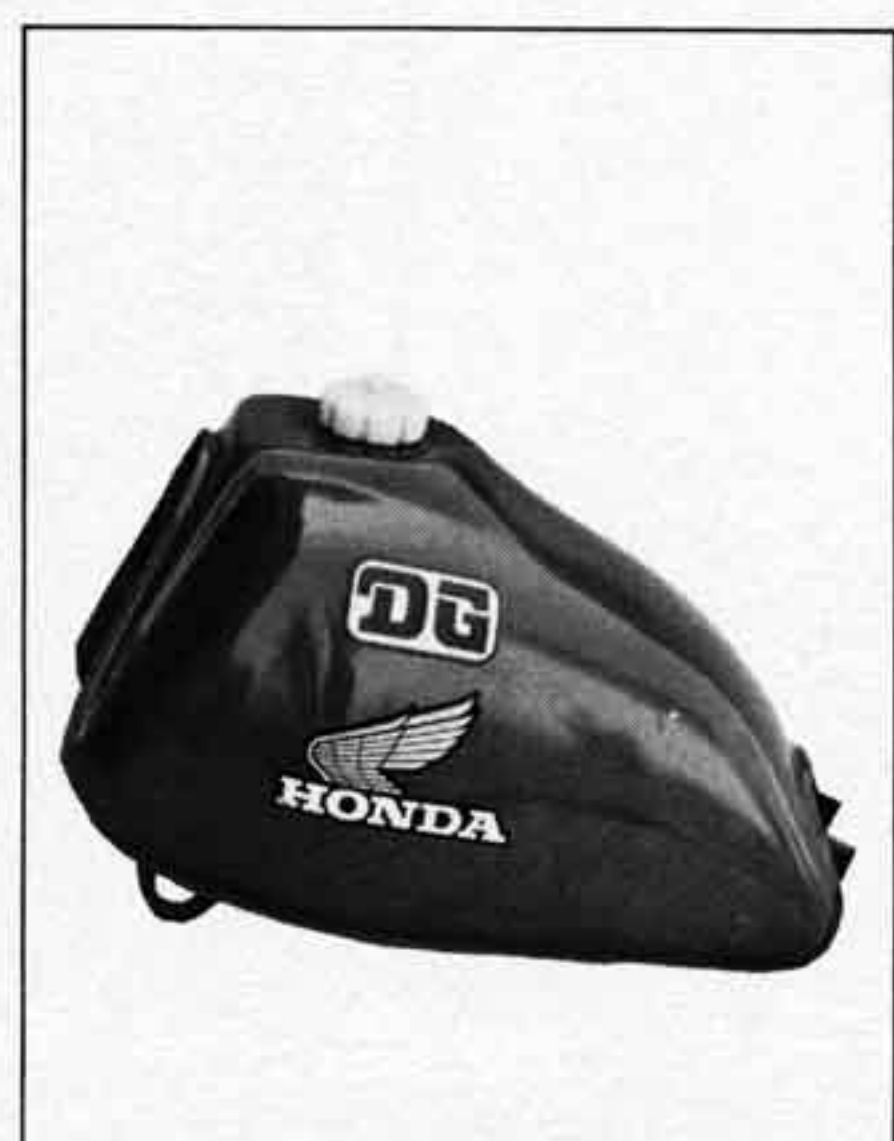


Aluminum head runs up to 100° cooler than stock.



| DG Parts and Prices | |
|---------------------------------------|----------|
| Honda CR125R Pro Kit (see text) | \$310.00 |
| Chrome-moly handle bars | 24.50 |
| DeHandler plastic levers | 9.00 |
| Oakley grips | 4.50 |
| F.I.M. side number plates | 19.50 |
| Air caps for forks | 16.00 |
| Aluminum head | 64.50 |
| Pro pipe | 85.00 |
| Pro porting | 95.00 |
| 34mm Mikuni carburetor | 59.50 |
| Stage II air cleaner | 12.50 |
| Aluminum swing arm | 169.50 |
| KYB "F" Series shocks | 285.00 |
| Cross bar pad | 3.50 |
| Replica plastic tank | 49.50 |
| Tank Decals | 6.00 |
| Front number plate | 5.50 |
| IRC G45Z 18 and 23 in. tires | na |

Available from: DG Performance,
1170 Van Horne, Anaheim, Ca. 92806
or phone 714-630-5471



Factory RC125 tank has been copied by DG in plastic.

with radial finning. The finished head boosts compression ratio slightly but its biggest contribution comes from the increased cooling it furnishes. Cylinder head temperatures have dropped by as much as 100 degrees on some bikes with the use of the DG head. When the engine runs cooler, the bore distorts less, leaner jetting may be used, more timing advance is possible, and hotter spark plugs can be used; these all add horsepower and make hole shots easier.

DG designs their accessory pipes to clear their radial heads and give improved performance. They are made from die stamped pieces for a smoother exhaust flow and the Honda CR125R pipe has a small silencer as part of the package. The silencer is repackable but very noisy, even when freshly packed.

All of DG's Mikuni carbs are prejetted. The jetting on our test bike was close, needing only a drop of the needle to be right-on. Probably the best thing about Mikunis is the availability of jets. Mikuni

makes jets in a wide variety of configurations and they are readily available.

All of the above parts are included in the Pro Kit, or if a buyer prefers, each may be purchased separately.

DG has many small items to make motorcycling more fun. We ordered our test bike with the full boat. Here is a list of those parts: chrome-moly bars, DeHandler plastic levers, Oakley grips, cross bar pad, front number plate with cable guides, F.I.M. side number plates, and tank decals.

The breathed-on DG Honda is a different machine. Power is abundant, handling almost too good to believe and reliability hasn't suffered. It quickly becomes a challenge trying to find a surface that is rough enough to even bobble the bike. It will go through the roughest sections of tough courses faster than most riders will be able to ride it. The suspension doesn't jolt or punish the rider, it just soaks everything up and asks for more. The longer, stronger swing arm places more weight on the front

wheel of the bike and combined with the new IRC tire, stops front end skate. The longer wheelbase also adds stability in the straights.

Naturally a fully loaded bike is going to hurt your pocketbook. In this case the accessories totaled \$852 plus the tires. The tires are a new model and were unpriced. They are scheduled for release about mid October.

We entered the potent little 125 in a couple of local races. Pros John Greenway and Don Griewe chalked up a second and third overall for their efforts. The bike was clearly the fastest 125 on the track at both events. A poor start in one race and a rider used to riding a larger machine in the other, kept the Honda from the winners' circle. Both testers thought the bike was great and felt they should have won.

Is a full-blown DG Honda CR125R worth all the money? If you want the neatest 125 you have ever ridden, if winning is important, if you feel you deserve the best, it's more than worth it. 