Measure the *loaded with rider* dimension. Remove the workstand. With two helpers available, sit as far forward as possible on your CRF's seat, wearing your riding apparel. Ask one helper to steady your CRF perfectly upright so you can put both feet on the pegs. Bounce your weight on the seat a couple of times to help the suspension overcome any situation and settle to a good reference point.

Ask the other helper to measure the *loaded with rider* dimension.



Example: Unloaded = 24.6 in (625 mm) - Loaded = 20.7 in (525 mm)

Race Sag = 3.9 in (100 mm)

 Calculate the *race sag* dimension. To do this, subtract the *loaded with rider* dimension (step 3) from the *unloaded* dimension (step 2). Standard Race Sag: 4.1 in (105 mm)

Adjust spring pre-load as necessary to obtain the desired handling results.

Decreasing the race sag dimension (example: 3.7 in, 95 mm) improves turning ability for tight terrain at the cost of slightly reduced straight line stability.

Increasing the race sag dimension (example: 4.5 in, 115 mm) may improve stability on faster terrain with less turns, but will reduce turning performance slightly and may upset the balance between the front and rear suspension, producing a harsher ride. This will happen if the adjustment shifts the effective wheel travel toward the more progressive end of its range.

## **Rear Suspension Adjustments**

## Spring Rates

If you are lighter or heavier than the average rider and cannot set the proper ride height without altering the correct spring pre-load, consider an aftermarket rear shock spring.

A spring that is too soft for your weight forces you to add excessive spring pre-load to get the right race sag and, as a result, the rear end of the motorcycle is raised. This can cause the rear wheel to unload too much in the air and top out as travel rebounds. The rear end may top out from light braking, or kick sideways over lips and squareedged terrain. It may even top-out when you dismount your CRF.

Because of the great absorption quality of the shock bumper rubber, it may be difficult for you to notice when your CRF's suspension is bottoming. Some riders may think the damping or perhaps the leverage ratio is too harsh. In reality, the problem is most likely insufficient spring pre-load or a spring that is too soft. Either situation prevents utilizing the full travel.

Keep in mind that a properly adjusted suspension system may bottom slightly every few minutes at full speed. Adjusting the suspension to avoid this occasional bottoming may cost more in overall suspension performance than it is worth.

A spring that is too stiff for your weight will not allow the rear tire to hook up under acceleration and will pass more bumps on to you.