

# Secrets of buying a safe Springer

Everything you need to know  
to save your life

by Larry Richardson

**L**ast summer, I'm following a buddy up the Coast Road. I'm on my fatbob, he's on a chopped bike with a 12-over springer.

We're cutting along about 55 when we both hit a dip in the road. A little dip—maybe a couple of inches deep.

No big thing?—Wrong again. My buddy loses it, and decides to find out which is tougher, the asphalt or his butt.

After he slides to a stop, cussing and moaning, I pull over to check him out. His biggest problem, fortunately, is that he's in dire need of a fresh set of underwear.

His bike is another story. That brand new springer—\$249.95 new—buckled, just above the rocker when he hit the bump. That made him speed wobble his scoot into the ground.

The topper to the story came when we took the front end back to the manufacturer.

His answer to the problem was, "No problem. I'll give you another one of our 'super neat front ends' free of charge."

After that, there was a slight disturbance at that address, and we decided it was time to see a lawyer.

Which brings up the main subject—a lot of the high-class, super-chrome springer front ends that are on the market now are pure and simple crap.

They're poorly designed, made with cheap materials, or the wrong materials, or else they're put together by a welder with the d.t.'s.

But there are plenty of good springers on the market. Some of the really good ones are Gary Gerber's, the old Dick Allen springers, D & D's, Custom Manufactured Products, and Butts, to name just a few. There are a lot more that are super reliable—but there are an equal number that are junk.

With springers, as with anything else, you get what you pay for. And that's the problem. Most guys build a bike on a budget. So when they get ready to buy a springer, they're usually more interested in the price than in safety.

Of course, like most of us, they figure that the manufacturer isn't going to put his customer's butt on the line by selling trash. Which is stone wrong.

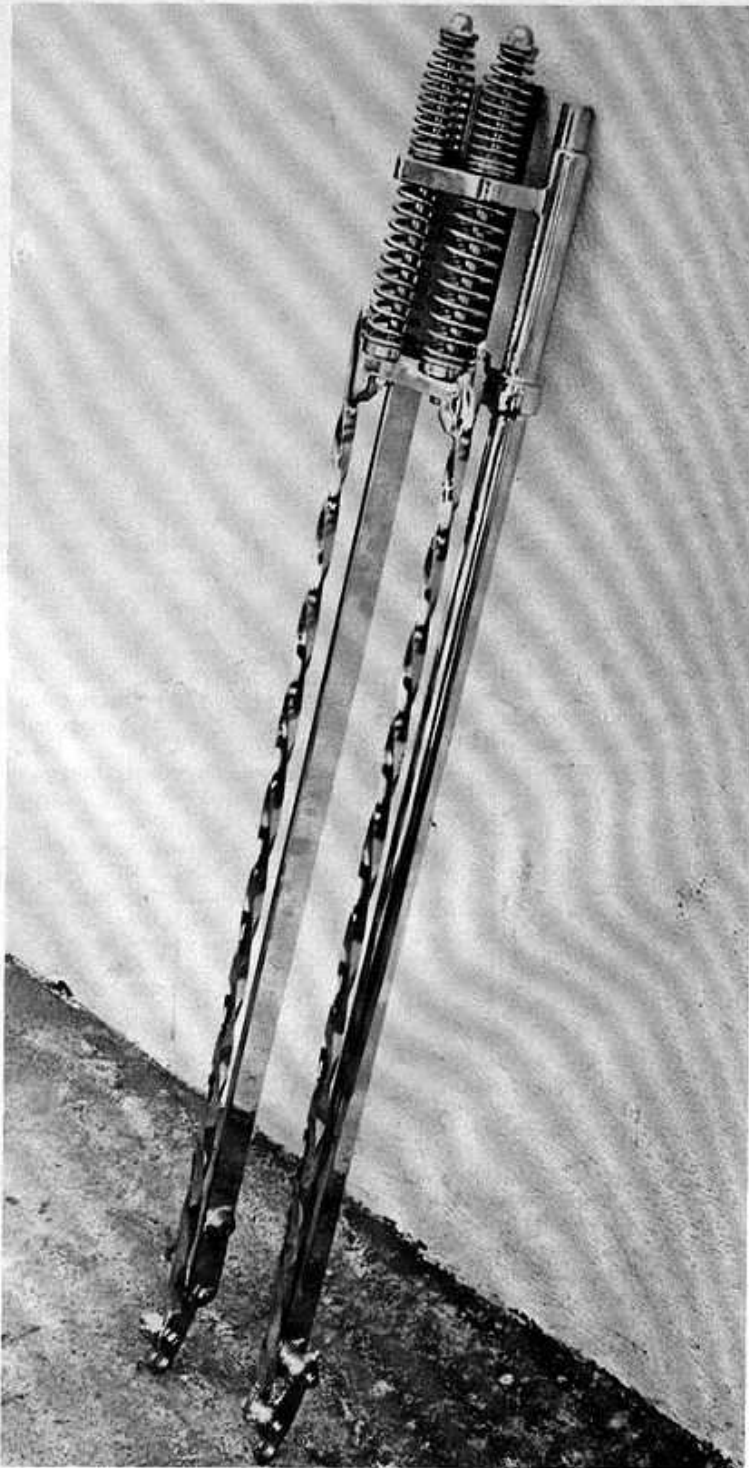
To keep from having your springer fold on the dotted lines some night at 90 per, though, there are a few things you can look for when you're shopping for springers.

One you should keep in mind is the fact that no springer will ever give a ride equivalent to a glide. First, there's no hydraulic dampening, so over a rough surface the springer will "pogo," which is what it sounds like.

#### REMEMBER THE RIDE

One advantage that a springer does have though, over extended glides comes when the bike's front end is raked. The closer the glide legs come to being parallel with the ground—in other words, the more rake—the less they will work. With an extreme amount of rake, the impact of the front wheel moving over obstacles will be almost at right angles to the front end's travel. The result is a rigid front end, glides or no.

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If you take a little time, and aren't afraid to drop a few bucks, you can get not only a righteous-looking springer, but one that'll last as long as the bike does. (Photos courtesy D & D Distributors).

So a springer does have its advantages. Most people who put a springer on their scoots adjust to the difference in ride within a couple of days—assuming they've got a well-designed setup.

Basically, there are two types of springers used on chops. There are old Harley springers and new custom springers.

The three common types of Harley springers are the VL, 74 and 45. They are all basically the same. The commonest way of extending them is with old Ford radius rods.

The springer legs are cut off within a few inches of the top. Then the radius rods are cut to whatever length desired, and dovetailed over the leg stub. There are a lot of people riding around on springers that were extended in this way by an expert, and haven't had any trouble yet.

If you decide to go the old Harley route, though, there are a few things you should check.

First, and most important, remember that that's old metal. It may have been sitting in a box in somebody's warehouse. Or, it might have belonged to someone who put 20 years worth of wheelies on it.

So, check the stem for straightness, and look at all the weld seams for possible cracking.

The second thing to be careful with is the Parkerization. To keep the rust away, Harley coated a lot of their springers with the Parkerization process. It works fine, as anybody who's ever carried an M1 around can attest. But if it's not removed from any area to be welded, the Parkerization can seep into the weld, and weaken it drastically.

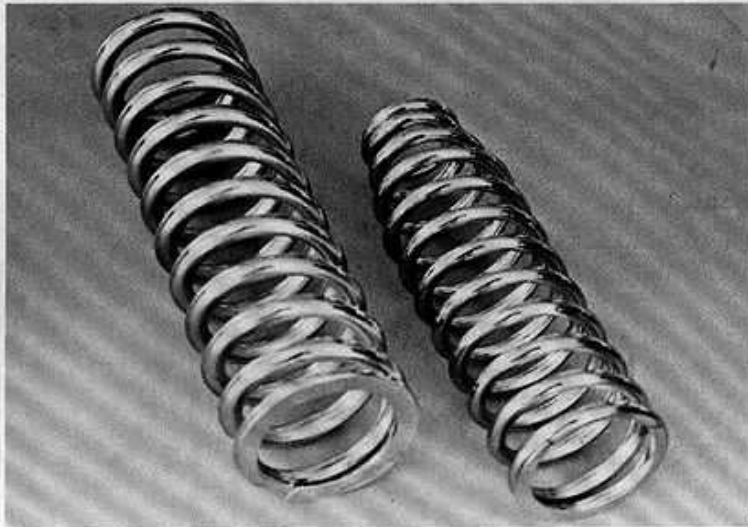
Fortunately, when most guys cut the springer legs off, before welding on the radius rods, they use a cutting torch. This, coupled with the standard wire-brushing cleanup afterwards, seems to remove all the Parkerization.

There are also some guys running girder, or leaf-spring front ends. They look out of hand, but when they're extended they cease to do anything but beat you to death.

#### INDIAN GIRDER

An exception is the old Indian girder. They were built for a heavy bike, so they'll work quite well for the Harley.

Not so for Trumpet or Beezer springers. On a Limey, they'll work great, but they simply can't handle



Top and bottom springs should be strong enough to prevent as much pogoing as possible.

the increased weight of a hog.

Now, assuming you decide you don't want to hassle with narrowing, extending and cleaning up an old Hog springer, you'll probably be interested in one of the custom narrowed units.

But before you drop the bucks, do a little research. Look at the material that's used. Heliarc'd chrome moly without any heat relieving is dangerous (Big Bike, September 1971, "The Dangerous Chrome Moly Myth").

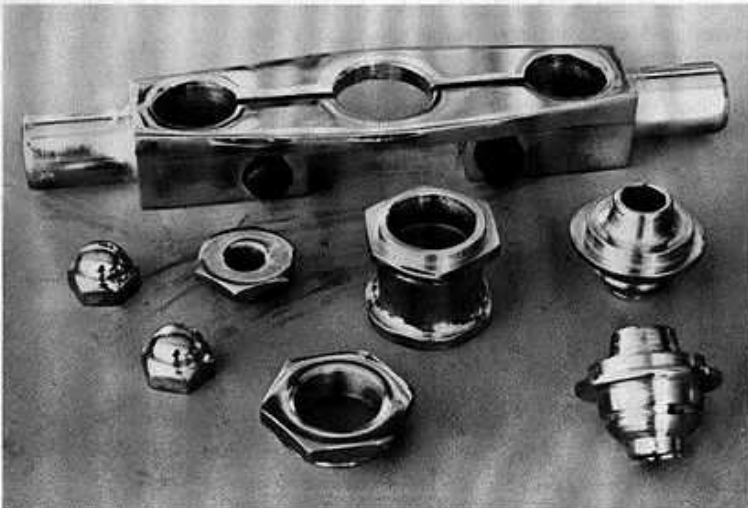
There are, though, some springers made of chrome moly that are put together without welds. There's nothing wrong with that. You've got the

strength of the metal unweakened by welding, and a light front end.

But generally a springer's better when it's made out of a mild steel.

The next thing to check out is the design of the whole front end. There are some single-spring setups made. They have a very clean appearance. But remember that without that top spring, your pogo action'll increase.

Also, you should check to make sure that there's some way of adjusting the spring tension. With use the springs weaken, and that ride that's perfect now will get bouncier and bouncier. With an adjustable nut at the top of the spring guides, you'll be



The little things are what count—make sure they're well made, and that the chroming isn't going to wear off in a week.

able to get that perfect ride back, rather than having to hunt over hell's half acre for new springs.

#### CHECK THE ROCKER

Another area to check out is the bottom rocker. Some guys like the looks of those monstrously long rockers. If that's what gets you off, so be it.

But there are a few things to remember before you settle on that front end with the fourteen inch long converted Persian scimitar.

The longer those rockers are, the more tendency toward lateral movement they'll have—so you'll have to accept the increased sideways wheel movement.

Also, as you increase the distance between the springer arm and the axle mounting hole, the amount of leverage on the arm exerted by the wheel hitting a bump will increase. In addition, the stress line will increasingly move at right angles to the springer leg angle, so you'll have more wear and tear.

Still another thing you'll have to compensate for with a huge rocker is leverage—the farther that wheel is from the springer leg, the more force will be needed to move the handlebars.

After you shop around a bit, and find a design that you consider not only good-looking, but safe for your style of riding, talk to your friends.

If you can find anyone with one like it, or someone who's had experience with that particular brand, see if they've had any troubles in mounting it, or if theirs was badly made.

The next step, assuming you're not buying by mail, is to take a look at the front end you're planning to buy.

Was it welded up in a jig? The old lay-it-on-the-floor-and-eyeball-measure-the-angles-before-you-weld doesn't cut it when your life's riding on that welder's straightness of eye.

You could have gotten the one he made up after coming off a three week binge.

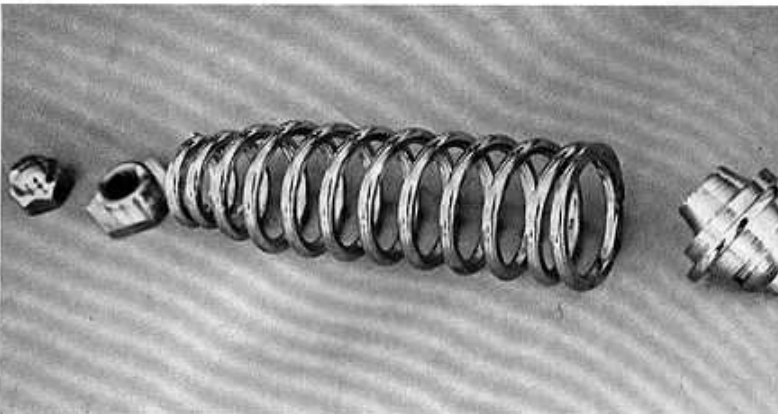
The next thing to consider is just how was it welded? Insisting on a heliarced weld job (assuming you're not thinking about chrome moly) isn't a bad way to insure safety.

While you're looking at the springer, check out the weld seams. If they're alternately puddled and damned near non-existent, or maybe not completed (like the weld around the springer leg-bottom plate is only

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One of the most important areas to check out closely: the bottom rockers, whether they're elaborate custom items, or simple parts.



To prevent spring guide bend, top and bottom nuts should have spring seats.

half-done), don't buy it.

Grab the springer near the triple clamps, and try to twist it. Since there's no wheel mounted, there'll be some twist. But there shouldn't be too much—half of an inch or so would be about right.

#### HOW IS THE STEM FASTENED?

Then take a look at the stem. The safest springer should have a press fit, with a ventilated weld at the bottom. There are some companies

that advertise an interchangeable stem that screws into the springer. If you buy one of these, it's a good idea to have the neck welded in place before you use it.

Another area to look at is the springs. If they are not securely mounted, to prevent any lateral movement, the elliptical pressure exerted on them by the action of the springer will eventually bend the centering stems.

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**SAFE SPRINGER** *Cont. from page 21*

There should be a spring pad on the lower spring perch, and a groove on the underside of the upper spring perch for the lower springs.

The upper springs should be centered by some type of ball joint at the bottom, and a shoulder nut at the top that should be locked into place by a second nut.

Make sure that the spring rate is stiff enough. If you've got a set of used ten pound bed springs on your front end, count on orbiting hemorrhoids, and getting sprung to death every time you go over a bump.

Look at the top triple clamp. Some of them are cast out of reclaimed coffee cans, or cut out of 1/4 inch steel plate. A solid piece of steel billet (like D&D's) will add strength to the front end, and be secure in its mounting.

Take a look at the way the bottom rocker's mounted to the legs. Is there space enough for the rocker to have full movement, or will a strong bounce make the rocker scrape the leg? Rechroming after a few thousand miles won't make you or your bank account any happier.

The bottom legs should have some

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kind of adequate bushing, with a grease fitting, (oilite bushings excepted) for lubrication.

Some of the better springers also have needle bearings lining the leg mounting holes on the bottom rocker, which is an added nice thing.

**IS THE CHROMING GOOD?**

The next to last thing to consider is the chroming. And look at that closely, all over. Especially examine those little, out-of-the-way places. That minute fleck of chipped chrome can widen into a righteous eyesore after a few hundred miles.

Run your finger over the metal. If it's rough, somebody slighted on the polishing of the metal. Then clean a section, and look straight down at the chroming.

If it's streaky, or has a dull sheen, it won't last too long. That could have been caused by the springer brushing against something else in the tank, or too little nickel, or else the tank was simply contaminated with sediment. Again, rechroming is expensive, so it's a good idea to insist on a good job.

And that brings up the last thing to consider. How much is that springer going to cost?

It's probably going to run you anywhere from \$190 to over \$300. There's an old saying—you can't go first class paying third class fares.

Certainly some springers are overpriced. But the ones that are too much of a bargain were probably made by cutting corners. The maker isn't selling at that ridiculous price because he doesn't want his bank account to put him in a new tax bracket.

If you consider everything, and talk to a lot of people, and look at a lot of springers, you can end up with something that'll last, and look good, longer than your scooter will. There are springers on the streets that were extended and chromed seven years ago, and still could enter a show.

So remember—all that's between you and a sudden conversion to a high-speed unicycle is that front end.

Pick a good one, and you'll never have a complaint. Pick a bad one, and join my buddy in picking gravel out of his butt—or maybe get with some other people in the International Pushing Up Daisies Contest. It's your money, your choice—and your life.

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