

## **Motorcycle Buyers Guide:**

Motorcycles have embedded themselves in the American spirit as eternal symbols of freedom. In a country now entirely connected by thousands of miles of winding roads, trails, and highways, motorcyclists are truly and rightly called Iron Horsemen: the last descendants of those who first traveled by horseback to explore and map and seek adventure. From the gleaming chrome of pipes shaped by master customizers to stripped down rat bikes and motocross dust crunchers, there's no mistaking the thundering and screaming engine of a motorcycle.

### **Cruisers:**

First made popular in the 1930s, these bikes are the most comfortable in our collection due to upright seating. Long rides, however, can result in sore or stiff arms from pulling back on the handlebars. This can be halfway resolved with a universal cruise control (your throttle arm can take a quick rest after engaging it), or by adding absorbent handgrips. Cruisers account for more than 50 percent of the American market for motorcycles.

Unless these are stripped down and customized for racing, cruisers usually carry V-twin engines that push out 50-70 horsepower, though power cruisers offer 80-100 hp. Like the rest of the bikes in this category, you can make modifications to the exhaust/mufflers and carb/fuel injection system to maximize engine performance, but for the most part cruisers are about sharp-looking bikes that ride and ride well.

Motorcycles require some attention to be paid to height and weight. As far as height goes, it's basic: when bike is still, you should be able to put one foot on the ground. Shorter riders especially need to be aware of this. As for weight, lightness equates with control. A heavy bike can be hard to handle, especially for a beginner.

Plenty of extras and customization options exist for cruisers: the most obvious being choppers that dramatically alter the rake angle--that of the front end--and the culture surrounding them. Aftermarket accessories are inexpensive ways to add style: everything from wheels, gas caps, and shift peg covers are available, as are chrome accents and edge guards. Extremely dramatic effects can be had with chrome and paint, particularly powder coat finishes: dry metallic paints that are sprayed on and then cured under heat. Other extras include saddlebags, racks, and tour bags for carrying gear, back rests for your co-pilot on large bikes, aftermarket exhausts/mufflers, and air cleaners.

### **Sport bikes:**

These light bikes are built for speed and handling and outfitted with powerful V-twin or I4 engines. They're equipped with high footpegs that are set back so rider is leaning forward: without being perfectly prone or horizontal, this is the most aerodynamic position for the rider. Fairings--plates that cover the engine--and windscreens further reduce drag on the bike, though

“streetfighter” modifications strip down the fairings and often swap out factory mufflers for under-engine exhaust systems to redistribute weight, and enhance the look and performance of the bike. Further performance benefits can be had from full-system exhaust modifications. These kinds of mods will also require jetting the carburetor or electronic fuel injection remapping and possibly modifying the ignition.

### **Dirt bikes: trail bikes and motocross**

There are plenty of subcategories of dirt bikes, but for the purposes of simplicity and popularity, we’re going to stick to motocross and trail bikes. Motocross, or MX, bikes are pure sport: intended entirely for closed, off-road obstacle courses. Trail bikes aren’t made for competition, though you may well end up in a friendly off-road race or two through the woods. As a result, they’re a little less rugged and may be outfitted with on-road necessities. Neither type is going to have fairings or the any of the decorative features of cruisers or sport bikes, unless you count mud and dust. Motocross bikes are light and fast with long travel suspension: necessary for jumps (and landings). Trail bikes usually have larger fuel tanks. Single cylinder two or four stroke engines are the norm for both bikes. Without bogging you down with details, “stroke” in reference to engines describes the movement of the pistons in relation to intake and exhaust: the engine cycle. The difference that buyers need to be aware of is that two stroke engines are, in general, more powerful. They’re also less fuel efficient and create more pollutants than four stroke engines and are banned for sale in California. Four stroke engines are more reliable, but less powerful. They’re good for beginners, who should look for small engines on either type of bike: under 150 ccs is a good place to start. If you’re planning on riding a trail bike on-road, it’s usually going to have to be made street legal--requiring insurance, registration, mirrors, and head and tail lights, among other things--if you plan on riding on public streets. The advantage is not having to transport your bike in a flatbed or trailer. Some trail and motocross bikes may be street legal from the manufacturer, but to preserve performance, it’s better to modify whatever bike you buy and keep the weight down.

Both trail and MX bikes experience enhanced performance from slip on or full-system exhaust modifications. Slip-ons will take about 20 lbs off the bike and add 4-5 hp. Full-system mods will take 40-50 pounds off and add about 10-20 more hp.

A final word on safety: helmets are necessary for any type of motorcycle...but don’t neglect your hands, either. Get a pair of riding gloves. In the event that you wipe out, your natural instinct is going to be to throw out your hands. Gloves will literally help save your skin. You’re protecting your brain bucket with your helmet, so use your head and get the best pair of gloves you can find.