

# ROAD SHOES VS. MOUNTAIN BIKE

Cycling shoes add comfort, safety and efficiency to the riding experience. Two main types of cycling shoes are available, depending on the style of cycling you prefer: road-cycling shoes and mountain-biking shoes.

## HISTORY

Early in cycling, riders looked for comfort and efficiency in every part of their clothing and equipment. Old-time cycling shoes were made with leather uppers, leather soles and wooden insoles. A slot on the sole of the shoe slipped onto the back of the pedal to hold the shoe in place. Toe clips, minimal metal "cages" attached to the pedal, added to the stability of the foot on the pedal.

## MODERN SHOES

The point of wooden insoles was to create a hard barrier between the metal pedal and the rider's foot to keep the rider from feeling discomfort and to increase the efficiency of the pedal stroke. That principle still holds true today. Modern cycling shoes are designed to optimize both comfort and transfer of energy to the pedals, among other features.

## ROAD SHOES

Road-cycling shoes generally feature a sleek, light design and an extremely stiff sole and insole that do not bend, making the shoes extremely efficient for riding and quite unsuitable for walking or other activities. New road shoes (as of 2010) range in price from as low as \$25 to \$300 or more. The difference in price is based primarily on the quality of materials used to make the shoe; high-end shoes may incorporate carbon-fiber soles, expensive closure and lacing systems, and custom wooden insoles (yes, wood is still used in cycling shoes!). Specially designed cleats on the bottom of road-cycling shoes attach to different types of road pedals. Road shoes often clip onto just one side of the pedal.

## MOUNTAIN SHOES

Mountain-biking shoes are generally much beefier than road shoes and include a rugged, somewhat flexible sole that looks a bit like the sole of a hiking boot. The reason for such soles is because mountain biking includes periodically dismounting from the bike and walking or running on rugged terrain. The cleats used on mountain shoes are depressed below the treads of the sole, hiding them from contact with the ground. Like road shoes, mountain shoes employ various cleats, depending on the pedal system on the bike. Mountain shoes clip onto more than one side of the pedal for easier remounting while trail riding.

## CLIPLESS VS. TOE CLIPS

Most experienced cyclists prefer to use "clipless" pedals with shoes that attach to the pedal via specially designed cleats that click securely to the pedals. This allows the rider to push hard without the foot moving back and forth, and it's also possible to pull up on one pedal while pushing down on the other, maximizing efficiency. The cleat detaches when the foot is moved to the side. Pedals with old-fashioned "toe clips" are also available, allowing use with all styles of everyday shoes. The rider places the front of the foot into the toe clip and snugs it down with an easily adjustable leather strap.