label will have the two pieces of information you need: the draw weight, in pounds, and the string length, in inches. When you read the bow's label and place the order, be aware that there is a difference between AMO length and actual string length. Generally, most bows and string manufacturers work in AMO length, but if you have to convert (or measure an existing string), AMO length roughly equals the actual length of the string plus 4".

You can also make your own strings from scratch without too much difficulty; there are instructions later in this section if you're interested. It might be worth reading anyway for more information about string sizes, allowable poundage, materials, etc.



Compound bows are a special situation. If your string is attached to the cables by double teardrops, you can replace the string with the help of a friend. Draw the bow, and hold it at full draw while your friend attaches the new bowstring to

the empty side of the teardrops. Let

the bow down slowly, so that both strings are in place. Then, draw the bow again by the new string. Hold it at full draw, while your friend removes the old string (which is now loose). Gently let the bow down, and you're done. If your compound bow **doesn't** have double teardrops, then you will need a bow press to change the string. Unless you happen to have one and know how to use it, take the bow to an archery shop.

Installing nocking point indicators

Tools needed: Bowsquare, nocking point indicator, nocking pliers. Or dental floss and glue.

Installing a nocking point indicator on the bowstring is the single easiest thing you can do to improve an archer's precision. The nocking point indicator is a tiny clip of brass with a plastic liner inside to protect the string. When clamped in place, it gives the archer a fixed location to nock their arrow, ensuring consistency. It's important to locate it correctly, though.

First, you need to find a point on the string that is exactly perpendicular to the top of the arrow rest or shelf. A *bowsquare* is a tool custom designed for this job and clips to the string to make it easier, but if you are careful, you







inset distance

arrow width

minus one inset

can also use a drafting triangle or anything you know has an exact right angle. Once you've found the perpendicular point, move up the string 1/8" and place a mark. This is where the bottom of the arrow should line up when nocked. If you have nocks that are the full width of the arrow, then move up the string again one arrow diameter. This the top of the shaft, where you want the BOTTOM of the nocking point indicator to be located. Take the nocking point pliers and clamp the

nocking point indicator onto the string at this point.

If your arrows have nocks that are skinnier than the arrow, your nocking point indicator will

need to be slightly lower, equal to the distance of the offset of the nock. The overall result we are going for is to have the arrow as perpendicular to the string as possible, because that ensures the straightest flight and most efficient use of the bow's energy. Then, we move the nock up 1/8". This gives us a margin of

error in case the nocking point shifts a little or the string stretches over time, because if the nocking point is ever lower than the perpendicular point, the back of the arrow will bang against the rest and cause a wobbly flight. If it's a little high, the only ill effect you get is an imperceptible loss in efficiency.

To use the nocking point indicator, simply nock the arrow to the string beneath the nocking point, and then slide the arrow up the string until snug.



height

arrow rest

height





Although special nocking point pliers are cheap, you can make do with regular pliers if you are careful not to pinch or cut the string. If you can't afford a pack of nocking point indicators, you can make one from dental floss. Tie a few clove hitches around the string at the point you would have installed the metal clip, and wrap enough floss around the string to stop the arrow from sliding any higher. Tie off with a few more clove hitches, and place a dab of glue or epoxy on it to keep it from unraveling while shooting.

Bows

A bow full drawn is seven-eighths broken. -Thomas Waring, 1832

In general, bow repairs are beyond the call of duty for most archers. Typical bow damage includes cracking, compression fractures (they look like raised lines on the belly of the bow, like the frets of a guitar), delamination, and (in wood bows) dents. If you discover a damaged bow, remove it from service immediately. Tape a big paper note to it that says "damaged" so that no one finds it later and accidentally shoots it, risking injury. Deal with the damaged bow as soon as possible. Some bows, such as those of wood or natural products, are only good for firewood once they are damaged. Others, like compound bows, can be repaired, but these repairs need to be performed by a skilled technician. Refer to the manufacturer's literature.

