

This is an Alex auxiliary cartridge designed to fire a 32 ACP cartridge in a rifle chambered for 30-06.

Things are simple no longer in
the new world of . . .

AUXILIARY CARTRIDGES AND OTHER SUCH STUFF

by ELMER KURRUS

YOUR FAVORITE firearm can be easily converted to a sub-caliber. This special "magic" involves the use of an adapter or auxiliary cartridge, an insert barrel, or a conversion unit. Such conversions are simple, efficient, economical.

The *simple* part of any conversion is that the procedure can be accomplished without special tools. In about the time it takes you to read this sentence, you can convert (or unconvert) a magnum or a shotgun to a rimfire, a hunting rifle or handgun to a 22-cal-

iber for target practice, or a wide range of other options. *Efficiency* corresponds to one-inch accuracy at 25 yards and two-inch groups or better out to 50 yards. The *economy* is in the use of lower-cost ammunition.

Assume that you're deer hunting with your 30-06 rifle, and where you hunt smaller game such as grouse or rabbit can be taken along with deer. You are over-matched for the lesser stuff and don't want to carry a second gun. The solution: open the breech of your rifle; replace your 30-06 car-

tridge with a 32 ACP/30-06 adapter; use the 30-06 rifle to collect camp meat. The 32 ACP in a long barrel is very quiet compared to the 30-06, won't cause excessive damage to small game, and costs about one-third the price of the big game load. A pleased hunter once told me, "That 32 ACP/30-06 adapter is a real grouse-getter."

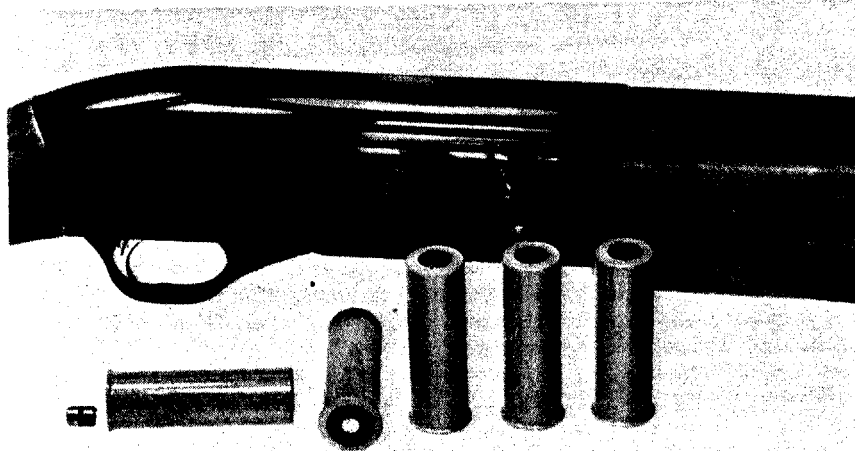
There are probably a dozen ways to thus get into the fascinating world of adapters, insert barrels, and conversion units. Which you want depends



This auxiliary allows you to fire the 22 Long Rifle in any 22 WMR rifle or handgun.



Savage Model 412, known worldwide as the Four-Tenner, converts a 12-gauge shotgun to use the 410 shotshell.



The 2 1/2-inch 12 Ga./22 auxiliary can be used in any 12-gauge shotgun. You could thus have a Winchester Model 12 slide-action 22.

on whether you need to convert a rifle, shotgun, or handgun.

Three retail dealers specialize in firearm conversions. They include:

Alex, Inc., P. O. Box 3034K, Bozeman, MT 59715/406-282-7396; Neil Jermunson.

Gremmel Enterprises, 271 Sterling Dr., Eugene, OR 97404/503-688-3319; Doug Gremmel.

Sport Specialties, P. O. Box 5377DK, Hacienda Heights, CA 91745/818-968-5806; Harry Owen.

Each dealer offers methods to convert firearms. They vary, so it's important to understand the wide variety and difference in cost associated with a change to sub-calibers. Speaking in general terms, a cartridge adapter can be purchased for less than \$20.00. Insert barrels vary in price depending on the dealer, the type of conversion, and the length of the insert barrel. An average price for an insert barrel is approximately \$35.00 to \$50.00. If you wish to convert a centerfire magnum revolver to 22 LR, you're in the price range between \$80.00 to \$100.00.

Since the variety and options cover a wide range of possibilities, a closer review of adapters, insert barrels, and conversion units is useful:

The Adapter

An adapter—auxiliary cartridge—is machined to the same exterior dimensions as the rifle or pistol cartridge. It is designed to accept the sub-caliber cartridge as a sort of sleeve for your gun's chamber. Some models require a device to transmit the firing-pin blow, most often to rim-fire cartridges. The adapter is usually made of soft, durable steel.

With the proper adapter, the same firearm can fire any bullet having the same diameter as its barrel. The 30-06 cartridge can use one adapter to fire the 32 ACP, another to shoot the 30 Carbine, since both are 30-caliber. A rifle or handgun in 223 Remington can use adapters to shoot 22 LR. The combinations are virtually unlimited.

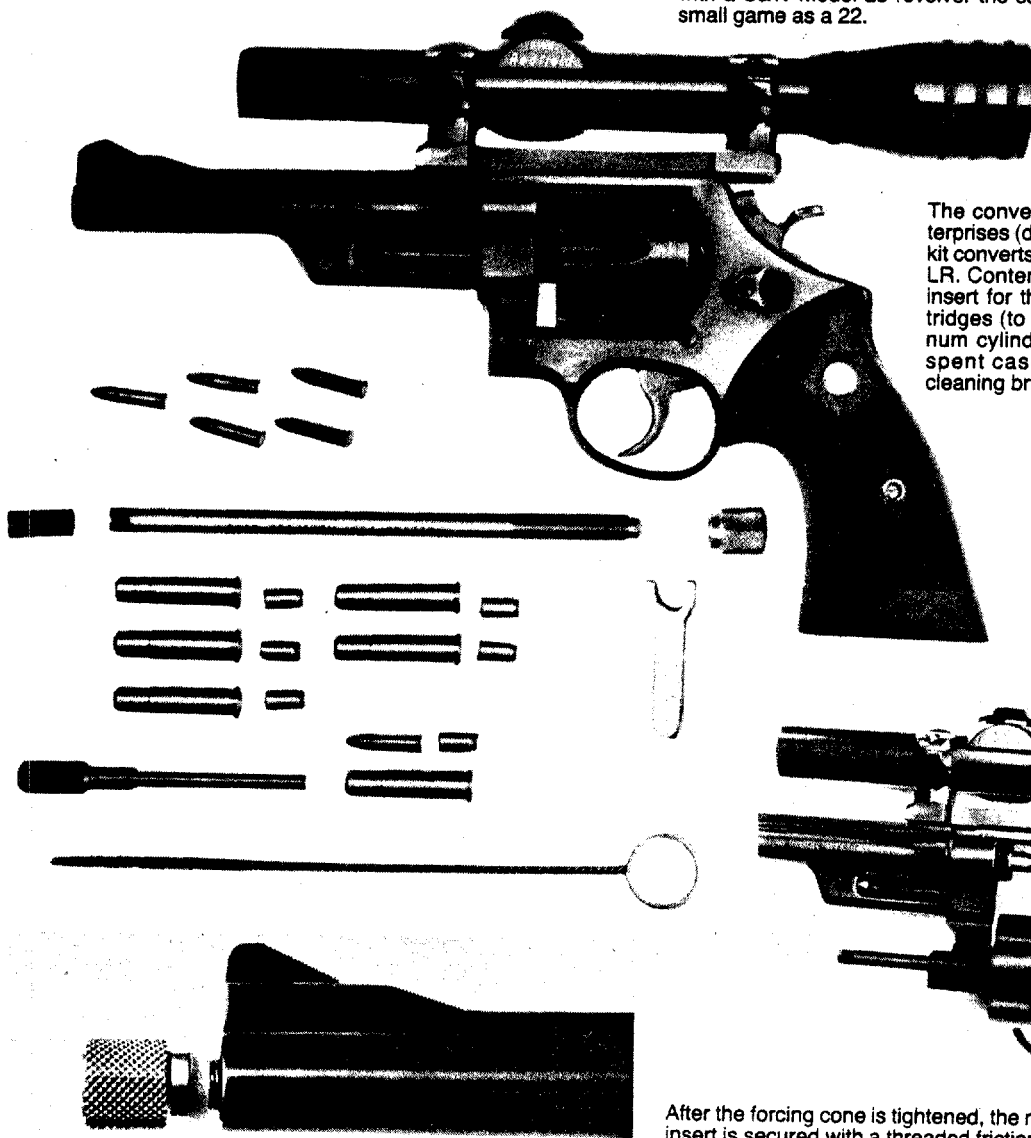
Alex, Inc. and Gremmel Enterprises both offer good selections of adapters. Alex, Inc. manufactures three basic series of adapters, accommodating 22 LR, 25 ACP, and 32 ACP cartridges. Adapters for the 22 LR cover a spread of cartridges from the 221 Remington to the 220 Swift. Adapters that use the 25 ACP cartridge are made for firearms ranging from the 250 Savage through the 25-06 Remington. A 32 ACP adapter is offered to fit cartridges between the 30-30 Winchester and the 300 Winchester Magnum. All Alex, Inc.



Author's 357 Smith & Wesson took this snowshoe with 22 LR with a sub-caliber unit.



Unusual conditions resulted in an exceptional handgun trophy taken with a S&W Model 28 revolver the same day the gun was used on small game as a 22.



The conversion unit from Gremmel Enterprises (dealer for Lothar Waitther). This kit converts a 357 Magnum revolver to 22 LR. Contents of the kit include: A barrel insert for the 6-in. S&W, 6 auxiliary cartridges (to use 22 LR through 357 Magnum cylinder), knockout rod to remove spent cases, and a general purpose cleaning brush.

The rear end of the insert barrel screws into a forcing cone.



After the forcing cone is tightened, the muzzle of the 22 insert is secured with a threaded friction nut.

adapters, regardless of chamber size, sell for \$14.50. Alex calls them "Auxiliary Cartridges."

One of the newest adapter innovations was brought to my attention by Neil Jermunson, owner of Alex, Inc. He's recently developed the capability to use 22 LR cartridges in either the 243 Winchester, or the 6mm. According to his extensive tests, both offer surprising accuracy when used with standard velocity 22 ammunition. Neil has also modified his newest creations to use a low-carbon, alloy material as a firing pin. This softer material offers added protection to the firing pin of the rifle.

Gremmel Enterprises is the primary U.S. agent for Lothar Walther. This company offers a wider range of "Adapter Cartridges"—they add 22 WMR and 22 Hornet to the 22 range. Gremmel also specializes in adapters for European cartridges, plus 32 ACP adapters for the 30 Carbine. Sold as Article No. 99, Gremmel adapters for rifles have a different design and finish, and retail for \$30.00 each.

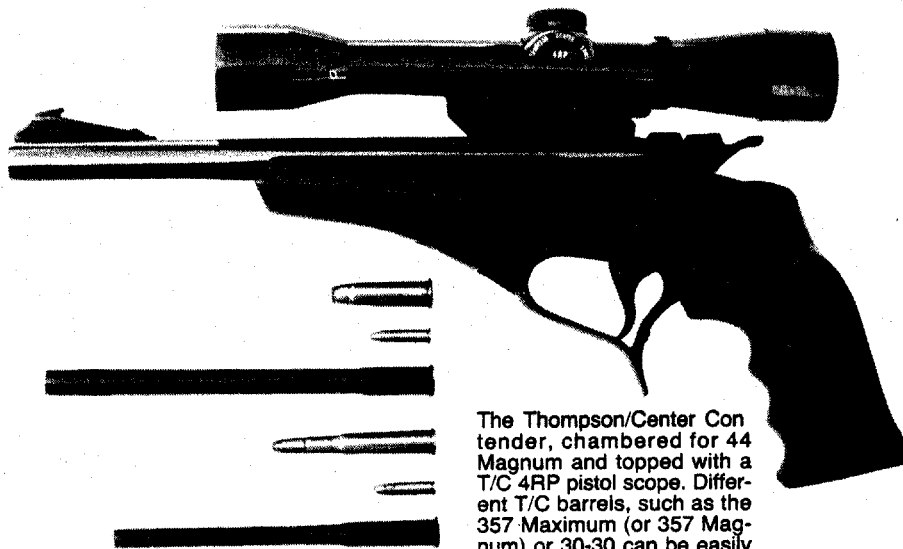
Harry Owen, chief engineer for Sport Specialties, is a different breed of cat! Over a period of 12 years, Harry has developed an inventory of over 400 different adapters, insert barrels, and conversion units, and so Sport Specialties boasts "the most complete line of adapters of any producer in the world."

Their basic price for a blue-steel adapter is \$18.95. A stainless steel version is \$26.95. In their 1985-86 catalog, at least 48 different models are listed for rifle adapters. A complete series of adapters are offered for the Thompson/Center Contender plus a new innovation for permitting 22 WMR chambers to shoot 22 LR shells.

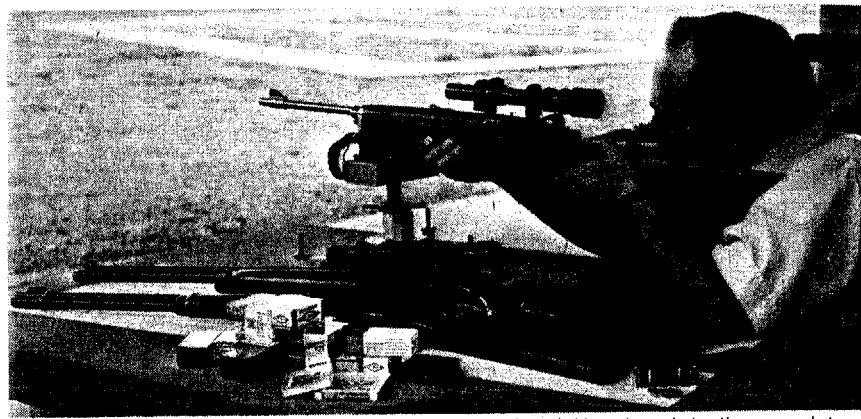
Sport Specialties has 24 different adapters for the T/C pistol. The 22 LR adapters (and insert barrels we discuss elsewhere) take advantage of the fact that the Contender firing pin is easily switched to rimfire. At a cost of \$18.95, any T/C barrel can be converted to a sub-caliber. The most popular is the 22 LR/223 TC, which converts the 223 Remington to use rimfires.

I've frequently used the 22 LR/22 WMR adapter with my Savage Model 24 and with my Ruger Single Six when I preferred not to change revolver cylinders. Other than minor zero changes, I haven't noticed anything unfavorable. I just slip the 22 LR into the sleeve-like adapter, load it, and fire in the normal manner. A small slit in the adapter allows easy removal of the spent case. Then I do it again.

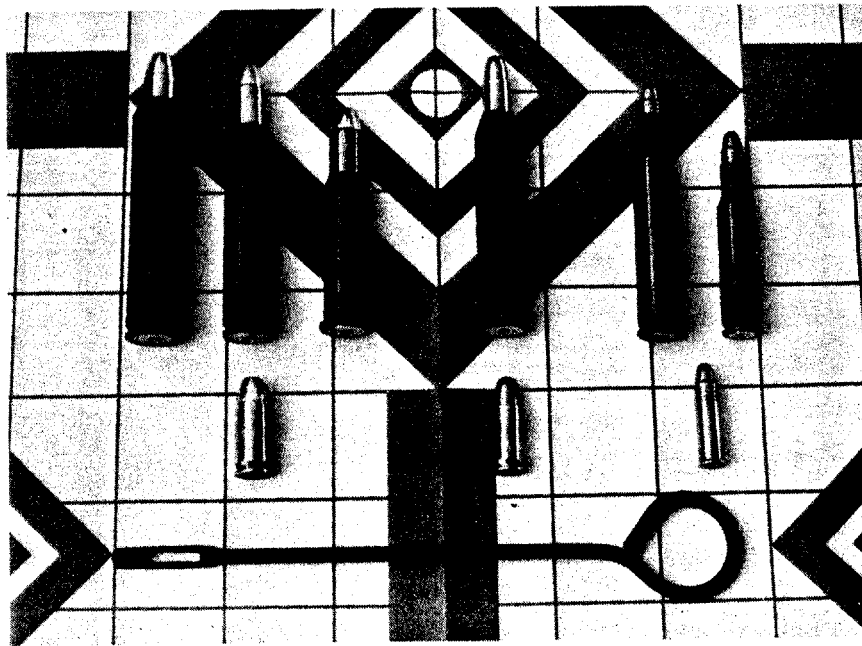
At least three additional companies offer adapters that convert standard



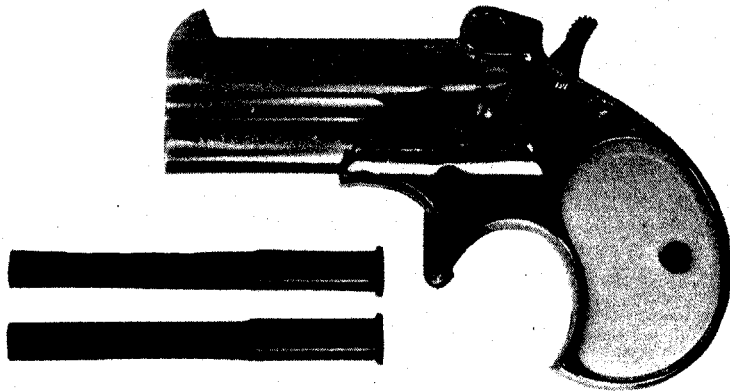
The Thompson/Center Contender, chambered for 44 Magnum and topped with a T/C 4RP pistol scope. Different T/C barrels, such as the 357 Maximum (or 357 Magnum) or 30-30 can be easily converted to 22 LR.



Harry Owen, owner of Sport Specialties, bench-testing a variety of adapters and insert barrels. His catalog lists over 400.



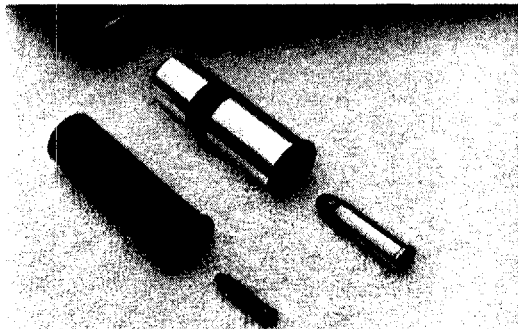
Auxiliary cartridges manufactured by Alex, Inc.: 32 ACP/300 Win. Mag.; 32 ACP/30-06; 32 ACP/30-30; 25 ACP/25-06; 22 LR/220 Swift; and 22 LR/222 Rem. The knock-out rod is used to remove spent cartridges and as a short cleaning rod.



Insert barrels are available to convert derringers. Depicted are Sport Specialties insert barrels that convert the 357 Magnum derringer to 22 LR—great for practice.



With the Cherry Converter by Amimex you can have a double-barreled 38 Special—it's easy. This precision-built adapter is crafted from 2024 aluminum, T-6 hardness, and anodized to its distinctive "cherry" color. Available in 12 and 20 gauge, designed to fire 38 Special only.



You can turn a double to a 22/38 with a 22 LR/12 gauge adapter from GTM Co. and a 38 Special/12 gauge adapter from Kestmati, Inc. GTM offers 22 LR adapters; Kestmati offers five calibers.

Using different inserts from Sport Specialties, the Savage 24 CS over/under can be converted to a double 22 rifle.



shotgun calibers to a sub-caliber. Each uses a similar design, a shot-shell-shaped adapter that chambers pistol or rifle ammunition. Sizes are 12, 16 and 20-gauge, of course. The three companies are:

Amimex, Inc., 2660 John Montgomery Dr., San Jose, CA 95148/408-923-1720; Russ and Janis Meek.

Kestmati, Inc., 23011 Moulton Pkwy., Suite G-6, Laguna Hills, CA 92653/714-855-6452; J. K. Ditty.

GTM Co., 15915B E. Main St., La Puente, CA 91744/818-968-5806; George T. Mahaney.

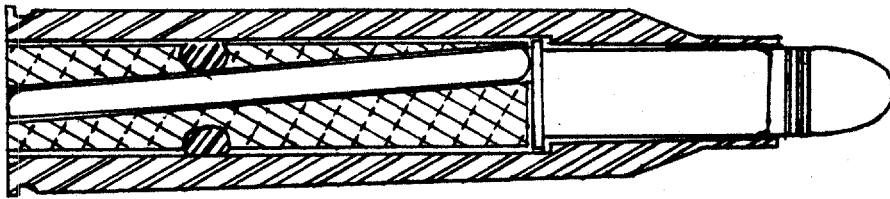
Russ Meek developed Amimex's "Cherry Converter" after several prototypes had been designed, evaluated and tested. The original idea is attributed to Lewis Tripp, who gives similar credit to Tony Court. The first production model, the CE-12-38, was patented in January of 1983.

This is a precision product. It's made from 2024 aluminum stock at a T-6 hardness, and anodized. It's chambered for the 38 Special cartridge, and won't accept the 357 Magnum, and is made for 12 and 20 gauge. The adapter has its own rifling—1½ inches of lands and grooves—and boasts 3-inch groups at 25 yards. It's simple, efficient and very economical. It sells for \$19.95 each.

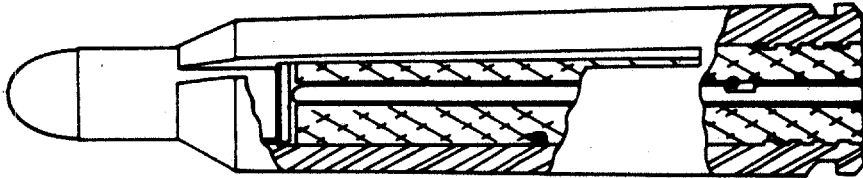
A firm called Kestmati, Inc. also sells a "Metallic Ammo Converter" for 12 or 20-gauge shotguns. This adapter is made from hardened aluminum alloy, anodized. The Kestmati Converters offer a choice of 38 Special, 357 Magnum, 44 Magnum, 45 Colt and 223 Remington chamberings at \$19.95. Kestmati estimates about 400-500 rounds before their adapter begins to show appreciable wear.

The GTM Co. is named for George T. Mahaney. This company has a new ripple—the 22 rimfire. Their converter allows the use of 22 LR in 12, 16, or 20-gauge shotguns. Capitalizing on the popularity of the 22 rimfire, GTM has designed a lightweight adapter, made from "space-age" aluminum alloy. The adapter houses a steel 22-caliber tube, off-set to allow the firing pin of the shotgun to strike the rim of the 22 cartridge. The device is convenient and simple to use. It allows rapid change-over from shotshell to 22 sub-caliber, and retails for \$35.00.

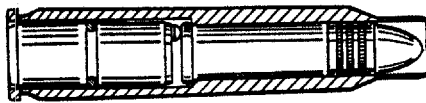
Sports Specialties offers an adapter that will accurately shoot 22-caliber air rifle pellets in a variety of rifles or handguns, using only a rifle primer for propellant. The most popular pellet adapter is for the 223 Remington, but adapters are available for any centerfire 22 at \$24.50.



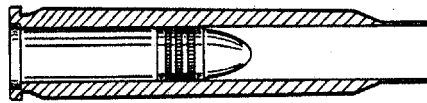
Here's one way to make a 22 Long Rifle work in a 22 centerfire. Alex makes it.



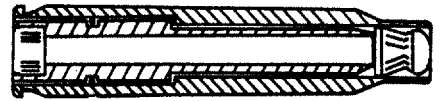
This is how a pistol cartridge can be fired in a centerfire rifle. It's an Alex.



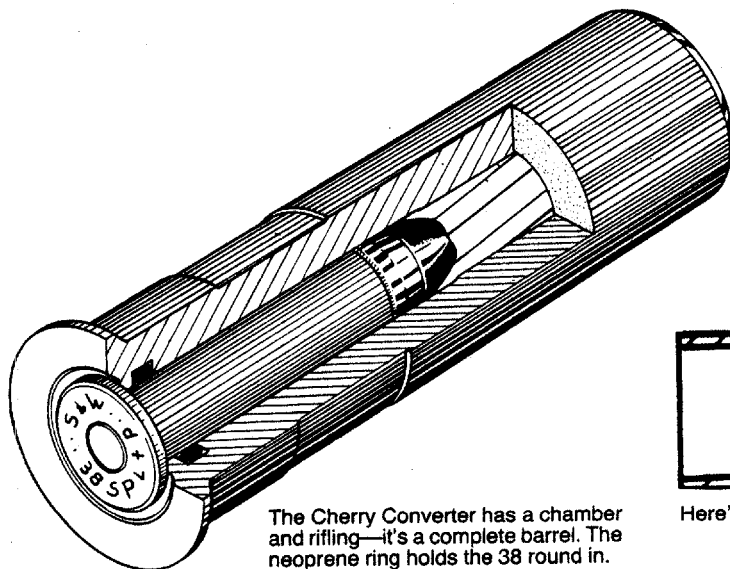
Here's a different way to get a centerfire firing pin blow to shoot a rimfire. From Sport Specialties.



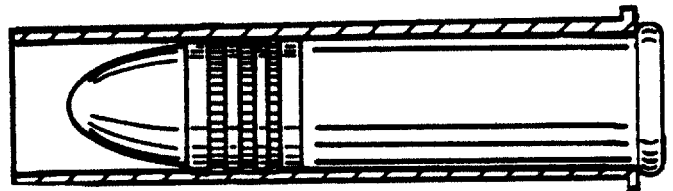
You can switch a T/C Contender to hit a rimfire correctly, so this adapter will shoot a 22 rimfire down a 223 T/C barrel.



And this gadget will fire an air gun pellet down a 223 barrel, powered by a primer.

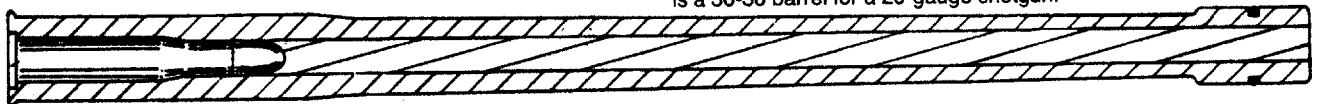


The Cherry Converter has a chamber and rifling—it's a complete barrel. The neoprene ring holds the 38 round in.



Here's how the 22 Long Rifle/22 WMR adapters work.

This style of insert develops more horsepower than short ones. This is a 30-30 barrel for a 20-gauge shotgun.



Insert Barrels

Insert barrels offer great flexibility. They are designed to fit into your rifle, shotgun, or handgun to quickly convert it to a different caliber. Of all the options offered by Sport Specialties, 22 LR insert barrels are the most popular. One of the newer innovations has been insert barrels to fire rimfire or centerfire cartridges in 410,

20, 16, 12, and 10-gauge shotguns. These insert barrels work in any type of shotgun, and in 20 different sub-calibers. In break-open shotguns, the insert barrel is placed directly into the barrel; in a pump or autoloader it's more complicated, but once you get it into the shotgun barrel, you've converted your scattergun to a single-shot rifle. Most pump and autoloader shotguns have been designed with easy barrel removal in mind, so the

modification is simple and can be accomplished in a matter of minutes.

Insert barrels, especially those for break-open guns, have been around for many years. The grand-daddy of insert barrels in the United States here lately is made by Savage Arms. It's called the "Four-Tenner" and is designed to convert either 12 or 20-gauge shotguns to fire 410-gauge shells. It simply slips into the breech of most single, side-by-side, or over-

under barrels offering an extremely efficient modification, and weighs only five ounces. They sell for about \$34.00 each.

Gremmel Enterprises carries at least three shotshell inserts. One is a rifled insert, similar in size to the standard shotgun shell. The insert is designed to fire either the 25 ACP or 22 LR cartridge. A second shotgun insert uses European sub-caliber shotshells, such as the 6mm with shot, the 22 Long with shot, and the 9mm with shot. The third shotgun insert is tailored to short range indoor practice. It fires a 4mm M20 centerfire cartridge, another European size and is available in 12, 16, and 20 gauge.

Harry Owen seems to have taken the concept a step further. He offers a special insert just for pump and auto-loader shotguns that can be used without barrel removal. The insert is identical to a loaded shotgun shell, but is chambered and rifled to use a sub-caliber cartridge. An illustration of the 12-gauge/38 Special model is shown in this article, but these useful inserts are also available from Sport Specialties in 10, 12, 16 and 20 gauge. Sub-caliber selections include: 9mm Luger, 380 ACP, 38 Special, 357 Magnum, 44 Magnum, 44 Special, 45 ACP, 45 Colt, 32 ACP, 25 ACP, 22 WMR, and the world-famous 22 LR. Regardless of gauge or sub-caliber selected, each is priced at \$35.00. (Yes, these are like the Amimex and Kestmati offerings in design.)

Before World War II, Ludwig Krieghoff Sr. operated an arms factory in Suhl. As adjuncts to their excellent combination guns, a 22 LR insert barrel was designed for shotgun barrels. These inserts are expensive (about \$188.00), but represent the "top-of-the line" if you're looking for the ultimate in insert barrels.

The Krieghoff insert barrel is 10 inches in length and can be purchased for either 22 LR or 22 Magnum. Properly fitted, they say, the "standard" model produces two-inch groups at 50 meters. An "extra" model, carefully selected during factory test-firings, guarantees one-inch accuracy at 50 meters. Krieghoff insert barrels are available through Gremmel Enterprises, Sport Specialties or GTM.

Insert barrels work especially well with combination guns. My favorite Savage combination is the Model 24-V, chambered for 30-30 and 20 gauge. I've added a Weaver V4.5 scope using detachable, see-thru mounts. The scope can be removed, or attached, in a matter of seconds. In my jacket pocket, I carry two insert barrels. One

is a 22 LR/30-30, while the second is a 30-30/20 gauge. The first converts the 30-30 rifle to fire a 22 LR cartridge; the 30-30 insert barrel converts my over-under to a double rifle. I've thus modified the 30-30 rifle to 22 LR for \$35.00 with a 6-inch insert barrel; the 10-inch barrel which makes my "double rifle" costs \$65.00. Such conversions for the many Savage combinations are almost uncountable.

The Thompson/Center Contender is well suited to the use of adapters or insert barrels, as well, and Sport Specialties offers an unusual variety of insert barrels for the T/C. They come in 6-inch, 10-inch and 14-inch lengths. In field tests, I've learned that in spite of weight and packaging advantages of the short ones, the longer barrels are more accurate.

Any of the big-bore Contender barrels, from the 30 Herrett to the 45 Colt can be thus converted to 22 rimfire. (One could also, of course, simply get a 22 rimfire barrel from T/C Editor.) The 6-inch barrels are \$35.00; the 10-inch \$45.00; the 14-inch versions \$55.00.

One of the most innovative of conversions is the ability to modify 357 Magnum or 44 Magnum revolvers to 22 caliber. For the serious hunter, this allows the use of the same handgun for either big game or smaller animals such as grouse or rabbit.

In the fall of 1981, I was hunting in remote Alaska, using a Smith & Wesson Model 28, chambered for 357 Magnum. The revolver was fitted with a Redfield 2½ power scope, anticipating its use on medium-sized game. My original plan was to use the Magnum for larger game, and selectively convert to 22 LR for grouse or snowshoe hare.

We were hunting an area west of Mount McKinley, in the foothills along the Kuskokwim Mountains. This area offers excellent habitat for moose, bear and caribou. As soon as you leave the open tundra, you see an abundant variety of lesser game—spruce grouse, the occasional ptarmigan, snowshoe hare, marten, and wolf. Conditions were so favorable, I had been taking grouse and snowshoe for two days with the revolver converted to 22 LR.

Then I saw the black bear. I thought the 357 Magnum light for bear, but I also knew carefully placed shots would produce acceptable results. My handloads were 146-grain jacketed hollow points, with a muzzle velocity over 1400 fps. The bear was 100 yards away, seriously engaged in cleaning up the remains of a moose. It

was at least three miles back to camp, so getting a heavier handgun or a rifle was impractical; and a black bear with the handgun is a most respectable trophy.

It boiled down to two possibilities: either use the 357 Magnum at close range or pass up what appeared to be an exceptional trophy. I knew my scope-sighted revolver was super-accurate under 50 yards, so I decided to try for the black *only* if a clear shot was possible and at close range.

In under five minutes, I removed the 22 LR conversion unit returning the revolver to 357 Magnum. Thereafter, the pieces to my unusual puzzle fit together like magic: I got a stationary shot at 35 yards. As I squeezed for the shot, the bear decided to stand up and he took the bullet three inches above his left eye. I've taken larger bear, but few have offered that much excitement and satisfaction.

Gremmel Enterprises and Sport Specialties both offer 22 LR conversion kits for revolvers. Prices are comparable, primarily depending on the barrel length of the revolver to be converted. The "standard" seems to be a conversion kit for 6-inch revolvers that retails for \$87.00. Revolver conversion kits consist of a 22 LR barrel insert, 6 auxiliary cartridges, and an ejector rod. Although the conversion kit seems a bit complicated, overall, the modifications are very simple.

All the adapters, insert barrels and conversion units mentioned here can be mailed. There are no Federal controls of any sort on adapters, inserts or conversions. Similarly, no Federal Firearms License is required by any buyer or seller.

Historical data is a bit vague, but gunsmiths have been trying to convert basic firearms for close to a hundred years. About 60 years ago, Marble Arms Company manufactured adapters. And also years ago, Winchester made chrome-plated adapters to fire the 32 S&W Short through 32-40 barrels. Sears sold centerfire rifle insert barrels for 12-gauge shotguns at the turn of the century. So we're not talking about a new idea, but a good idea.

I think the advantages of converting your rifle, shotgun or handgun to a sub-caliber are just too good to ignore. At a minimal price, you can add the benefits of a second cartridge along with a completely different set of ballistics. You can change calibers but still use the same familiar gun. Especially important, the use of adapters, insert barrels, or conversion units is just plain fun. ●