

# PARTS NOTES

(FROM TOM NAGLE'S VISIT)

Implied Warranty is based on 3 factors: age (generally 2 years from purchase date), condition, type of repair (some repairs will be covered even if purchased more than 2 years ago).

Trigger Assemblies are sold as a unit.

In general (we need a better explanation), the firing pin is stopped by the sear safety cam. When the trigger is pulled, the sear safety cam is dislodged and the firing pin can move forward ....

Butt plates are sanded down to fit the stock. So, used butt plates are "custom fit" and may not fit another stock.

Sportsman 74 and 76 rear tap size 8(screw size)-40(threads per inch). Sight tap size is 6-48.

Brownells is the best supplier of gunsmith tools. They sell a nifty firing pin disassembly tool for the ML. We now have the catalogs. Pls note their tele number: 515 623 5401

It is not ok to dryfire a rimfire. Has a firing pin float—not a spring to retract them.

If shells are stored poorly or if they get wet or damp, the powder can get contaminated and cause the powder to burn at a slower rate which causes higher pressures to build. Normal pressures are 8000-12000 psi. Shotguns are proofed at about 20,000 psi.

Model 3200 Note a design change with the hammer and sear connection about 25 years ago. We now charge \$350 for the upgrade---see your obsolete parts section for Model 3200---all of the parts for the upgrade are listed.

Magnum extractor—riveted extractor is used  
Standard extractor—rivetless extractor is used  
Extractors are sold by caliber. You also have to ask rivetless or riveted?

Refer to the Model 700 Facts page. Please note the underlined data (the last paragraph on that page) on the parts pages. Screw sizes, thread sizes, etc...

Note: take down screws are the same thing as front and rear trigger guard screws. The tread size (1/4 x 28) and head size (5/32) are the same for both—they are just different lengths.

90 Ts are made and serviced by the Kolar ( US Competition Arms).

The use of improper solvents (like WD 40) leaves a gummy substance that can build up and cause the firearm to malfunction.

Free base is the distance between the largest diameter (ogive) of the bullet and the beginning of the rifling. Free base varies by caliber. In general, less free base means greater accuracy.

Barrels are forged (collapsed around a form to create the lands) or cold hammer forged (a mold is forced, "hammered", down the barrel to create the lands). In the custom shop, lands can be created through a "button" process. A rod is pushed through that twist and cuts the lands out. Cut rifling refers to a cutter that scraps metal away to create the lands.

Rifle barrels are stress relieved. The barrels are heated then cooled slowly to dissipate the stress on the barrel. This also improves the accuracy. Shotgun barrels do not need to be stress released—they aren't subjected as much repeated shooting.

Our barrels are not cast to one side or the other---at least not on purpose---the barrels are aligned with the stock. "Cast on" refers to the barrel slanting to the right. "Cast off" refers to the barrel slanting to the left.

Aluminum bedding is done during the manufacturing process at the factory. Glass bedding is not done during manufacturing—it is a after-purchase modification. Only synthetic stocks are bedded.

"old metal" barrels are made to withstand pressures that are 2.5 times the safety factor, about 45000 psi. The "new metal" is designed to withstand 4 times the safety factor.

Gas orifice dimensions can be found in the Field Service Manual for each model. Gas orifice holes control the amount of gas that is released.

Harmonics refers to the way the shot wave (vibration) flows down the barrel.

Blueing = controlled rusting. Blueing is the chemical process of artificial oxidation (rust) applied to parts so that the metal attains a nearly black appearance. This prevents rusting and reduces light reflection.

Roto blast refers to process in which a coarse medium is blast to dent the surface. The surface is then blued.

Bead blasting refers to a process in which glass beads are blast to dent the surface. The surface is then parkerized.

Parkerized refers to a non-reflecting, rust preventative finish. Phosphate (crystal) coating.

Electroless nickelplate (marine magnum) no carbon steel is exposed that can rust.  
Electroless nickelplate parts are interchangeable with other parts.

We use #416 stainless steel. It is rust resistant---it will rust if not maintained.  
Truly stainless steel would be too expensive to tool.

MIM, metal injection molding, is used to make some parts. A metal powder is mixed with  
a lubricant and creati