

870 Pump Action

The 870 came out in 1950 and it works basically the same as the pump action 7600. We were the first ones to have production line firearms and this was the first gun that we produced on the line. The 870 is the best selling gun in the history of the world. The only gun that there has been more manufactured of is the SKS which is Chinese made.

All of the first 870's were called Wingmasters Express came out in 1987.

The 12 gauge is the most popular and the most versatile.

The predecessor to this gun was the Model 10. This was the early pump action. These were basically the only 2 pump action shotguns that we ever made.

The 870 uses the common fire control.

The carrier is a longer black piece on the trigger assembly. The carrier dog is connected to that.

Cross lock (or trigger lock) is the type of safety on shotguns. The gun won't go off when this is on. This one doesn't have a sear block safety. Model 700 is a sear block safety.

The cycle of operation is:

Magazine tube

Follower (now orange-was grey on the cutaway)

Magazine spring (Inside the magazine tube)

LH Shell latch (When loading ammo this holds the ammo in the magazine tube)

RH Shell latch (As the LH Shell latch lets go the RH shell latch comes over and catches the new shell to make it go in.

Both the LH and RH shell latches are different.

Bolt (rides on top of the action bars).

The shell latches on other guns are called feed latches.

The actual movement is:

The shell is on top of the carrier.

Carrier comes up.

Bolt comes forward and push feeds the shell.

Pull trigger

Bang

When you push back forward the LH shell latch takes over again. Pull back and extractor, extractor plunger, and extractor spring extract shell.

The ejector needs to be installed at the factory or by a qualified gun smith. It has to be heated up and gun has to be refinished (about \$100.00)

When the shell is in the chamber, ready to go, the chamber locks

On top of the action bars sits the slide assembly in cut outs made specifically for it..

The bolt assembly sits on top of the slide.

Inside the bolt is the firing pin and the firing pin spring

On the end of the bolt is the extractor and extractor spring

The appr. 2 1/2 inch piece that kind of flops around on the top is the locking bolt.

The locking bolt moves up and down as the bolt goes over slide.

This locks into the cut on the barrel extension (on end of barrel)

(You are locking the bolt into the end of the barrel which is on the end of the barrel.)

Locking bolt

You only want the gun to go off in the locked position. This holds the force back. If you barely move the fore end it won't go off. Locking bolt stops the firing pin from moving forward to unload push action bar release on LH side of trigger.

The fore end assembly includes:

Action bars

Action tube

This gun uses the same trigger plate pins as in all common fire controls.

Receiver set happens when the barrel pushes back into the receiver. Always make sure that the magazine cap is tight.

New followers are all orange now. Have been gray or black.

The magazine tube is silver soldered or welded onto the receiver. This must come to the factory to get replaced or worked on.

The barrel support is welded onto the magazine tube.

Anyone can buy the magazine tube assembly.

Soft solder is what homeowners use. Silver solder consumers can't do.

For magazine tube work send to RARC. Tell consumers to use RARC or factory.

Our receivers are cut out of a single piece of steel. All other manufacturers forge the receiver. Ours is much stronger.

The receiver assembly consists of:

Ejector

Receiver shell latches (LH,RH)

Magazine tube

To get the receiver assembly a person must have FFL license. Once in a while we sell to RARC's but not often.

Shell latches are held in by staking. Use a staking tool to remove them.

When putting barrel on the action must be open. Open and push forward just a little .

FORE END MUST BE AS TIGHT AS POSSIBLE.

The action bar release is on the trigger assembly. Push this in to unload or kick out live loads or rounds.

The cut in the barrel is called the extraction cut.

In order to take the fore end off you must first press the disconnecter.

The locking bolt on the bolt (the big thing that sits inside) locks up into the barrel extension.

All of the parts of this gun are made with a flat side and a rounded side. All flat sides face the same direction (all rounded sides face the same direction).

The fore end wrench takes the fore end tube off.

The cut on the fore end is made to be cracked. This is an expansion joint.

We make two different extractors.

Steel is on the Wingmaster and Police models. (about \$9.00)

Powdered metal is on express (about \$1.00)

These do break sometimes.

To get the extractor out push down on the plunger. Move around and extractor comes out. There is an extractor plunger and spring.

The firing pin is held on by the firing pin retaining pin. On top and bottom of the bolt (small circular) you take a punch and push out. The back of the firing pin has a cut in it to hold it in.

We recently upgraded the firing pin spring. It's tighter.

Headspacing on the 870 is controlled at the bolt face, extractor, and barrel. You can get SET BACK in the barrel-the cut gets bigger and this makes too much headspace. You can use the oversized locking bolt to fix this sometimes (bring it back to specs.) If this doesn't work then the consumer must buy a new barrel.

The trigger plate pins-there are two (front smaller, rear bigger)

The sequence goes:

Carrier dog (activates the bolt and then dog lifts carrier)

Carrier dog plunger " " " " " " " " " "

Carrier pivot tube detent spring

Hammer pin (slides in hammer pivot pin)-this is pinged in

Disconnect (is also held on by the hammer pin

Action bar lock spring

Sear spring

Hammer spring plunger

Trigger pivot pin

The FLEXIE TAB SYSTEM-this allows you to when reloading if you don't push shell

Every 870 has the flexie tab system.

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The standard magazine spring is 14 inches.
There is one that is 16 inches (called magazine spring extended) for the positive feed.

To clean the magazine tube use 10 or 12 ga. Bronze bristle brush and wrap a patch around it.

Ejector and ejector spring need to have RARC or us do because it is riveted in. We have had two ejectors-the first were non-magnum. All 2 3/4 or 2 1/2 have V in the serial number. The reason for the 2 3/4 only is due to the ejector. It's too short to eject the 3". We can change the ejector if they send it in.

FFS is Fire on Safe Release.

To put the recoil pad on use a med. Sized Phillips head.

Stock bolt is down in the large hole in the stock. Use a large straight slot screw driver or a stock bolt tool to get it off and on.

Don't use stock bearing plate (a spacer) with synthetic stock. If changing from synthetic to wood must buy this stock bearing plate.

Receiver stud (this came off-consumer can buy). The nut at the end of the receiver that the stock goes in to.

The receiver assembly is made up of:

Receiver

Stud

Magazine tube

The vent rib is 3/8 inch wide or 7mm. The exception for this is the SP10 which is 8mm.

The width of the vent rib on all gauges BUT the SP10 is the same. We put them as standard beginning in the mid 80's. They give a line for sight.
The wavy lines disperse heat.

Wing master has front site (thread size is 6x48) and middle bead (middle is half the size of the front).

Wingmaster and target gun front site and beads are screwed in.

Express only has front bead (no middle bead). This is pressed in and won't come out. The only way to get it out is by a gunsmith. It has to be cut and drilled out.

THE EXCEPTION IS : The Express Turkey gun has the same site as the Wingmaster (Bradley front site and middle bead).

Rifled sided barrels have basically model sites. They are welded on at the base.

About 2 yrs. Ago we started making barrels by cold forging. We now do laser edging on the writing on the barrels.

Police barrels have detent rings on the BBL Guide Rings.

The best way to site a gun in is at 25 feet and go from there.

Porting on choke tubes reduces recoil.

Police barrels and Marine Magnum have detent rings and magazine cap is ported. You can't put a regular barrel on a police gun w/o having a detent spring installed. You could loose your barrel without it. (You would shoot it out)

Timing cuts on the action bars activate the shell latches.

Trouble shooting:

If they say that the long skinny thing keeps falling out then it is the shell latch. (This is staked in)

If consumer can't open the fore end up to eject the spent shell then there is probably a burr in the chamber near the barrel extension. Can be filed down.

If the barrel guide ring falls off then gun needs to be taken in or send to RARC & it will be replaced.

Consumer says that the end of the barrel is not concentric (shooting off to the left, right, or whatever), the customer may say that the metal on one side of the end of the barrel is thicker than the other (this is OK-it is from the spin polishing-if it were bored wrong then the choke tube wouldn't go in)

9 times out of 10 this is caused by the barrel-sometimes it's the magazine tube-send the total gun to the factory.

If the trigger plate pins keep falling out then the detent spring is missing. We can sell them a new one.

Gun owners sometimes loose these pins when they put a saddle scope mount on you take these off the gun and use the scope mount scope screws. Many times when gun owner's are ready to take these off the firearm they can't find those original pins-we can sell them more.

The vent rib is brazed on.

The only difference in a police gun and a regular 870 is that the police trigger is powdered metal and the sear spring is red (as opposed to yellow) and it's stiffer (this is intentional-they don't want the gun accidentally firing).

We have made 3 different styles in the 20 gauge shotguns. The first 20 gauge is called the 20 gauge standard frame or full frame. The first 20 gauge's were 12 gauges with a modified receiver, action bar assembly, etc. We did this until 1977. These were also known as LW's (this is stamped on the gun).

In 1977 we came out with the 20 gauge LT. This is a true 20 gauge gun. The frame and everything is smaller.

PARTS BETWEEN LT AND STANDARD (LW) DO NOT INTERCHANGE-THIS INCLUDES BARRELS!

IF THE SERIAL NUMBER ENDS IN X OR N THEN IT'S A STANDARD FRAME 20 GAUGE. WE DON'T HAVE PARTS TRY JACK FIRST AND GUN PARTS.

The little frame is all guns from 1977 forward. Check serial number.

THIS IS THE SAME ON THE 1100'S ALSO.

A lot of 16 and 12 gauges are the same.