REMINGTON NYLON 66

Data: Remington Nylon 66
Origin: United States
Manufacturer: Remington Arms Company Bridgeport Connecticut
Cartridge: 22 Long Rifle
Magazine capacity: 14 rounds
Over-all length: 38½ inches
Barrel length: 19¾ inches
Weight: 4 pounds

Around 1959, when the Remington Nylon 66 first arrived on the scene, many firearms traditionalists sneered at its DuPont Zytel stock/receiver, stamped-steel parts, and expansion-type springs. Over the years, they have found that it works, and keeps working, uncleaned, mistreated, and abused. The back-window rack in nearly every pickup truck in the country now carries a Nylon 66, a tribute to Wayne Leek and the design team at Remington. For those not familiar with its mechanism, though, the Nylon 66 can be a disassembly/reassembly nightmare.
Disassembly:

1. Remove the inner magazine tube from the stock. Grip the bolt handle firmly and pull it straight out toward the right.

2. Back out the two cross-screws, located near the lower edge of the receiver cover, and remove them toward the right.

3. Remove the receiver cover assembly upward. The internal cartridge guide spring and the rear sight base are riveted on the cover, and removal is not advisable in normal disassembly.

4. Remove the ejector from its recess in the left side of the receiver.
5. Loosen the large cross-slotted screw on the underside of the stock, just forward of the trigger guard, then push it upward to raise the barrel retaining piece until its upper cross-bar clears its recess on top of the barrel. Slide the barrel out toward the front.

6. The front sight is retained on top of the barrel by two screws, one at each end.

7. Take out the cross-slotted screw from the bottom of the stock, and lift the barrel retainer and its front plate out of their recess in the top of the stock.

8. Be sure the hammer is in its cocked position (at the rear), and the safety in the on-safe position. Grasp the cartridge guide, and move the bolt forward out of its tracks in the receiver. Remove the bolt spring and its guide toward the front.
9. Move the safety to the off-safe position, restrain the hammer against the tension of its spring, and pull the trigger to release the hammer. Ease the spring tension slowly, and move the hammer forward out of its tracks in the receiver. Remove the hammer spring and its guide.

10. Push out the cross-pin located in the receiver just above the forward end of the trigger guard (arrow). Tip the trigger guard downward at the front, disengage its rear hook from inside the receiver, and remove the guard downward.

11. Use a small tool to unhook the trigger spring from its groove on the front of the trigger.

12. Push out the trigger cross-pin, and remove the trigger downward.
13. Push out the cross-pin just below the ejector recess (arrow), and remove the cartridge stop and its flat spring from the bottom of the receiver.

14. Use a tool to push the front of the cartridge feed throat (insert) downward, and tip it out of its recess for removal from the bottom of the receiver.

15. Use a small tool to lift the magazine tube retainer from its recess inside the receiver, and remove it from the top. Take out the magazine tube toward the rear.

16. Restrain the sear at the top of the receiver against its spring tension, and push the disconnector pivot at the bottom of the receiver to release the sear. Allow the sear to pivot upward, slowly releasing the tension of its spring.
17. Use a tool to disengage the hook of the disconnector pivot spring from the receiver cross-piece at the bottom.

18. Push out the disconnector pivot points, one on each side of the receiver. After one has been removed, the other may be pushed out from the inside, using one of the other cross-pins already removed, or a drift punch.

19. Depress the sear slightly to clear the rear arm of the disconnector, and remove the disconnector assembly from the top of the receiver. The disconnector is easily separated from its pivot by squeezing the sides of the pivot inward just enough to detach the lugs from the holes in the disconnector. The springs are also easily detached by turning their ends out of the holes in the parts.

20. Push out the sear pivot pin, and remove the sear and its spring from the top of the receiver (actually, the spring will usually fall from the bottom as the pin is taken out).
21. Push out the safety lever cam pin, the last cross-pin at the rear of the receiver. This will allow the safety lever to drop, and the safety and its attached lever can then be removed upward.

22. Use a fingernail or a small tool to move the safety detent spring retaining pin out toward the rear. The pin has a groove at its rear tip to aid removal. The detent spring is not under heavy tension, but it can flip the pin as it is removed, so restrain it with a fingertip during removal. Take out the detent spring and the ball bearing from their hole in the top of the receiver, and take care that the bearing isn’t lost.

23. The two internal cross-screws with square nuts on the left side do not retain parts, and their removal is neither necessary nor advisable during normal takedown.

24. The firing pin is retained in the bolt by a cross-pin on top, near the rear of the bolt. The retaining pin is bent down on each side to lock it in place, and one end must be pried upward before the pin is drifted out. The firing pin is then removed toward the rear.
25. Insert a small screwdriver between the rear of the extractor and its plunger, and depress the plunger while lifting the extractor out of its recess. Caution: The spring is under compression, so take care it doesn’t get away. Ease it out, and remove the plunger and spring.

26. A roll pin across the top front of the bolt retains the cartridge guide. Drifting out the pin will release the guide for removal. Be sure to use a roll pin punch, to avoid deforming the pin.

Reassembly Tips:

1. When replacing the disconnector assembly, remember that the sear (arrow) must be tipped forward to allow the rear arm of the disconnector to go behind the sear.
2. Remember that the cartridge feed throat ("cartridge insert") must be put in from below. Insert its rear tip first, then swing its front wings upward into the recesses, while holding the rear tip in place with a tool, as shown. When the cartridge feed throat is in place, invert the gun so the feed throat will not fall back into the stock before installation of the cartridge stop (the front tip of the stop spring holds the feed throat in place). Installation of the cartridge feed throat is the single most difficult point in the reassembly of the Nylon 66.

3. Do not attempt to install the cartridge stop and its flat spring at the same time. Install the stop, then insert the spring, with its forward end going under the pin (remember, the gun is inverted), and push the spring forward until its indented catch locks on the front edge of the cartridge stop.
4. When properly installed, the front lip of the sear (arrow) should be under the front cross-piece of the disconnector, as shown.

When reinstalling the hammer assembly, it is necessary to use a small tool to depress the sear while holding the trigger back, allowing the hammer to move to the rear. When the hammer is moved back to the cocked position, set the safety in the on-safe position to prevent release of the hammer while the bolt is installed.

When installing the barrel retainer, note that the front plate goes at the front of the retainer, and that the plate has an oblong slot which mates with a stud on the retainer.

Before replacing the receiver cover, be sure the ejector is in place in its recess on the left side. This part is often left out during reassembly, or drops off if the gun is tilted toward the left during replacement of the cover.

Before replacing the cover, be sure the cartridge guide is flipped over forward, to lie on top of the barrel.

5. It is very difficult to reattach the trigger spring to the front of the trigger without a small hooked tool. The one shown was made from an opened paper clip.