

Tools Required

What tools do I need for AMW Pro-X hardware? You only need a couple of things. We do not carry these items, as you can buy them much cheaper elsewhere, but we do have recommendations that will allow you the best use and performance.

1) Good Snap Ring Pliers:

You will need some good, quality snap ring pliers of the proper size. We have provided you with the McMaster-Carr part numbers for the pliers listed below for easy ordering.

For 38mm
use:

PN 57805A35
or

PN 5415A63
(0.070" tips)

For 54mm
use:

PN 57805A36
or

PN 5415A64
(0.090" tips)

For 75mm
use:

PN 7131A21

For 98mm
use:

PN 7131A26
(0.120" tips)
Extra tips (PN 7131A1)

For 150mm
use:

PN 5300A21
(0.120" tips)

Q. Why do we recommend different pliers? Why not use the McMaster-Carr PN 5391A37 that comes with the 0.090", 0.108", & 0.102" tips?

A. Because they are not safe for the larger rings. 50% of the time these have been used, we have watched the snap ring fly out of the tool. The tips are not angled inward enough for the larger cases. They work ok for 54mm & "sort of" ok for 75mm, but the 75mm & 98mm pliers we recommend are the same pliers with different tips. This is much safer. And even though the 0.120" tips on the 98mm pliers will also fit the 150mm rings, they do not have the leverage required to comfortably compress the 150mm rings. Please take our advice on snap ring pliers. We been flying snap ring hardware for over 10 years, and have horizontally fired thousands of motors on the test stand. These tools have not let us down, and still work well today.

2) Reload Assembly Grease:

The Zoo Keepers favorite is Slick 50 "One Grease" — cheap and available at most AutoZone, Pep Boys, Target, K-Mart, and even Walmart stores.

Also very good, but harder to find is Mobil One Synthetic Grease — Available at AutoZone, Pep Boys and other auto parts stores.

Why these? Both of these lubricants have the highest service temperature readily available, and they are easily cleaned!

Other acceptable choices:

Dow #111 or #112 Silicone Grease — these are paste consistency high-temperature silicone lubricants that are compatible with the o-rings used in AMW Pro-X reload kits. These require chlorinated solvents to properly clean up. With all of the environmental campaigns to stop destroying the ozone layer with chlorinated solvents, we stopped using this grease over 8 years ago.

Generic "High Temperature Wheel Bearing Grease" — Although this works ok, it's tough to find the service temperature on the cans. Look for +425F on the generic grease, or don't use it. The other stuff we've used for years with great success.

DO NOT USE these lubricants:

Silicone Dielectric Compound — It is a much more expensive grade of silicone than Dow 111, the service temperature is lower, and it turns to white crud after firing. It can be very tough to clean.

Any ANTI-SEIZE Grease — Most of these lubricants are filled with metal, or metal oxides, and are 2-3 times the cost of our recommended choices. The metal compounds conduct heat 100 times faster than the normal lubricants and the heat transfer rate is sufficient to cause the motor casing to burn through. While there are some anti-seize compounds that do not contain metals available, these brands are not generally available in a retail establishment, and we suggest that you avoid trying to determine the difference when a pound of the recommended lubricants are just 5 dollars.