

# PART TWO: The Pike



# The Pike

Our tests focused far less on the pike than on the adz and fork, but overall we're pleased with the pike. It seems largely unchanged, and matches the pike on the Pro Bar for length and angle. It seems slightly thicker, which is fine with us.

You'll notice the pike on the Pro Bar in these pictures (which has taken much use and abuse) is slightly bent near the end. We look forward to giving this Maxximus Rexx the same abuse without it distorting due to the harder steel.





# PART THREE: The Fork



# The Fork

To say that the fork has been improved is an understatement. It's been improved in almost every aspect:

1. The more slender fork allows for a more aggressive curvature, which in turn creates approximately  $\frac{1}{4}$ " additional spread when performing a fork-force on an inward-swinging door.
2. The squared-shoulders are easier to strike, and require no modification by the user.





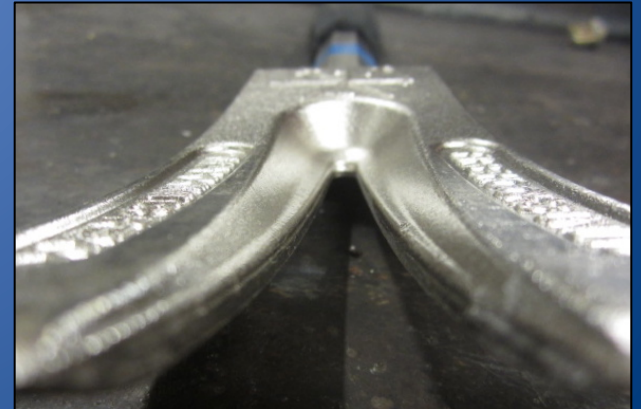
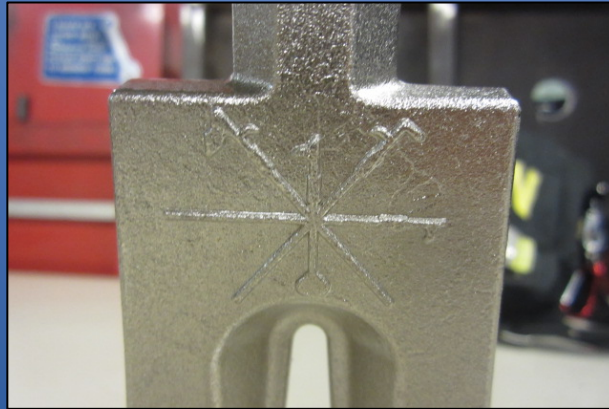
# The Fork (cont'd)

3. The gap-lines and set-lines ground onto the Maxximus Rexx require no modification by the user.
4. The fork-tips are slender, have a constant angle, and have no “ramp” like the Pro Bar...and again requires no modification by the user.



# The Fork (cont'd)

5. The lock-pulling blades of the fork add versatility to the tool. Other than the S&D Rex, I can't think of a single tool on the market that has two lock-pullers installed on the same tool (though there may be).
6. And we love the raised logo on the fork! A handsome tool counts for something in our book!





# PART FOUR: Lock-Pulling Function

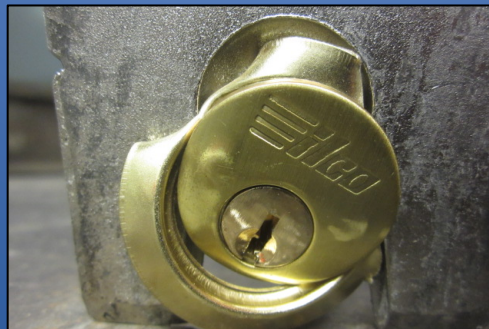


# Lock-Pulling Function

Obviously, the real innovation in the Maxximus Rexx is the lock-puller machined into the adz. While modeled on the Rex Tool, it is both similar in some ways and different in others.

By virtue of the fact that the Rex Tool is a single-purpose tool, and the Maxximus Rexx is a multi-purpose tool, it is almost unfair to compare the two. In some aspects, the Rex Tool is superior at pulling certain types of locks....and in other aspects, the Maxximus Rexx is superior at pulling the same locks due to its length and versatility.

Let's start this section by a comparison of function to the standard Rex Tool.





# Rex Tool VS. Maxx Rexx

One of the things that sets the standard Rex Tool apart from other lock-pullers is its highly-angled ramp. This feature is a real asset when pulling rim and mortise lock cylinders, because it keeps an outward-pulling stress on the cylinder as it bites into it.

But that same aggressive ramp can be something of detriment when pulling deadbolts or key-in-knob locks because it makes the tool hard to “steer”. This ramp may make it difficult to set behind a deadbolt or collar of a key-in-knob lock, necessitating pulling the knob off instead.

The Rex Tool is a fantastic and versatile lock-puller, but even it has its limitations.



# Rex Tool VS. Maxx Rexx (cont'd)

1 - The Maximus Rexx, by necessity as a prying tool, doesn't have the ramp that the Rex Tool does. Therefore, it doesn't grab rim and mortise cylinders as aggressively (though that was not a problem in any of our tests).

But that same feature, the slender adz, makes it easier to set behind the collar of a key-in-knob lock or deadbolt, and offers the user more choice as to angle of placement of the lock-puller onto the neck of a door-knob.





# Rex Tool VS. Maxx Rexx (cont'd)

- 2 - The pike of the Maximus Rexx may interfere with pulling a lock installed on a right-side opening door, however the tool need only be adjusted to another angle to be used effectively.
- 3 - The Maximus Rexx, being four inches longer, also offers more leverage for prying against the lock than does the standard Rex Tool.



# Rex Tool VS. Maxx Rexx (cont'd)

4 - With the bifurcated adz of the Maximus Rexx, it's easy to drive one tooth of the adz behind the collar of most key-in-knob and deadbolt locks. Not unlike using a Mini Pro Bar or Truckman's Tool.

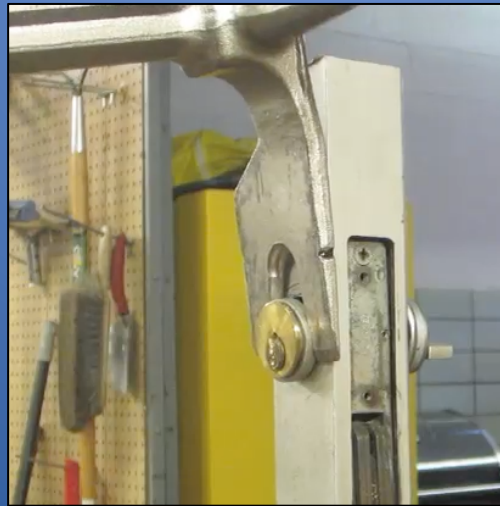
While certainly possible, trying to set the tool behind the collar on these types of locks is sometimes awkward when using the standard Rex Tool. In this way, the Maximus Rexx clearly stands out. And the added length adds considerable leverage after tool-set.





# Rex Tool VS. Maxx Rexx (cont'd)

5 - The Maximus Rexx, despite having no aggressive ramp, did a fantastic job of biting through or around collars and onto rim and mortise lock cylinders. Second only to the standard Rex Tool, we would say.





# Rex Tool VS. Maxx Rexx (cont'd)

6 - The greatest disadvantage of the Maximus Rexx as a lock-puller lay in the shape of the adz. Because the lock-pulling jaws are slightly off-set to the shaft, it has a tendency to turn to the right and can be difficult to steer back to a neutral position.

However, as an experienced lock-puller, I find this issue to be a minor annoyance more than a real impediment to the operation. If a firefighter can pull a lock with other tools, then he or she should be able to pull a lock using the Maximus Rexx without any trouble, regardless of this issue.



# Rex Tool VS. Maxx Rexx (cont'd)

7 - Another disadvantage of the Maximus Rexx is that it is somewhat awkward to use by yourself as a lock-puller, as it was a bit cumbersome to hold the tool with one hand (though that's how it was used in nearly all our lock-pulling tests).

Then again, the enormous advantage of the tool is that the standard Rex Tool need not be carried separately....one firefighter or one crew with the Irons carries most everything that is likely to be needed for forcible entry, whether conventional-prying or through-the-lock work is required. Certainly there is a trade off there, whether working alone or in a team.



# Rex Tool VS. Maxx Rexx (cont'd)

8 - The harder steel held up EXTREMELY well with regard to the jaws of the lock-puller.

On the far left is a picture of one of our Rex Tools that has taken a lot of abuse both in the real world and in our training classes, and it shows in the blades....which have been chewed up a bit. The middle and far right picture show the adz of the Maximus Rexx after 200+ conventional forces and 40+ lock-pulls.

The adz is straight as an arrow, and the blades look pristine.





# Rex Tool VS. Maxx Rexx (cont'd)

Again...the adz is straight as an arrow, and the blades look pristine.



# Depth of Lock-Puller

The lock-puller we used was not cut as deeply as the tool pictured on the far right. It worked very well, and we see no reason to set the lock-puller that far down the adz.





# Fork as Lock-Puller

Having a lock-puller integrated into the angle of the fork-opening adds to the versatility of the tool.

The adz would still be the preference in most cases, but it's always good to have options in the real-world.





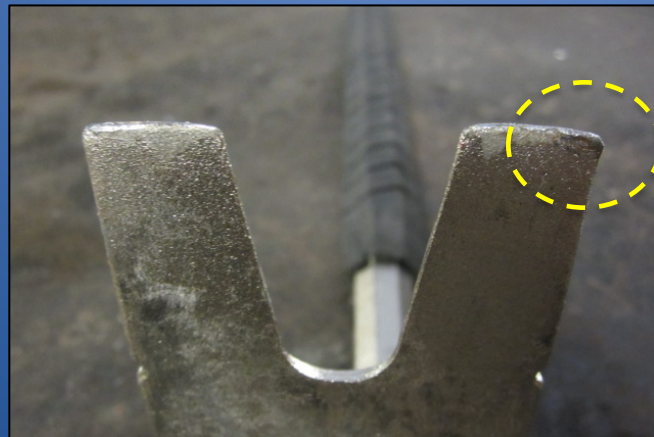
# PART FIVE: Miscellaneous Observations



# Durability

Given the new blend of steel combined with the thinner components, durability was obviously a factor of interest in all our tests. I'm happy to say that we have not found durability to be any negative issue in any of the steel components or working ends of the tool.

The pictures below on the right and in the middle show the only damage we were able to inflict on the tool in over 200 conventional forces and over 40 lock-pulls: a slight curl on the tip of the tooth of the adz closest to the pike. In adz-prying, this is the leading edge of the adz that remains in contact with the fulcrum. All of our Pro Bars for our company and for our fire department show this same mark, which leads me to believe that this is common to any working-tool and not a significant finding.



# The Rubber Grip

The only issue we had with durability was the rubber grip, which was cut during a conventional force on our prying-prop (which admittedly has some sharp metal burrs).

The grip, I think, will be a love/hate feature for individual users of the tool. As we discussed, the grip's thickness may be an issue for some firefighters. And some firefighters simply prefer a naked bar.

I still think it is a worthwhile feature that will be attractive to many chiefs and purchasing officers on the basis of its electrical insulating properties.





# Marriage to Other Tools

The new fork, having the same angle (though slightly longer) still marries well to striking tools commonly used with the Pro Bar.



# Weight

The Maxximus Rexx weighing about a pound less than the Pro Bar is a great benefit as we see it. The slight reduction of weight makes it more easily transported, carried, and maneuvered into place without any real reduction in force or momentum when swinging the tool as a battering ram.

We've used the titanium halligans made by Tico, and the tool was just too light to be effective as a battering ram or during other swinging applications such as shocking the door.



# PART SIX: Suggestions and Summary





# Suggestions

A few suggestions to mull over:

- 1 – Consider offering the Maxximus and Maxximus Rexx tools both with and without the rubber grip. While we are unsure what the cost is to have the bars wrapped or how that will affect the practicality of stocking the items, I know that there is a market for the tools both with and without the grip.
- 2 – This is a tall order.....but I think an eventual re-vamp of the standard Pro Bar, incorporating all the best aspects of the Maxximus, would also be in great demand. The harder steel, squared shoulders, markings, thinner adz/fork, etc. but with a standard-width adz could be quite an amazing tool as well. Obviously that's a major business decision, but I think it would be well-received in the forcible entry world among FFs who don't care for the wide-adz halligans.
- 3 – Here's another crazy idea....I think the standard Rex Tool could be improved by the use of the same vanadium steel as is used in the Maxximus tools. I have no idea how that would affect cost and other business aspect of selling it, but the blades would be nearly indestructible.

# Summary of Findings

The Maxximus Rexx, in our opinion, is the next great evolutionary leap of the halligan tool. The versatility of the adz for multiple kinds of prying, and for pulling all major types of door-locks is truly astounding.

In our conventional-prying classes, we always talk about the need to consider through-the-lock methods for low-priority calls. And in our through-the-lock classes, we constantly stress the good practice of ALWAYS bringing the Irons to the door along with the lock-pulling tools, even for low-priority calls where through-the-lock techniques are going to be tried first.

With the Maxximus Rexx as part of the Irons set and a Key Tool in your pocket, you have both bases covered for forcible entry into most regular houses, apartments, and businesses. Having the option for either conventional-prying or through-the-lock work in one tool makes it more likely that the situationally-appropriate technique will be used. And, so long as an individual firefighter doesn't object to the wide-adz, there is no reason to object to the presence of the lock-puller, whether they use it or not.

# Summary of Findings (cont'd)

We hope that any questions about the tool's durability will have been laid to rest by our testing process, and that of the FDNY.

Certainly, any tool can be damaged or destroyed by misuse or abuse. We've all seen heavy, old pinch-point pry-bars bent from extreme stress. It's our opinion that any operation that would damage the Maxximus Rexx would likely damage the standard Pro Bar or any other halligan-type tool on the market.

**SEARCH & DESTROY** is proud to have been asked to participate in the testing process, and we hope that our tests, test videos, and this report have been helpful to Fire Hooks Unlimited.





**PREPARED SPECIALLY FOR BOB FARRELL, OWNER  
FIRE HOOKS UNLIMITED**