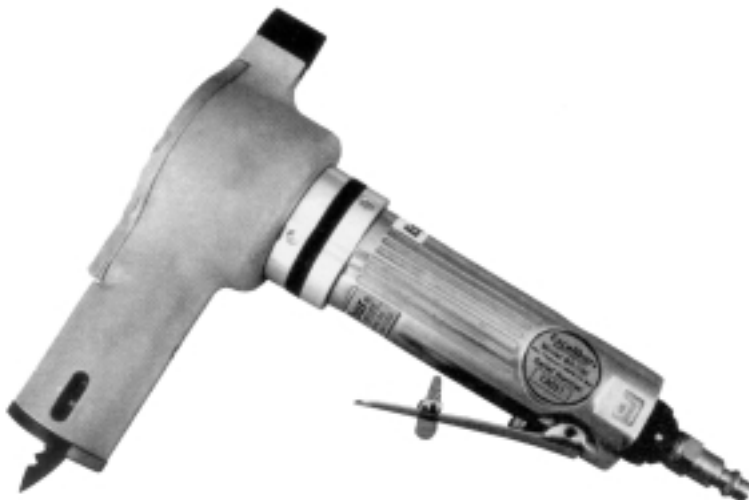


**Excalibur**®  
KNIFE FOR LIFE

# Users Guide



 **AMERICAN**  
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# Excalibur®

KNIFE FOR LIFE



The **Excalibur** is a pneumatic tool that cuts auto glass and metal. During rescue operations, use the **Excalibur** to remove windshields and metal hazards.

## Glass Cutting Blade



The glass cutting blade is crafted out of high speed steel. The patented blade is designed to pulverize glass in a fashion that reduces the hazard of removing glass.

## Metal Cutting Blade



The bi-metal construction of the metal cutting blade allows it to bend while cutting various types of steel used in auto and aircraft manufacturing. Our rescue technicians have successfully used the **Excalibur** to cut the following:

- A, B, and C posts
- Steering wheels
- Brake, clutch and gas pedals
- Stick shifts
- Nader Bolts
- Drive Shafts
- Aluminum
- Lexan
- Composite panels, fenders, door skins, etc.
- Plastic Dashes, inside trim, etc.
- Window security bars
- PVC
- Dry wall (to find hot-spots)

## Pneumatic Power For Your Excalibur

### Using SCBA Bottles



Attach pressure regulator to SCBA bottle. Attach hose to pressure regulator set at 130 psi. Attach **Excalibur** to pressure hose.

### Using other air supply sources

Attach pressure hose to air supply regulated at 130 psi. Attach **Excalibur** to pressure hose.



## Glass Cutting



Strike windshield with top of tool to make puncture point.

With the top of the tool in a hammering position, strike the windshield hard to make a puncture point. Then, turn the tool over and start it running at full speed. Push the blade into the puncture point and start cutting. Do not let the glass cutting blade's point hit metal surfaces. Cut an inch or so away from the pinchweld and a couple of inches away from the dash. If the glass cutting blade hits metal, it can damage the drive unit or possibly break the blade. Tools damaged in this way will not be repaired under warranty.

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## Metal Cutting

When cutting metal, preferably keep the blade at a 90 degree angle to the object being cut. Due to the **Excalibur's** 1/4" stroke, we recommend moving the tool up and down in a sawing motion when cutting metal. We highly recommend the use of **Excalibur** Cutting Lubricant.

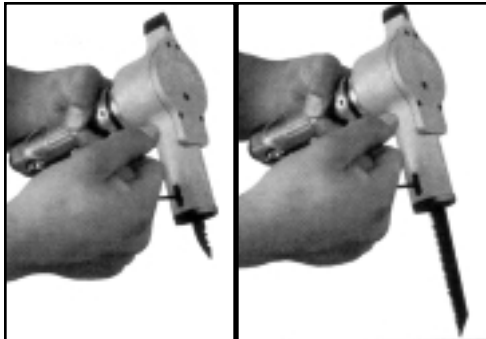


## Patient Protection • Tool/Personal Safety

- Protect patient prior to cutting glass
- Use approved and properly rated air supply (130 psi)
- Do not use oxygen to power tool
- Use only **Excalibur** blades
- Tighten both hex screws to secure blade properly
- Do not try to cut metal pinchweld or dash with your **Excalibur** glass cutting blade
- Do not pry with your **Excalibur**
- Use pneumatic tool lubricant
- Wear full protective gear at all times
- Keep mouth closed while operating tool

## Blade Replacement and Blade Protocol

When you receive your **Excalibur**, look at how your glass blade is installed. Always put it in the same way. For the glass cutting blade, the teeth must face forward, away from the tool. For the metal cutting blade, teeth must face toward the rear of the tool.



**Glass Cutting Blade Installation**      **Metal Cutting Blade Installation**

## Removing or Replacing a Blade

Make sure the tool is not attached to the power source. Two hex screws hold the blade in place. They are accessible through the side of the **Excalibur** base. A hex wrench is supplied which fits the screws. Loosen the screws and pull the blade out. Insert a new blade. Push it in until it "bottoms out" and tighten the screws.

Always keep a new blade in your **Excalibur**. Don't take risks with patients' lives! You can use old blades to practice your technique on junked cars or on a few used windshields from an auto glass shop in your area. When you are through practicing, put in a new blade and be ready for your next rescue operation.

## Tire Deflation



The **Excalibur** may be used to deflate a vehicle's tires. To deflate the tires, make a plunge cut into the sidewall of the tire using the glass cutting blade. You may need to apply added force to penetrate the rubber. Observe extreme caution

## Underwater Usage

**Excalibur** performs well around, in or under water. When diving with **Excalibur**, the flexible hose will reach the rescue scene while the SCBA bottle floats on the surface. (After running the tool underwater, lubricate and run the tool, then lubricate again before storing.)



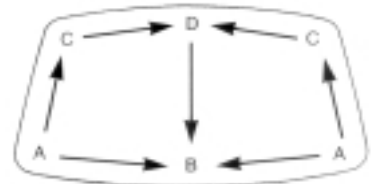
## One Person Removing Windshield

Strike the windshield hard at point A with the top of the **Excalibur** to make a puncture point. Turn the tool over. Start the tool running at full speed, push the blade into the puncture point, and cut from point A to point B. Remove the tool. Start again at point A and cut to point C. As you turn the corner, use your gloved hand to take hold of the top of the windshield and cut to point D. Then, go down the windshield to point B. Remove the first half of the windshield and put it under the vehicle or in an area designated for debris.



**Strike windshield with top of tool to make puncture point.**

Rotate to the other side of the vehicle and make another puncture point. Repeat, cutting pattern A to B, then A to C. As you turn the corner, use your gloved hand to take hold of the top of the windshield and cut to point D. Remove this half of the windshield and put it under the vehicle or in an area designated for debris.



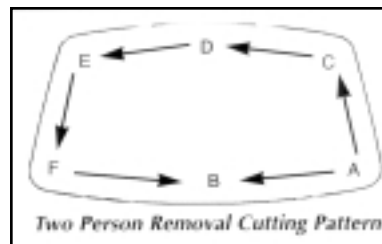
*One Person Removal Cutting Pattern*

## Two People Removing the Windshield



**Strike windshield with top of tool to make puncture point.**

Strike the windshield hard at point A with the top of the **Excalibur** to make a puncture point. Turn the tool over. Start the tool running at full speed and push the blade into the puncture point. Cut from point A to point B, then remove the tool. Start again at point A and cut to point C. As you turn the corner, use your gloved hand to take hold of the top of the windshield. Cut halfway across the top to point D. Stop and give the **Excalibur** to your partner who will finish the cut across the top to point E.



*Two Person Removal Cutting Pattern*

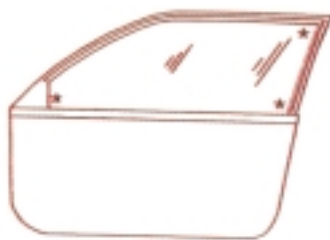
Your partner should place his or her gloved hand under the glass to support it, then cut down to point F. Supporting the end of the glass with a free gloved hand, your partner continues the cut around the bottom corner and back to point B. Both people remove the whole windshield and slide it under the car or put it in an area designated for debris.

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### Tempered Glass (All Side Glass and Most Rear Glass)

Be sure you are wearing personal protection gear. Protect the patient. Advise the crew, "Breaking Glass!" Run the **Excalibur** at full speed. Touch the blade tip to the corner of the window or back glass. Glass will break. Pull out or push in the broken glass.



### Warning

Due to possible pressure exerted by the damaged vehicle tempered glass may "explode" inward or outward. Be prepared for this to happen. Also, be aware that tempered glass has a built-in internal pressure. This explosion is not extremely violent, but it may send small pieces of glass several feet. Glass manufacturers designed tempered glass to break into small pieces, not dangerous shards.

### Safety Information • Extending Tool Life

- Do not exceed 130 psi.
- Lubricate the **Excalibur** after each use by placing a few drops of oil in the male connection.
- Always wear safety glasses and gloves when using this tool.
- Do not activate the **Excalibur** until it is in cutting position. Disengage the tool and let it stop running before taking it out of the glass or metal.
- The blade is sharp and can even cut or puncture when the tool is not running.
- Consider your work environment. Be sure you have firm footing before starting a cut.
- Disconnect the tool when it is not in use, before servicing, and when changing accessories
- Stay alert! Watch what you are doing. Use common sense.
- Protect patients at all times.



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### At The Rescue Scene

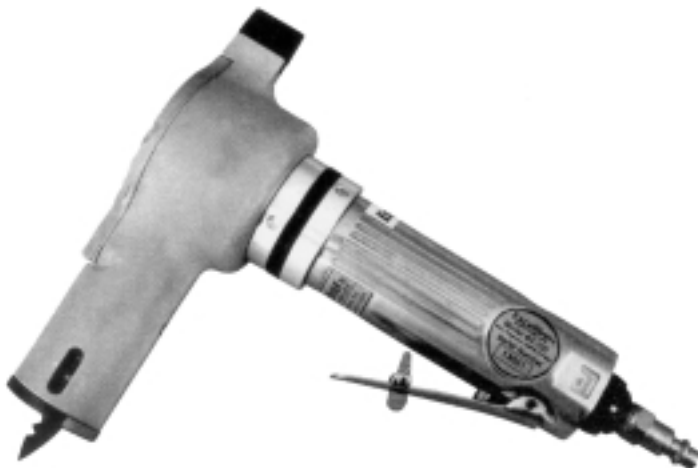
- Recognize Hazards
- Stabilize the scene
- Control traffic hazards
- Rescuer makes contact with the patient
- Stabilize the vehicle
- Deflate tires
- Rest vehicle on cribbing
- Hold C-Spine
- Primary patient evaluation
- Stabilize the patient
- Secondary patient evaluation
- Cover patient to protect patient from glass and debris
- Patient should have eye protection
- Explain the sounds the patient will hear
- Be sure you have on personal protection (eye, hand) Bunker Gear
- Advise interior rescuer you are going to take out the windshield

### CAUTION

Always wear NESA or OSHA eye protection and NFPA approved gloves. Always wear protective gear during a rescue operation.

### Questions So Far?

Do you have a question about the tool? Let us help. Call us at (937) 228-2200 between 8 a.m. and 5 p.m. EST, Monday through Friday, or e-mail us at amres@erinet.com to answer any questions.



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