

 **Equalizer®**

PWT1113

PYTHON™



**ROTATING CUT-OUT WIRE
AUTO GLASS REMOVAL TOOL**

USER GUIDE





 **Always wear safety gloves and safety glasses** 
when using cut-out wire/line and wire/line removal tools!

There are many makes and models of vehicles that you could encounter and with these, the amount of scenarios that you could run into are too numerous to mention. We have done our best to give an accurate in use directive while keeping it as simple as possible. Please keep in mind that there may be times when you have to position/adjust the units differently for a particular make/model or scenario encountered.

It is recommended to use the Snake Eyes™ boroscope unit (SE545) prior to removal to help locate problem areas such as clips, stops and thick accumulations of urethane. You can then mark these areas with a grease pencil as a reminder to be prepared when you get to that point in the removal.

The Snake Eyes™ can also be used to diagnose rust on the pinchweld. If your shop will repair the rusted spots, this will save time as well as help you with your up front estimates. If you don't do rust repairs you will know ahead of time and can refer the customer to a body shop.



Measuring The Wire/Line:

For windshield removals you will use approximately 20 ft of cutting wire/line from the roll (this is long enough for most vehicles). For back glasses, quarter glasses, vents and roof panels; measure the area and add three feet to determine the length of wire you will need for the job.

Inserting The Wire Starter:

For Windshields: Starting from the area that you feel will best suit you (either the drivers side or the passengers side) insert the wire starter tool (JN1130) from inside the vehicle through the adhesive bead at the bottom area of the windshield.



Note: To avoid damages to the painted area it is recommended to place a piece of tape on the exterior of the pinchweld.

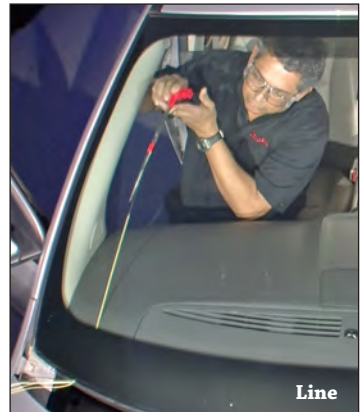
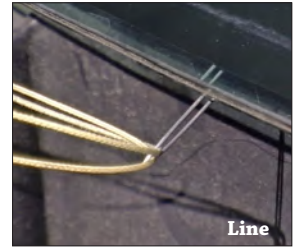
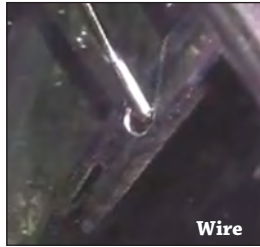
For back glasses, quarter glasses, vents and roof panels: Insert the wire starter in an area that will allow you to pull the wire/line into the vehicle without damaging the painted area, exterior moldings or under seal moldings.

Starting The Wire/Line:

If you are using the Venom™ Wire Dispensing Device (WDD167), attach it to the outside of the glass near the wire starter.



Insert the end of the cutting wire/line through the eye of the wire starter and pull it into the inside of the vehicle, allowing enough slack so that you can place your Python™ Cup Assembly (PCA1121) in the appropriate working place.



Applications Using Wire Grip (WGT112) - Used Only With Wire:

Setting Up The Cup Assembly:

When setting up your Python™ Cup Assembly, always make sure that the surface of the tool and glass are dry, clean and dust free.

Place the Python™ Cup Assembly on the lower inside corner of the windshield and prepare to pump the vacuum until the red warning line has disappeared.



Insert the end of the loose wire into the wire hole on the Python™ Cup Assembly.



Hold the wire in place and turn the Python™ Cup Assembly handle bar a couple of revolutions to start the reeling process.

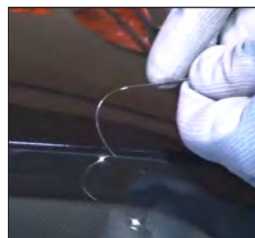
Placement Of Wire Around Windshield:

From the outside of the vehicle, if you are using the Venom™ Wire Dispensing Device remove and hold in one hand, while beginning to introduce the wire with your other hand. Start underneath the bottom corner molding (closest to where you inserted the wire to begin with) and continue to tuck the wire under the molding all the way up the A-Pillar and around the top corner keeping it pulled tight. At any time during this process, you can also secure the Venom™ Wire Dispensing Device to the body of the car or the glass to free up both hands to manipulate the wire.

Note: In some cases you might need to tape over the molding so that the wire does not pop loose.



Proceed along the top of the windshield keeping the wire tight. Place molding tape as needed to secure the wire. Continue around the opposite top corner and work your way down the opposite A-Pillar. Place molding tape as needed to secure the wire.



Finish by pulling the wire around the lower corner and as far along the bottom until you almost reach your original insertion point, then pull the anchor wire tight. Insert the wire starter a second time from the inside of the vehicle - just on the inside of the first wire (Always make sure that the wires are not crossed. If crossed, it could lead to the wire breakage). Be sure enough slack is given.



Then cut the wire loose from the spool or the Venom™ Wire Dispensing Device.



Insert this end of the cutting wire through the eye of the wire starter and pull it into the inside of the vehicle, allowing enough wire so that you can position your Wire Grip in an appropriate working place when you are ready.



Setting Up The Wire Grip:

Now from the inside of the vehicle, with Wire Grip (WGT112) in hand, you will insert the loose wire into the Wire Grip. To do so, follow these steps:

1. Push the wire through the front hole on the steel friction rod. Continue pushing the wire through the rod until you can pull it out of the opening on the shaft at the back end.



2. Then insert the wire through the hole on this same side of the steel friction rod. Continue to run the wire straight across and out the opposite side hole.



3. Using at least 1/2 inch to 1 inch of wire, then bend the wire towards the front of the steel friction rod keeping the wire tight against the rod and push the steel friction rod in, to secure the wire. This will ensure that the wire will be held in place if resistance is met when you start the cutting phase.



4. Place the Wire Grip on the windshield in the desired spot and anchor to keep the wire from moving.



Cutting The Glass:

Be sure to use the wire guard (GWH366) and dash protector (CU1077) during cutting. This will ensure that the wire stays on its course as you reel the wire during the cutting phase. Be sure to move or reposition these items to keep up with the wire as it is cutting.

Note: When cutting you always want to make sure that the wire is against the glass and never making contact with the interior (headliners, dashboards, decklids, A-Pillars or trim panels).

Once your protective gear is in place, begin reeling the wire by turning the handle bar on the Python™ Cup Assembly. Each rotation of the handle will move the wire further along the windshield, cutting as it goes.

Note: At any point in the cutting process should you encounter a problem area (ie. clip, stop, thick accumulation of urethane) the wire/line may create tension. At these times you should alternate relaxing (reeling slightly backwards) and reeling forward the Python™ Cup Assembly - don't ever try to force your way through. This relaxing motion will help relieve the tension and allow you to cut through the problem area without breaking the wire/line.



When you come to the bottom corner and you are making the turn, reposition the Python™ Cup Assembly towards the upper corner on the A-Pillar.

Note: If you prefer to remove the A-pillar trim panels do so at this time.

Continue to reel the wire working your way up the A-pillar making sure that the cutting wire is against the glass (and if the A-Pillar trim panels are still in place, that it does not make contact with these).

When you come to the top corner of the A-Pillar and you are making the turn, reposition the Python™ Cup Assembly towards the center of the windshield. Continue to reel the wire working your way across the top of the glass (Make sure the cutting wire is against the glass and never makes contact with the headliner).



Note: Some windshields have placement clips at the top of the glass (installed during the manufacturing process to keep the glass in place while curing). With a sharp blade unstick the clip from the glass allowing the wire to cut between the clip and the glass. This can also apply to the stops at the bottom of the windshield.



When you come to the next top corner and you are making the turn reposition the Python™ Cup Assembly towards the bottom of the windshield.

Note: If you prefer to remove the A-pillar trim panels do so at this time.



Continue to reel the wire working your way down the A-Pillar making sure that the cutting wire is against the glass (and if the A-Pillar trim panels are still in place, that it does not make contact with these). When preparing for your final cut, reposition the Python™ Cup Assembly to the center of the glass and move the Wire Grip up towards the A-Pillar.



Continue to reel the wire until the two sides meet one another and the wires come loose on the inside of the vehicle. This means you have successfully cut the windshield free.



Now, remove the Python™ Cup Assembly and Wire Grip from the glass and you are ready to lift the glass out of the opening of the vehicle.



Applications Using Slither™ (CCA1123) - Used With Wire or Line:

Setting Up The Cup Assembly:

When setting up your Python™ Cup Assembly, always make sure that the surface of the tool and glass are dry, clean and dust free.

Position the Python™ Cup Assembly in the center of the windshield just below the rearview mirror tab, making sure the anchor tab is facing the wire/line that has been pulled into the vehicle and prepare to pump the vacuum until the red warning line has disappeared. Then place the Slither™ Corner Cutting Assistant in the bottom corner opposite of the Python™ Cup Assembly.



Attaching Wire/Line To The Python™ Cup Assembly:

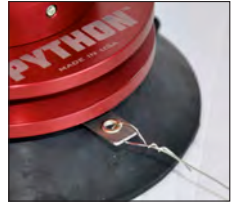
If You Are Using Line/Cord -

Tie a bowline knot (See Diagram on Page 18) in the end of the line. Insert the loop through the anchor tab on the Python™ Cup Assembly, then bring the loop over the end of the anchor tab to lock itself in place.



If You Are Using Wire -

Insert the wire through the anchor tab on the Python™ Cup Assembly, then twist the wire back onto itself as you would a bread tie.



Continue Setting Up The Cup Assembly:

Pull the wire/line from the Python™ Cup Assembly over to the Slither™ unit and wrap around. Turn the Python™ Cup Assembly handle until the wire/line is taught.

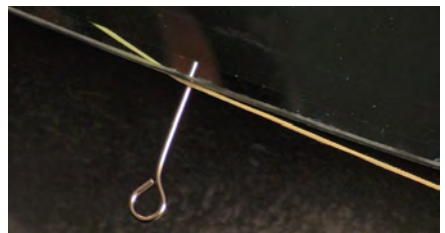
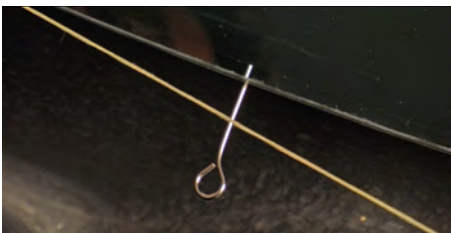


Placement Of Wire/Line Around Windshield:

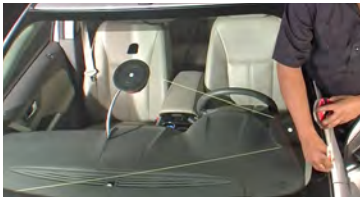
From the outside of the vehicle, hold the wire/line spool in one hand, while beginning to introduce the wire/line with your other hand.



Note: It's a good idea to add guide pins at the bottom of the windshield to keep the wire/line against the glass and avoid rubbing and possibly damaging the pinchweld.



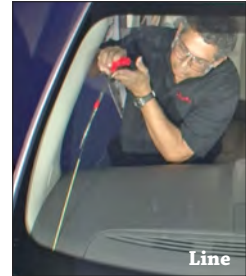
Start to tuck the wire/line along the bottom of the windshield towards the opposite side of the vehicle (where the Slither™ is placed). When you come to the corner, tuck the wire/line underneath the bottom corner molding and continue all the way up the A-Pillar and around the top corner keeping it pulled tight. Proceed along the top of the windshield keeping the wire/line tight. Place molding tape as needed to secure the wire/line.



Continue around the opposite top corner and work your way down the opposite A-Pillar. Place molding tape as needed to secure the wire.

Finish by pulling the wire/line around the lower corner and as far along the bottom until you almost reach your original insertion point, then pull the anchor wire/line tight.

Insert the wire starter a second time from the inside of the vehicle - just on the inside of the first wire/line (Always make sure that the wires/lines are not crossed. If crossed, it could lead to the wire/line breakage). Be sure enough slack is given.



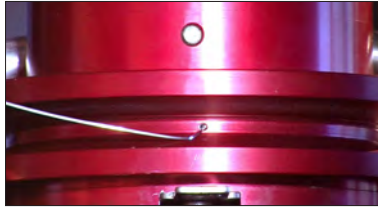
Then cut the wire/line loose from the spool.

Insert this end of the cutting wire/line through the eye of the wire starter and pull it into the inside of the vehicle, allowing enough slack so that you can secure the wire in the wire hole or notched slot for line.



If you Are Using Wire -

Insert the end of the loose wire into the wire hole on the Python™ Cup Assembly.



Hold the wire in place and turn the Python™ Cup Assembly handle bar a couple of revolutions to start the reeling process.

If You Are Using Line -

Tie a stopper knot (See Diagram On Page 18) on the loose end of the line then insert into the notched slot on the Python™ Cup Assembly.



Turn the Python™ Cup Assembly handle bar a couple of revolutions to start the reeling process.

Cutting The Glass:

Be sure to use the wire guard (GWH366) and dash protector (CU1077) during cutting. This will ensure that the wire/line stays on its course as you reel the wire/line during the cutting phase. Be sure to move or reposition these items to keep up with the wire/line as it is cutting.

Note: When cutting you always want to make sure that the wire/line is against the glass and never making contact with the interior (headliners, dashboards, decklids, A-Pillars or trim panels).

Once your protective gear is in place, begin reeling the wire/line by turning the handle bar on the Python™ Cup Assembly. Each rotation of the handle will move the wire/line further along the windshield, cutting as it goes.

Note: At any point in the cutting process should you encounter a problem area (ie. clip, stop, thick accumulation of urethane) the wire/line may create tension. At these times you should alternate relaxing (reeling slightly backwards) and reeling forward the Python™ Cup Assembly - don't ever try to force your way through. This relaxing motion will help relieve the tension and allow you to cut through the problem area without breaking the wire/line.



When you come to the bottom corner and need to make the turn, reposition the Slither™ towards the upper corner about halfway up the A-Pillar.

Note: If you prefer to remove the A-pillar trim panels do so at this time.



Continue to reel the wire/line working your way up the A-pillar making sure that the cutting wire/line is against the glass (and if the A-Pillar trim panels are still in place, that it does not make contact with these).



About halfway up the A-Pillar reposition the Slither™ to the top corner of the windshield. Continue to reel the wire/line working your way up the A-Pillar.



When you get close to the top corner and need to make the turn, reposition the Slither™ about center with the steering wheel at the top of the windshield. Continue to reel the wire/line working your way around the corner.

After you've made the turn, reposition the Slither™ just past the center of the windshield, on opposite side and just above the Python™ Cup Assembly. Continue to reel the wire/line working your way across the top of the windshield. (Make sure the cutting wire is against the glass and never makes contact with the headliner).



Note: Some windshields have placement clips at the top of the glass (installed during the manufacturing process to keep the glass in place while curing). With a sharp blade unstick the clip from the glass allowing the wire to cut between the clip and the glass. This can also apply to the stops at the bottom of the windshield.



About halfway across the top of the windshield reposition the Slither™ to the next top corner of the windshield. Continue to reel the wire/line working your way across the top of the windshield.



When you get close to this next top corner and need to make the turn, reposition the Slither™ close to the A-Pillar and a little bit down from the top corner of the windshield. Continue to reel the wire/line working your way around the corner.

Note: If you prefer to remove the A-pillar trim panels do so at this time.



Note: At this point, be sure and place the dash protector at the bottom corner as the anchor wire/line could start to move and ultimately cut at this time.

After you've made the turn, reposition the Slither™ a little more than halfway down the windshield still keeping it close to the A-Pillar. Continue to reel the wire/line working your way down the A-Pillar (and if the A-Pillar trim panels are still in place, that it does not make contact with these).



About halfway down the A-Pillar reposition the Slither™ about 1 foot horizontally straight across from where it just was. Continue to reel the wire/line working your way down the A-Pillar.



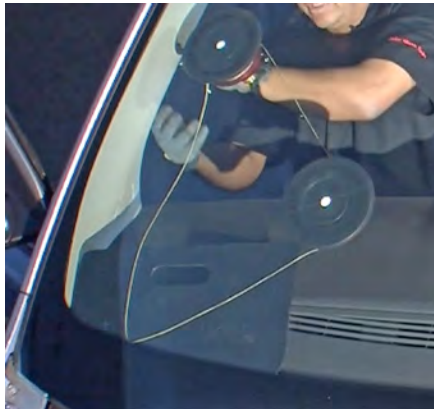
When you get close to the last corner and need to make the turn, you will need to reposition the Slither™ and the Python™ Cup Assembly.

Note: This is typically the **ONLY** time you will need to move the Python™ Cup Assembly.

Remove the Slither™, set aside for a moment. Remove the Python™ Cup Assembly and reposition a few inches out from the A-Pillar straight across from where it last was. Put the Slither™ back in approximately the same spot it was. This will allow the two wires/lines to cross and make the final portion of the cut.



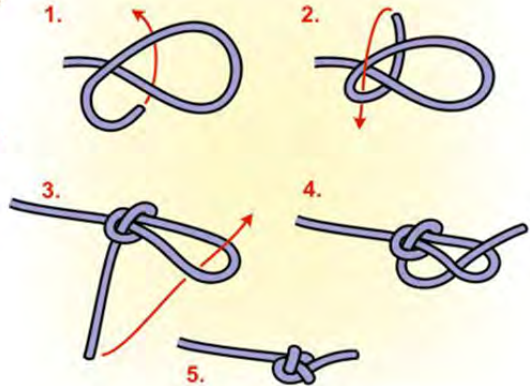
When the cut is complete, the wire/line will simply reel back into the vehicle.



You can now remove the Python™ Cup Assembly and Slither™ units. You can now proceed to lift out the windshield and prep for replacement.

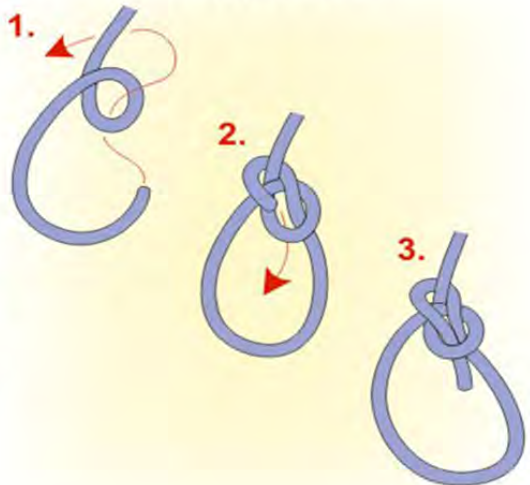
STOPPER KNOT

1. Form a small loop at the end of a line by running tag end over standing line.
2. Tie an overhand knot around standing line.
3. Pull overhand knot tight and feed tag end through noose (loop) end.
4. Pull tag end all the way through and slide knot down tight.
5. Pull both ends tight.



BOWLINE

1. Lay the rope across your left hand with the free end hanging down. Form a small loop in the line in your hand.
2. Bring the free end up to and pass through the eye from the under side (the rabbit comes out of the hole).
3. Wrap the line around the standing line and back down through the loop (around the tree and back down the hole).
4. Tighten the knot by pulling on free end while holding standing line



Additional Accessories

SE545



BNP516



UP334



MAC1125



SWL165



RC100



CU1077



HP564



LS1134

Equalizer®

2611 Oakmont Drive • Round Rock • Texas • 78665

Toll Free USA & Canada: 800.334.1334

International: 512.388.7715 • Fax: 512.388.4188

Email: sales@equalizer.com

www.equalizer.com