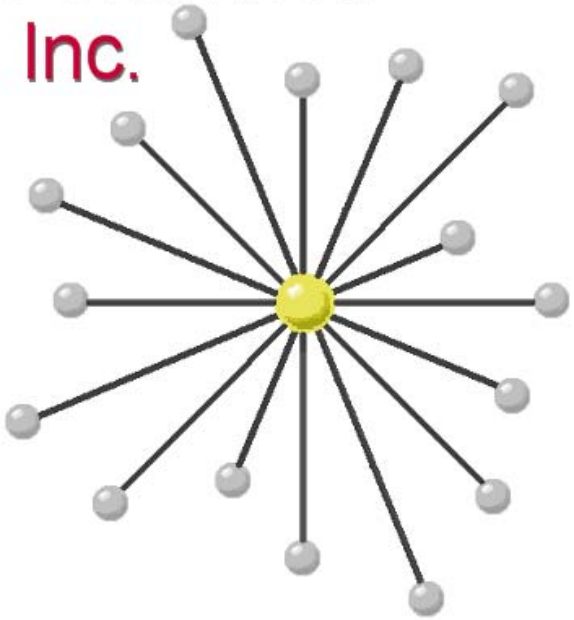
Resources Unlimited Company, Inc.



Hand Held Edge Deletion Tool

Operation Manual

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1. Safety Information

Safety Information

Please READ ALL SAFETY INFORMATION before using your Hand Held Edge Deletion Tool!

Warning! Edge Deletion Wheel can BREAK APART during use and CAUSE INJURY if damaged or run too fast. Always WEAR PROTECTION for eyes, face, hands and body.

Improper use can cause wheel to break apart and may cause injury.
Take precautions indicated below.

- **Exceeding Maximum Operating Speed can cause wheel to break apart and may cause injury.** NEVER EXCEED the maximum operating speed (MOS) on wheel label. CHECK the maximum operating speed (MOS) of the wheel against the machine speed.
- **Abusive operation can cause wheel to break apart and may cause injury.** DO NOT JAM the work piece onto the wheel. DO NOT PRESS hard on the side of the wheel.
- **A damaged, vibrating and wobbling wheel can break apart and may cause injury.** DO NOT enlarge or change the shape of the center hole. DO NOT use a wheel that has gouges or layer separation. STOP the wheel if vibrating or wobbling occurs during use. DAMAGE or WOBBLING may be caused by:
  * FORCING a wheel onto a spindle that is too large.
  * OVER-TIGHTENING the mounting nut.
  * USING flanges with wheels or rim wheels that are smaller than 1/3 wheel diameter, unequal in diameter or warped.
  * USING side support washers with unitized wheels that are smaller than 1/3 wheel diameter, unequal in diameter or warped.
- **Incorrect storage can soften wheel and cause it to break apart during use and may cause injury.** Wheel can soften in storage by exposure to water, high humidity, or hot temperatures. STORE wheel at temperatures below 150 degrees F (*65 degrees C) for at least 24 hours before using.
- **Sparks and particles flying off the wheel can injure or cause fire.** REMOVE FLAMMABLE MATERIALS from the work area. DIRECT sparks away from face and body. Use the machine hand held machine SAFETY GUARDS adjust properly to your operation as provided with unit. Make sure no one is standing in front or back of the wheel when starting machine.

2. Hand Held Edge Deletion Tool Set-Up

2.1 Adjusting Tool Air Flow

Before using the hand held edge deletion tool, you will need to adjust the air flow through the tool. The air flow has been turned down to a very low setting for shipment. To adjust the tool speed:

1. Close your air supply valve to the fixture you intend to plug the Hand Held Edge Deletion Tool into.

2. Plug the compressed air line into the Hand Held Edge Deletion Tool and restore the air flow.

3. Depress the air tool. If the tool is new, the wheel may spin slowly. (If the wheel does not spin at all, see the note at the end of this section.)

4. To adjust the speed, turn the inside black screw located on the side of the tool body. Set the tool's RPM for optimal safety, efficiency and comfort. Note that setting the speed too high or too low may produce inefficient coating deletion.

Note: Sometimes the wheel does not turn when the handle is depressed. You will hear a burst of air through the tool, but the wheel will not spin. This can be due to an over-tight U-Bracket or the tool speed being set too low. To set the speed, follow the steps above.

2.2 Deletion Wheel Adjustment

The Hand Held Edge Deletion tool should be adjusted to delete the correct amount of coating. To set the edge guide wheels:

1. Unplug the Hand Held Edge Deletion tool from the air supply.

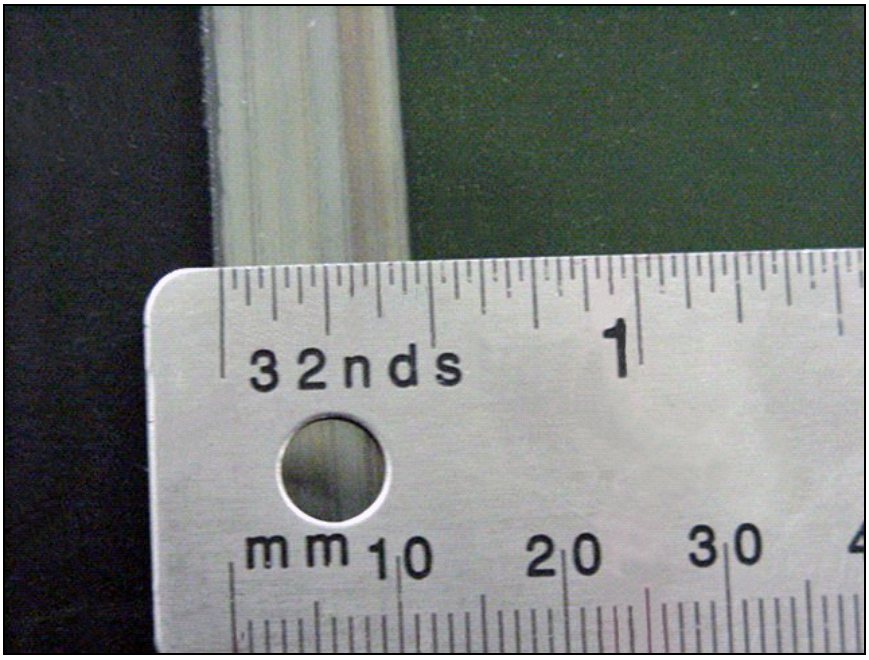
2. Holding the large air tool nut located behind the guard with a ¾" wrench or a crescent wrench, loosen the nut holding the grinding wheel on the arbor with a 9/16" wrench or socket wrench. (See photo on page 9).

3. Set the distance location of the grinding wheel by adjusting the position of the arbor. Measure from the front of the UHMW plastic guide to the front edge of the wheel. The arbor should be set so that you delete the correct amount 0" – 1/32".

4. Reversing the procedure specified in step 2, tighten the nut holding on the arbor while holding the large air tool nut with a ¾" wrench or crescent wrench. Stop tightening if the

arbor begins to spin in the air tool. If the arbor spins too freely, you may need to re-tighten the air tool until the arbor is firmly held.

5. Reconnect the Hand Held Edge Deletion tool to the air supply. Test your setting by edge deleting one edge of a coated piece of glass and measuring using a flat steel ruler. Adjust the position of the wheel using the steps above if necessary.`



An example of the amount of deletion required for a ½" spacer.

Note: if you change the position of the grinding wheel after the Hand Held Edge Deletion tool has been in use for a period of time, the wheel will be worn unevenly. If you increase the amount of coating being deleted, this will result in uneven deletion.

3. Using the Hand Held Edge Deletion Tool

3.1 Power

The hand held edge deletion tool is designed to be powered by factory compressed air - typically about 90 PSI. The tool uses a 1/4 NPTF male quick-disconnect, requiring a ¼ NPTF female quick-disconnect attached to the compressed air line. Daily oiling is recommend for the air tool. To do this manually, place a few drops into the male connector opening, tilt it and squeeze then handle to allow it to run into the body of the tool.

3.2 Operation

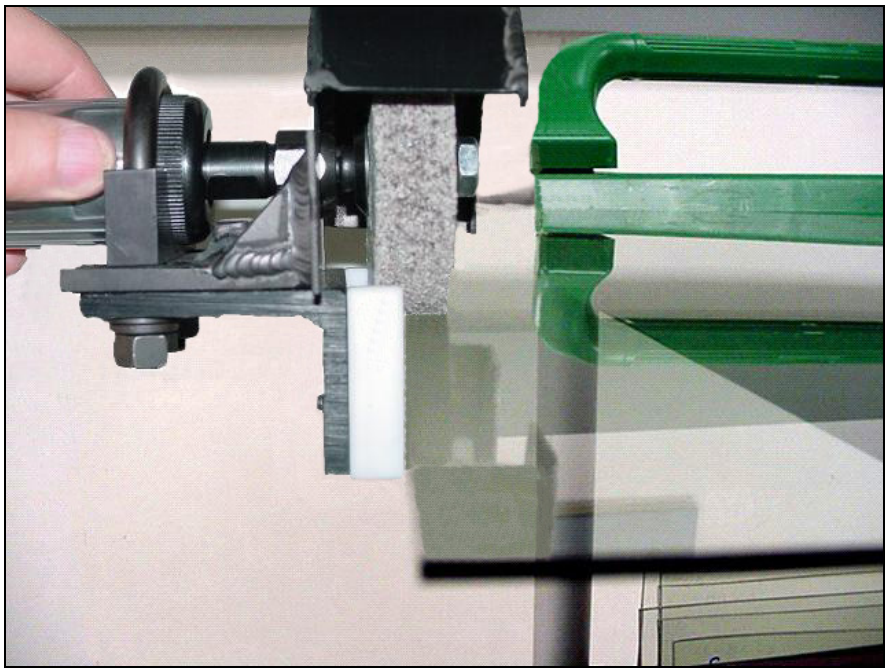
1. Adjust deletion guide so that the wheel is will remove the desired amount of coating. The deletion tolerance is +0”/ -1/16” from sightline

2. Close air supply valve to shut off air to the line.

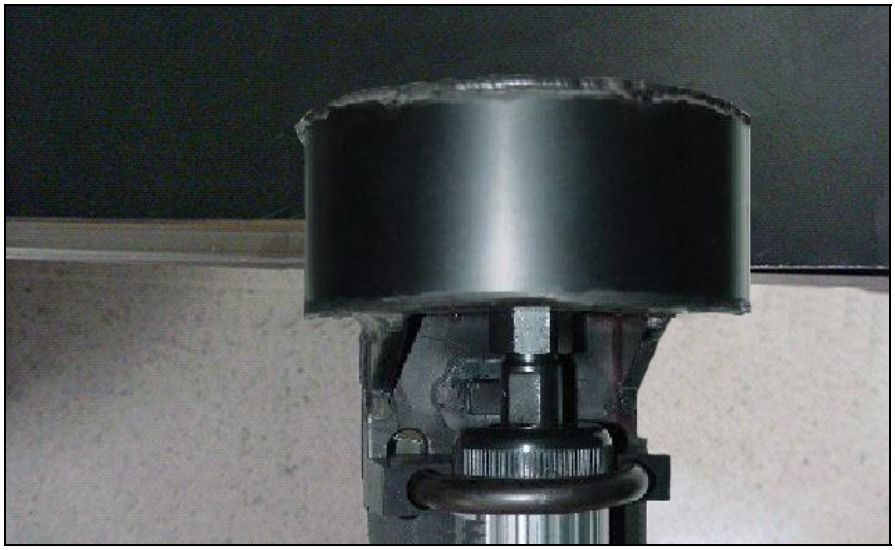
3. Plug compressed air line into the Hand-held Edge Deletion Tool. Restore air flow to the line.

4. Position tool comfortably in your hand for optimal balance, and press the air tool lever to actuate the Hand-held Edge Deletion Tool. (Fig. 3.2)

5. Place the Hand-held Edge Deletion Tool on the edge of the coated substrate with the coated side of the glass facing up.



6. Guiding the Hand-held Edge Deletion Tool with your hand, move smoothly along the glass, providing firm pressure to remove the desired amount of coating. Deletion must not extend past the sightline.



Putting too little pressure on the tool will not remove enough coating. Putting too much pressure on the tool may cause damage to the glass and premature deletion wheel wear. If the deleted coating glass looks streaky, all of the coating has not been removed - you may need to modify your edge deletion technique. Be sure to pass the glass under the deletion head as uniformly and smoothly as possible. Moving the tool over the glass too quickly or in non-uniform fashion can result in the wheel “skipping” as the glass moves beneath it, leaving streaks.

To determine if the coating has been completely removed from the edge, you can test the deleted area with an ohmmeter. The coating is removed when the ohmmeter shows no reading. An ohm reading indicates the edge deletion has not been successful.

4. Maintenance

4.1 Regular Maintenance Notes

1. When tightening U Bracket, DO NOT OVERTIGHTEN as this may cause damage to the air tool.

2. REPLACE white plastic guide if it becomes deeply grooved by contact with glass edge. Failure to maintain guide will result in incorrect edge deletion depth.

3. Make sure that Black EDHH Shield and EDHH Alum Guide are PROPERLY ALIGNED at a 90 degree angle to the air tool when reassembling after disassembly.

4. Clean and check aluminum EDHH Shield guide regularly for wear. Replace if damaged.

5. OIL EDHH GRINDER DAILY as specified on the tool.

4.2 Dressing the Edge Deletion Wheel

A wheel should be dressed or cleaned when the edge has a glazed appearance. ***Be sure to wear safety glasses with side shields when performing this operation.***

1. Adjust the arbor so that the wheel is far enough from the white plastic guide so that a regular wire brush can be placed against the entire edge of the wheel but still under the guard.

2. Hold the wire brush perpendicular to the edge of wheel edge as seen in the photo. If the wheel is at the proper distance from the plastic guard, you should be able to rest the wooden end of the brush against it and the wire bristles should make contact with the entire wheel edge.

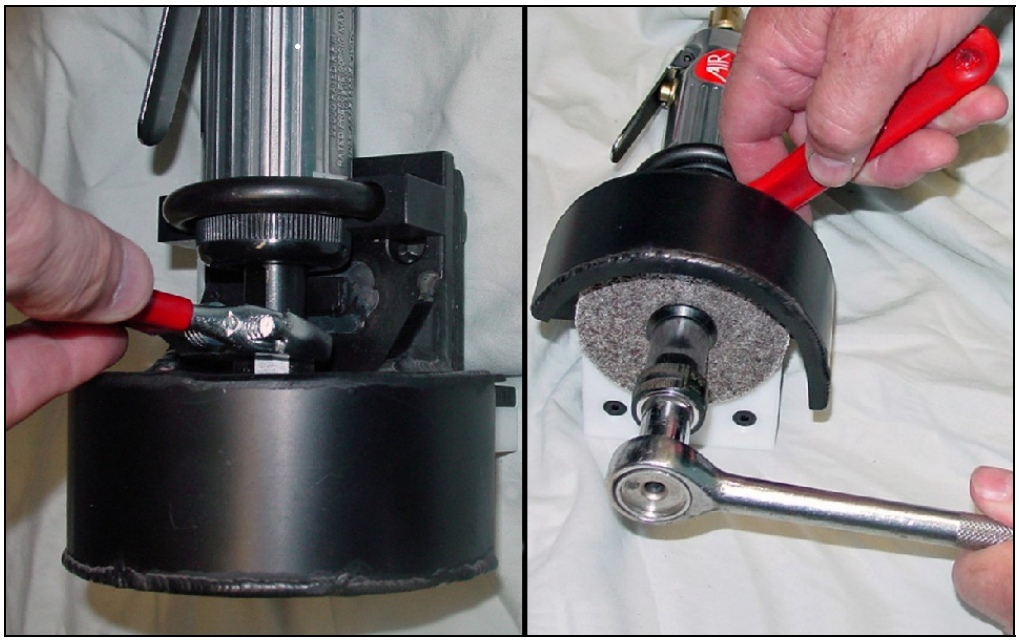
3. Start the hand tool and pressing the wire brush lightly against the wheel surface until the glaze on the wheel is completely gone.

4.3 Changing the Edge Deletion Wheel

The Hand Held Edge Deletion tool wheel should be replaced before the diameter of the grinding wheel is less than the top edge of the UHMW Plastic Guide. To remove the edge deletion wheel:

1. Unplug the Hand Held Edge Deletion tool from the air supply.

2. Holding the large air tool nut behind the guard with a ¾" wrench or a crescent wrench, use a 9/16" wrench or socket wrench to remove the nut holding the grinding wheel on the arbor.



3. Pull the black restraining washer off the arbor and gently remove the grinding wheel from the arbor.

4. Push the new grinding wheel onto the arbor until full seated against the rear restraining washer.

5. Replace the black restraining washer and 9/16” nut while holding the large air tool nut with a ¾” wrench or crescent wrench. Stop tightening if the arbor begins to spin in the air tool. If the arbor spins too freely, you may need to re-tighten the air tool until the arbor is firmly held.

Resources Unlimited keeps a supply of the grinding wheel in stock for the Hand Held Edge Deletion Tool. The tool comes equipped with two 3” x ¾” wide x 3/8” arbor Wheel, 8 Density. One is mounted on the tool the second is a spare. If you are interested in purchasing wheels from us, please check our website at www.resourcesunlimitedcompany.com for pricing. We can also be reached at 734-654-9728.

4.4 Changing the Hand Held Edge Deletion Tool Teflon Guide

To change the Hand Held Edge Deletion Tool Teflon Guide:

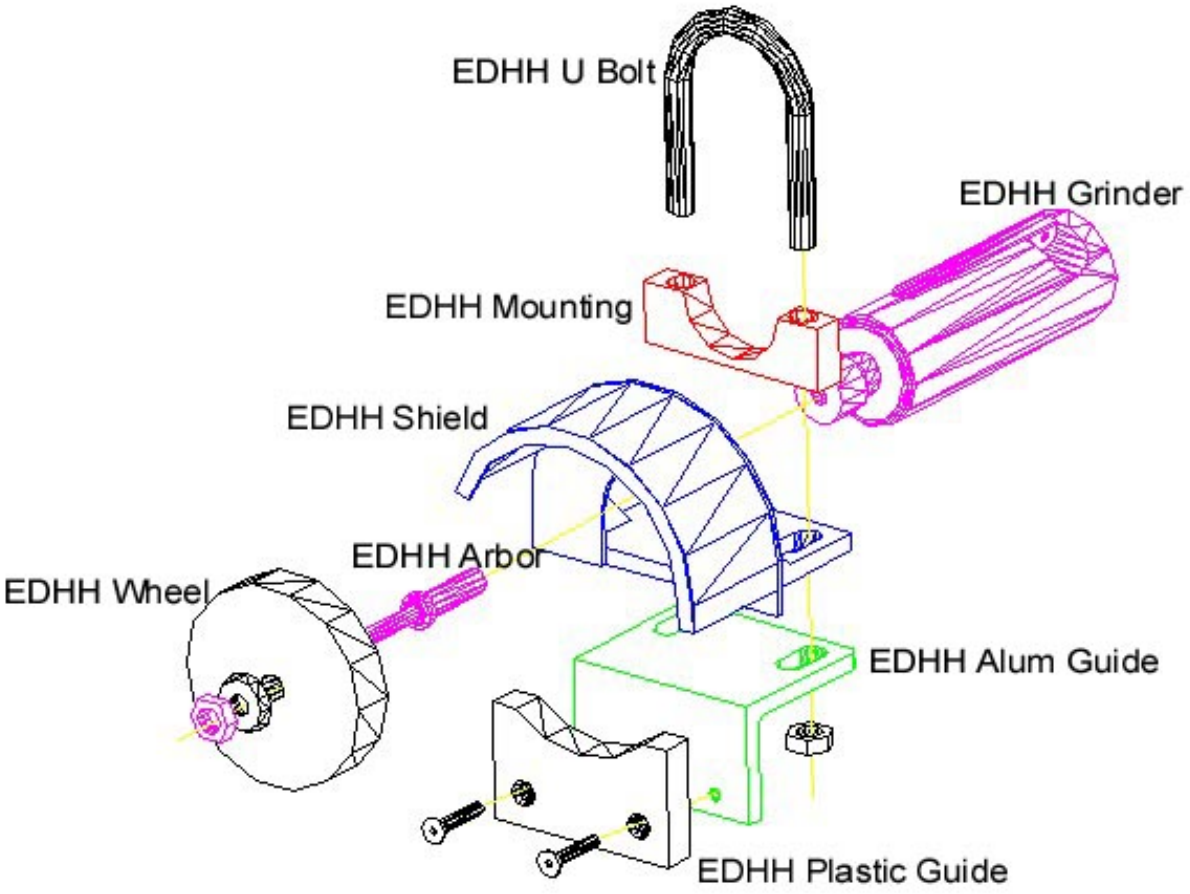
1. Unplug the Hand Held Edge Deletion tool from the air supply.

2. Using an 1/8” Allen wrench, remove the two black flat head socket cap screws from the guide.

3. Remove and replace the guide.

4. Adjust the wheel if necessary to provide the correct amount of coating deletion. See Section 2.2 on Hand Held Edge Deletion Tool Operation for more information on setting the position of the grinding wheel.

5. Edge Deletion Hand Held Parts Listing



Part	Description
EDHH U Bolt	E/D Hand Held 1-3/4” U-Bolt
EDHH Mounting	E/D Hand Held Aluminum Tool Positioning Mount
--	10-24 x 3/4” SHCS (2 Req'd)
EDHH Grinder	E/D Hand Held Air Tool Die Grinder
EDHH Shield	E/D Hand Held Aluminum Guard Shield
EDHH Arbor	E/D Hand Held ¼” Shank Arbor
EDT Alum Guide	E/D Hand Held Aluminum Guide Bracket
EDT Wheel	E/D Hand Held 3” x ½” Unitized Aluminum Oxide Wheel
EDT Plastic Guide	E/D Hand Held Teflon Glass Guide

Please visit our webpage at www.ResourcesUnlimitedCompany.com for pricing and delivery information on parts.