

## **Polishing Substrates with DREMEL 200-1/21 Rotary Tool**



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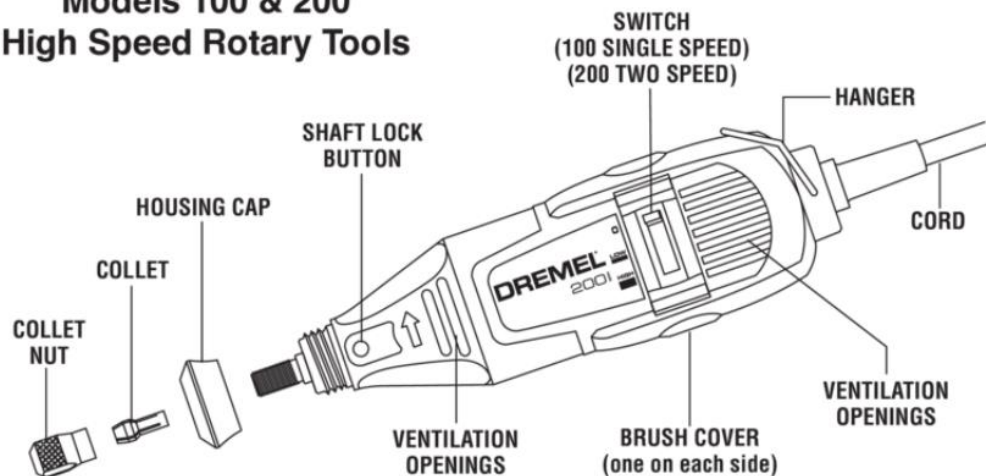
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Effectivity: March/19/2023	Polishing substrates		Revised by:
Revised:			Approved by:

This SOP uses the following:

- Instrument: DREMEL 200-1/21 Two-Speed Mini Rotary Tool Kit
- Dremel 220-01 Workstation
- Collet Wrench
- Stainless steel substrate
- DREMEL No. 421 Polishing Compound

### Models 100 & 200 High Speed Rotary Tools



## POLISHING STAINLESS STEEL

1. **Grab** the desired polishing compound. Varies per substrate surface.



2. **Swipe** back and forth the polishing compound on the material until all the substrate surface is covered.



The polishing compound should be placed as evenly and uniformly as possible.



**One side was polished to observe the before and after difference on the substrate.**

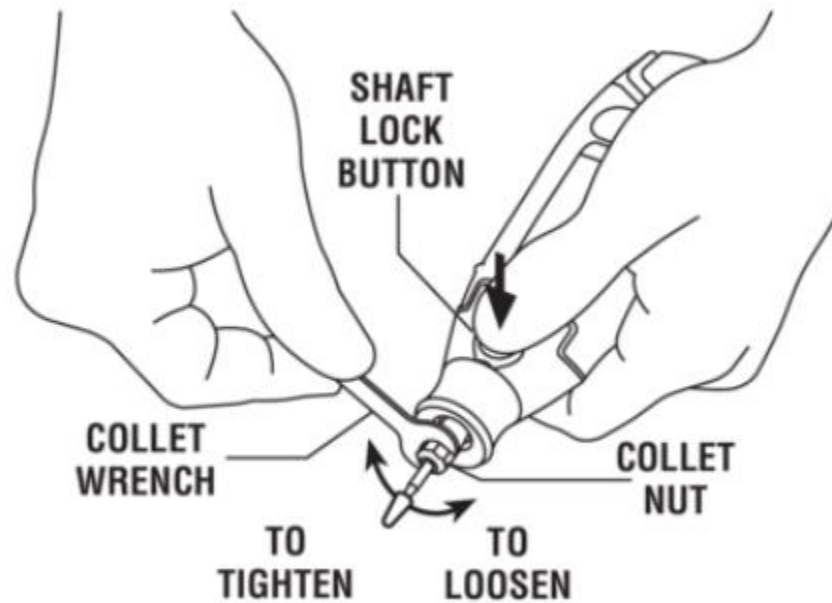
3. **Press** the Shaft Lock Button close to the attachment below the ventilation openings of the DREMEL 200-1/21.

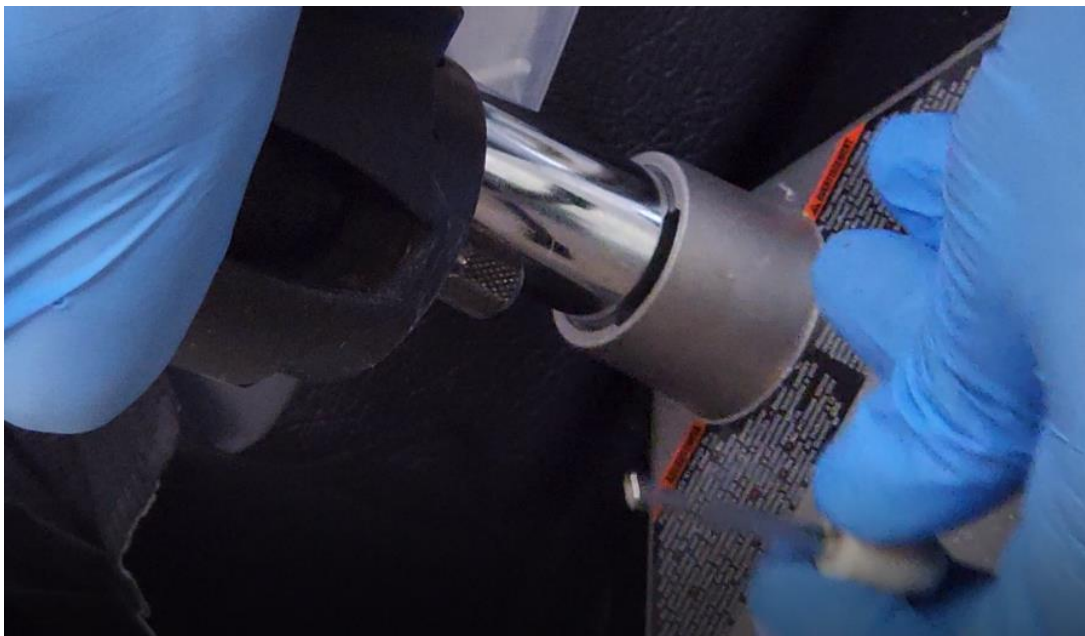




If you already have the strong polish brush (DREMEL 461 ¼ in. Rubber Polishing Cylinder Point) in the device, skip steps 4 and 5.

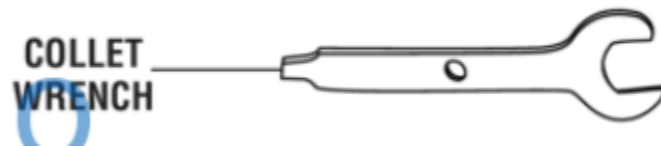
4. **Remove** attachment by rotating the Collet Nut with a Collet wrench.



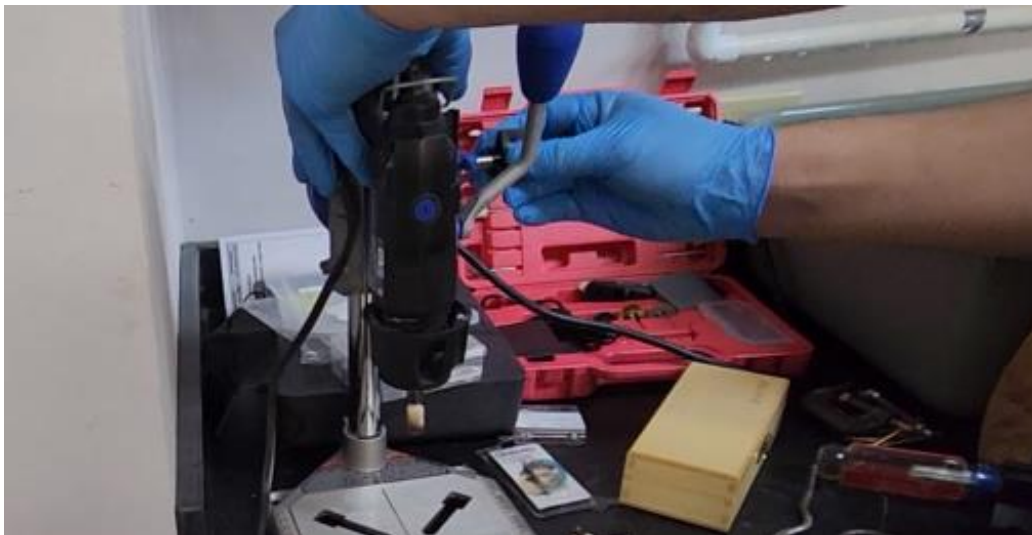


5. **Place** the strong polish brush inside the Collet Nut opening of the DREMEL 200-1/21. Use Collet Wrench to adjust accordingly.





6. **Turn** knob to move the DREMEL 200-1/21 drill.





7. **Change** drill to a horizontal position and turn knob to fix the position.

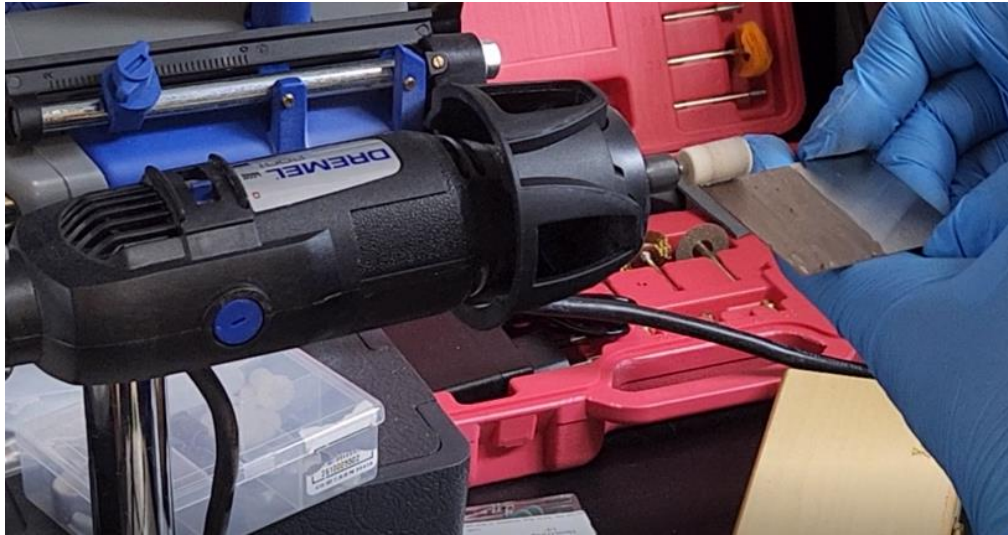


8. **Turn on** the DREMEL 200-1/21 drill to the low option (15,000 RPM).





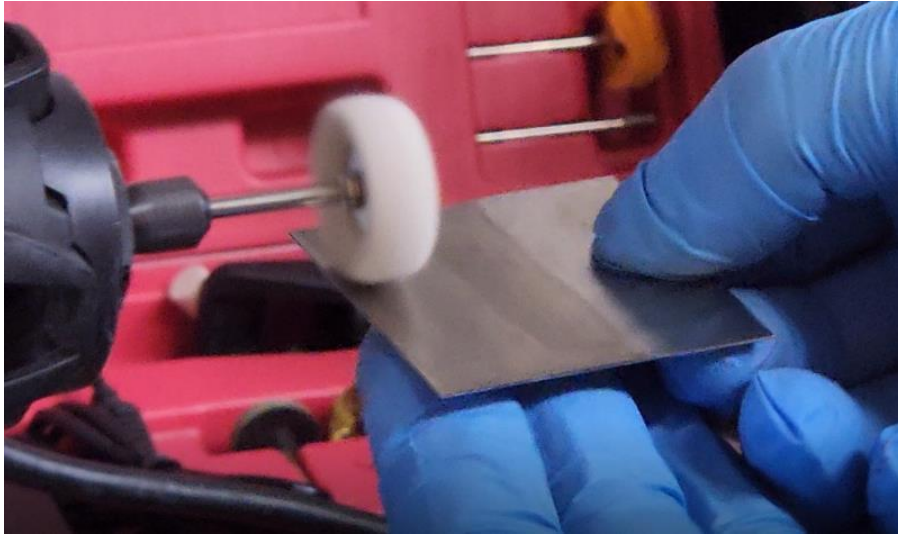
9. **Slide** the aluminum substrate on the polishing point uniformly with enough force to feel the point polishing the substrate. **Repeat** process for 5-10 minutes.



- 10. Change** the strong point (DREMEL 461 ¼ in. Rubber Polishing Cylinder Point) with a softer point ( ).










**11. Polish** substrate by wiping uniformly for 5 to 10 minutes.








## APPENDIX

### Polishing tips or brushes for substrates

Attachment	Picture	Polishing
Structure Tooth Tungsten Carbide Cutters		Fiberglass, wood, plastic, epoxy, and rubber.
<a href="#">DREMEL 461 ¼ in. Rubber Polishing Cylinder Point</a>		Steel, aluminum, brass, Shell/Stone, Ceramic, and glass. All 22,000 – 27,000 RPM
<a href="#">DREMEL 462 ¼ in. Rubber Polishing Cone Point</a>		Steel, aluminum, brass, Shell/Stone, Ceramic, and glass. All 22,000 – 27,000 RPM
<a href="#">DREMEL 463 1/4 in Rubber Polishing Tapered Point</a>		Steel, aluminum, brass, Shell/Stone, Ceramic, and glass. All 22,000 – 27,000 RPM
<a href="#">DREMEL 414 Felt Polishing Wheels ½"</a>		Steel, aluminum, brass, Shell/Stone, Ceramic, and glass. All 16,000 – 21,000 RPM
<a href="#">DREMEL 422 Felt Polishing Cone</a>		Steel, aluminum, brass, Shell/Stone, Ceramic, and glass. All 16,000 – 21,000 RPM
<a href="#">DREMEL 429 Felt Polishing Wheel 1"</a>		Steel, aluminum, brass, Shell/Stone, Ceramic, and glass. All 16,000 – 21,000 RPM

<a href="#">DREMEL 425-02 Impregnated Wheels</a>		Steel and aluminum. All 22,000 – 27,000 RPM
<a href="#">DREMEL 427 Polishing Point</a>		Steel and aluminum. All 22,000 – 27,000 RPM
<a href="#">DREMEL 423<sup>E</sup> EZ Lock CLoth Polishing Wheel5</a>		Steel (16,000 – 27,000 RPM), aluminum (5,000 – 8,000 RPM), shell/stone (5,000 – 8,000 RPM), ceramic (5,000 – 8,000 RPM), and glass (16,000 – 27,000 RPM).

#### Polishing compounds for substrates

Polishing Compound	Substrates
Aluminum Oxide	Metal, Glass, Plastics, Ceramics
Silicon Carbide	Metal, Glass, Ceramics, Composites
Diamond	Metal, Glass, Ceramics, Composites
Cerium Oxide	Glass, Quartz, Ceramics
Zirconia Alumina	Metal, Plastics, Composites
Iron Oxide	Metal, Glass, Ceramics
Chromium Oxide	Metal, Glass, Ceramics
Tripoli	Metal, Plastic, Wood
Rouge	Metal, Plastic, Wood
Colloidal Silica	Glass, Ceramics, Silicon Wafers
Calcium Carbonate	Soft Metals, Wood, Marble, Limestone

Advisor Signature

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Co-Advisor Signature

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