



263 SHOEMAKER RD. POTTSTOWN, PA 19464  
1-800-345-1178 INTERNATIONAL: 610-323-2200  
FAX: 610-323-6268  
WWW.EASTWOOD.COM

Instruction #13150Q – Rev. 11/06

# Eastwood Wheel Smoothing Kit part #13103

# Eastwood Wheel Buffing Kit part #13107



Replacing or having your mag wheels professionally refinished can be an expensive proposition. With a little help from Eastwood you can obtain professional results yourself at a fraction of the cost. Eastwood carries a wide variety of supplies to restore your aluminum or magnesium wheels, or create a custom look. Eastwood has assembled two mag wheel refinishing kits with instructions, however, specific supplies needed can vary widely depending on the original finish, condition of the wheel and final finish you desire. Some additional items that you may need include:

- **Aircraft and Automotive Paint Stripper (#10550ZP) or DEKOTE (#10411) removes paint, powder coating and clear coats**
- **DiamondClear™ for Bare Metal Surfaces (#10200Z, aerosol) provides long-lasting protection to newly polished wheels**
- **Flexible Shaft (#13385) attaches to your drill, drill press or grinding motor**
- **Self Etching Primer (#16014Z aerosol or #16009ZP qt.) to prep mag wheels for painted finishes**
- **DiamondClear™ Gloss for Painted Surfaces (#10196Z, aerosol) protects painted finishes**
- **Eastwood's HotCoat® Powder Coating System (#10198) allows you to powder coat your wheels**

# Instructions

## IMPORTANT SAFETY PRECAUTIONS

- Wear safety glasses or face shield at all times.
- Buffing wheels spin at over 2,000 rpm and can eject particles at high speeds.
- Wear tight fitting leather gloves.
- Always wear a dust respirator.
- Prolonged exposure to dust particles can harm your lungs.
- Do not wear loose-fitting clothing, if your hair is long tie it back or wear a cap.
- Wear a long sleeved shirt and make sure the cuffs are buttoned.
- Do not remove metal, especially from weld area on two piece wheels.
- When using paint stripper wear harsh environment rubber gloves.
- Mark location where wheels and tires came from when removing (i.e. LF, RF, LR, RR).

## General Wheel Preparation and Inspection

For best results please follow the preparation steps and precautions in this section.

**Remove tire from wheel to obtain best results** – This way your wheel can be thoroughly inspected, cleaned, buffed or painted around the entire bead area.

**NOTE:** If tire cannot be removed, tape and protect if chemical strippers are to be used to remove old finishes.

**Completely clean wheel** – Use a soap and water solution to remove road tar and contaminants. Eastwood's PRE (#10041Z) is ideal for removing stubborn road tar.

**Fully inspect wheels** – Inspect entire wheel for cracks, especially around bead and lug nut areas. If found, seek out a professional to have repairs done or replace wheel.

**Remove the old finish** – Use Eastwood Aircraft and Automotive Paint Stripper (#10550ZP) or DEKOTE (#10411) to remove paint, powder coating or clear coats. Brush stripper on in one direction only. Follow instructions on container. Remove coating using either a plastic scraper or a Scuff pad. Reapply stripper to any remaining areas, let sit per instructions, then scrub area with pad to remove coating. **Flush wheel with plenty of cold water** to remove paint stripper.

**Removing minor imperfections** – Once your wheels are thoroughly cleaned and inspected, remove minor scratches, nicks or bead damage using files and sandpaper. Blend in with the surrounding area to a 320 grit finish. Do not remove any significant amounts of metal, especially from weld areas on two piece wheels.

## Smoothing Rough Cast or Machine Cut Mag Wheels Using Wheel Smoothing Kit (#13103)

1. Strip any paint, powder coating, or clear coat, following instructions above.
2. Mount a 4" spiral buff (#13035) on an electric/pneumatic drill or flex shaft (2500 rpm minimum). Apply 80 grit greaseless compound (#13129) to buff then let buff sit until compound hardens (10-15 minutes). To improve flexibility, strike coated surface with a screwdriver handle. Buff wheel in one direction, cleaning buff as required using a buff rake and reapplying compound as needed. Buff your mag wheel 90° or as close as possible from first pass (see figures 1 & 2). Continue until all rough areas or machine marks are removed.
3. Clean mag wheel with hot soapy water to remove 80 grit compound residue. Proceed with the 220 grit compound (#13131) and a new 4" buff (#13035). Buff wheel 90° from last pass (see figure 1 & 2) around contour of the wheel. Clean buff as necessary using a buff rake and reapply compound (allowing 10-15 min. hardening time). Continue smoothing until all 80 grit marks are removed, alternating 90° from previous pass as described above and cleaning buff as required.

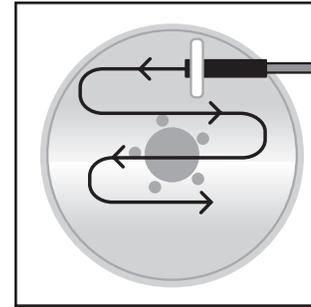
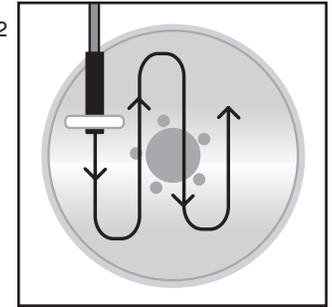


FIG. 1

FIG. 2



**NOTE:** Use Goblet Buff (#13045) mounted on a buff taper to get into contours and lug nut areas not accessible with 4" buffs. Also use our new Facer Buffs (1", 2", 3" diameter; #13171, 13172, 13173) and Mushroom Buff (3" diameter, #13174) to reach very deep recesses and narrow edges. These buffs are "treated" cotton and cut faster than felt bobs when used with Tripoli and Stainless compound. They will also quickly smooth the Greaseless Compound marks. Check our catalog or website for more information.

**NOTE:** Cleaning the buff frequently using our buff rake (#13120) and reapplying new compound will reduce the chance of adding fine scratches to the wheel. Remember to allow the applied compound to harden.

4. Clean wheel with hot soapy water solution to remove previous residue. Finish smoothing with the 320 grit compound (#13132) and a new 4" buff until a smooth leveled surface is achieved. If fine scratches remain go back to step 3 and repeat the process to remove.
5. Thoroughly clean mag wheel with hot soapy water to remove all greaseless residue, then use PRE (#10041Z) or acetone before finishing.
6. At this point the wheel has a satin finish (320 grit) which can be clear coated with our DiamondClear™ (#10200Z, aerosol), powder coated with the HotCoat® Powder Coating System (#10198), or primed with Self Etch primer (#16014Z) and painted the color of your choice. If a mirror shine is desired use our Buffing Kit (#13105) and follow the directions for polished wheels.

## Buffing Mag Wheels to a Mirror Shine Using Wheel Buffing Kit (#13105)

**BUFFING TIPS:** Work small areas of the wheel at a time and inspect your work frequently. Let the compound do the work, use light consistent pressure instead of bearing down on the buff.

Continue until the entire wheel has been buffed to a shine. Cleaning the buff frequently and reapplying compound to avoid fine scratches from material buildup on the buff. Do not use more than one compound on each buff. Store buff with the appropriate compound in a zip lock plastic bag.

1. Strip any paint, powder coating, or clear coat following general wheel preparation instructions.
2. Using an electric/pneumatic drill or flex shaft (2500 rpm min.), install 4" spiral buff (#13035) on arbor (#13064) and apply tripoli compound (#13135). Buff all areas of wheel, clean buff as necessary using the buff rake (#13120) and reapply compound. Alternate buffing angle 90° from previous pass (as shown in fig. 1).

**NOTE:** Apply compound as needed but not excessively. Use light, consistent pressure instead of bearing down on the buff. Let the compound do the work. If black streaks appear you have applied too much compound. Simply buff over surplus compound.

3. Install a new Tapered Goblet buff (#13045), on buff taper (#13053) and apply tripoli compound. Buff all edges and contours spiral buff cannot reach. Eastwood also carries a complete line of smaller buffs and felt bobs for tighter radius areas.
4. Clean mag wheel with PRE (#10041Z) or hot soapy water to remove all residual compound. (Residual Tripoli compound can compromise results.)
5. Install new 4" loose section wheel (#13042) and apply white rouge compound (#13001). Buff wheel 90° from first pass, (or as close to 90° as shape of the wheel allows). Continue until desired finish is achieved, stopping to inspect work frequently. Move buff with direction of buff wheel rotation to remove fine scratches.
6. Install new mag wheel buff (#13045) and apply white rouge compound. Buff all areas not reached by loose section buff until desired finish is achieved.
7. Thoroughly clean wheel with PRE (#10041Z) or hot soapy water, to make sure all compound has been removed from wheel.
8. To keep that mirror shine apply a protective coating of wax, Eastwood's DiamondClear™ for Bare Metal Surfaces (#10200Z, aerosol), or better still, powder coat with the HotCoat® Powder Coating System (#10198). If a painted finish is desired, prime wheel with Eastwood's Self Etching Primer (aerosol #16014Z or quart #16009ZP) and then top coat with desired color. If you wish to clear coat a painted wheel for added protection and enhanced looks, we recommend Eastwood's DiamondClear™ for Painted Surfaces (#10196Z, aerosol).

### Custom Tips

**Tip 1:** Engine turning can be applied to flat polished surfaces for a unique look. Use our Engine Turning Kit (#13117) for 1" swirls or (#13118) for 1/2" swirls.

**Tip 2:** To reapply or touch up a satin finish use a fine (320 grit) Scotch Brite pad.

**Tip 3:** If you wish to add some texture back to your wheels, glass beading works well. You can use Scotch Cal resist tape (#52082) to mask off areas you do not wish to glass bead. Aluminum Oxide will give you a coarser texture. Test an inconspicuous area to determine effect.

### Troubleshooting

Problem	Possible Cause: Corrective Action
<i>Black Streaks on Surface</i>	<ul style="list-style-type: none"> <li>• Applying too much compound or too much pressure on wheel.</li> <li>• Simply run buffing wheel over surplus compound to transfer to wheel or remove excess compound with PRE (#10041Z) or hot soapy water.</li> </ul>
<i>Buffing Wheel Turned Black</i>	<ul style="list-style-type: none"> <li>• It is normal for the buffing wheel to turn black almost immediately.</li> <li>• If the buff turns silver from aluminum pick up, simply rake buff to remove the build up.</li> </ul>
<i>Scratches Still Visible on Surface After Buffing Has Been Completed</i>	<ul style="list-style-type: none"> <li>• Failure to properly clean the mag wheel between steps, contaminated buff, or failure to change approach angle, with compound/wheel change.</li> <li>• Go back to the finest step that will remove the scratches and work up through the finer steps to clean the part and change your approach angle by 90° or as close to 90° as the wheel allows.</li> <li>• Make a final pass with the direction of buff wheel rotation.</li> </ul>



If you have any questions about the use of this product, please contact the Eastwood Technical Service Department at:  
**1-800-CAR-TEC1 (1-800-227-8321)**  
 To place an order, please call **1-800-345-1178**  
 or go online at [www.eastwood.com](http://www.eastwood.com)