

3M Application Profile

Market: Automotive Original Equipment Manufacturers (AOEM)
and Automotive Tier 1 Suppliers

Application Description: Basecoat/Clearcoat Paint Repair



Key Application Requirements

- Defects must be minor such as dirt, lint and/or small craters.
- Area needing repair must be small.
- The paint surface being repaired must have little to no orange peel.

Products Replaced

Standard buffing techniques that use coarser grades of abrasives, rotary buffers, wool pads and compounds.

Benefits/Advantages To Customer

- Removes small defects
- Saves cost of repainting
- Permanent repair
- Improves quality
- Faster (2 steps)
- Improved finishes

PRODUCT

3M™ Trizact™ Finesse-it™ Film
Disc Roll 466LA, Grade A5
UPC 051111-56251-2

3M™ Finesse-it™ Buffing Pad
Orange Foam, 3¾", PN 02637
UPC 051111-51158-9

3M™ Finesse-it™ Polish Extra Fine,
PN 06002, (gallons)
UPC 051131-06002-9

Scotch-Brite™ High Performance
Cloth-White, PN 02021
UPC 048011-26224-1

3M™ Nib Removal Sander
3125, 1¼" diameter
UPC 051111-60536-3

3M Industrial and
Transportation Business

Process

Step 1.

Sanding — by machine:

1. Use a mini orbital sander such as the 3M™ Nib Removal Sander 3125 and a 3M™ Trizact™ Finesse-it™ Film Disc Roll 466LA grade A5 to level/remove the defect.
2. Use water to keep the abrasive from loading during sanding.
Tech Tip: For better abrasive life and finish, spray the disc before and after each sanded spot.
3. Keep the pad flat.
4. Sand for 1-3 seconds depending on the size of the defect.
5. Keep the sanded area as small as possible.
6. Avoid over-sanding.
7. Remove the sanding residue when finished with a Scotch-Brite™ High Performance Cloth – White.
Tech Tips: When working near the edges of panels, which can be rigid and have thinner coatings, it is important to use a light feathering technique when machine sanding. If preferred, these areas can be hand sanded using a sanding pad with a soft surface, 466LA grade A5, and water to keep the abrasive from loading. Always sand in a circular motion holding the pad flat. Hand sanding will require 3-5 seconds of sanding depending on the size of the defect.

Step 2.

Polishing:

1. Use a 3" random orbital buffer such as a Dynabrade® Dynabuffer, a 3M™ Finesse-it™ Buffing Pad, and 3M™ Finesse-it™ Polish Extra Fine to polish out the sand scratches.
Tech Tip: Before using a new pad for the first time, apply “chocolate chip size” drops of the 3M™ Finesse-it™ Polish to the valleys of the pad. Work the polish thoroughly into the pad by rubbing the pad onto a work piece (by hand). It should have an even coating of polish across the entire face of the pad.
2. Apply a small drop (“chocolate chip size”) of 3M™ Finesse-it™ Polish – Extra Fine to the repair area.
3. Use the pad to spread the polish evenly over the spot.
4. The Dynabuffer line air pressure needs to be set at 80-85 psi while the tool is running.
5. Polish with a downward force not to exceed 5 lbs. (the tool weighs 3 lbs.). This is enough force to compress the foam and make the “nubs” on the foam pad disappear.
6. Use one hand to hold the tool and the other hand to steady the tool.
7. Keep the buffing pad flat. Do not tip it on edge.
8. Start the tool on the work surface. Do not “free spin” the tool.
Tech Tip: If the polish is being slung outside of the repair area, too much polish is being used or not enough downward force is being applied. Reduce the amount of polish being applied or slightly increase the downward force being applied.
9. Stop the tool before removing it from the work surface. Do not “free spin” the pad.
10. Buffing time should be 5-10 seconds if 466LA grade A5 was used in step 1.
Tech Tip: Do not run the edge of the backup pad into sharp edges – the foam will separate from the support plate if damaged.
11. Wipe the area clean with a Scotch-Brite® High Performance Cloth – White.
12. If sand scratches are not removed, re-polish as needed.

Related Tools

Machine Sanding: 3M™ Nib Removal Sander 3125

Machine Polishing: Dynabrade® Dynabuffer 3" Model #57126

Accessories

Machine Sanding:

- 3M™ Finesse-it™ Disc Pad, Soft — for 3M™ Nib Removal Sander 3125, PN 3125P (UPC 051111-60537-0)
- 3M™ Finesse-it™ Disc Hand Sanding Pad, Soft Contoured, PN 70437 (UPC 051135-92499-0)
- 3M™ Finesse-it™ Disc Hand Pad, Soft, PN 50199 (UPC 051111-50199-3)

Machine Polishing:

- 3M™ Hookit™ Disc Pad, 3" x 1/2" x 5/16"-24 EXT, PN 02700 (UPC 051111-55764-8)
- 3M™ Finesse-it™ Buffing Pad, Orange Foam, PN 02637 (UPC 051111-51158-9)

Safety Information

Always read and follow all safety information included with the product. Do not exceed maximum operating RPM's. Use guards provided with machine. Follow safety operation procedures posted in work areas.

For Additional Information

To request additional product information or to arrange for sales assistance, call 1-866-279-1235. Address correspondence to: 3M Industrial Business Customer Response Center, Building 21-1W-10, 900 Bush Avenue, St. Paul, MN 55106. Our fax number is 651-778-4244. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

Product Use

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