



Automotive Aftermarket Division

3M Flexible Parts Repair Material (FPRM)

1) Part Numbers

05900, 05901

2) Description and end uses

3M 05900/05901 are 2 component epoxy materials designed to repair all types of plastic parts (PP, EP, TOP, PP/EPDM, PC, PUR, ABS, etc.) These products have been specially formulated to allow fast and easy repair of damaged automotive plastic parts such as bumpers, body panels, interior trims, etc.

3) Physical Properties

Base	Polymercaptan	Epoxy
Colour	White	Dark Grey
Solids Content (approx)	100%	100%
Consistency	Thick Paste	Thick Paste
Specific Gravity (g/ml)	1.13	1.53
Shore D Hardness @ 23°C after 30 mins and final	35 (70)	35 (70)

4) Directions for Use

1. Clean the damaged area with soapy water. Allow to dry completely. Clean the area again with 3M 08985 Plastic Part Cleaner to remove remaining wax, grease, etc. Allow cleaner to evaporate before starting the repair process.
2. Sand the repair area, removing all existing paint from the area. For maximum adhesion 'V' groove any tears and holes using a disc grade adapted to the plastic material:
3M Roloc Disc, grade 36 for rigid plastics (ex: PC)
3M SC-DR discs, red and brown for softer plastics (ex: PP and PP/EPDM)
3. Clean the area with 3M 08985 Plastic Part Cleaner. Allow cleaner to evaporate completely.
4. For tears and holes, start the repair on the backside of the part. For small damages, follow steps 6, 8, 10 and 11.



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5. Apply 3M 06945 tape, overlapping the damage, on the outside of the part to avoid FPRM to overflow through the damage.
6. On polyolefin based plastics (PP, PP/EPDM, TPO, etc) apply 3M 05917 Adhesion Promoter on the repair area. This is not necessary on rigid plastic and not recommended on ABS plastics. Allow to dry for 10 minutes before next step.
7. Apply 3M 03020 Reinforcement Tape to the back of the part, overlapping the damage.
8. Prepare and apply FPRM to the damaged area as follows:

05990

- * Estimate material quantity requested for the repair
- * Dispense equal portions of Parts A and B on to a dry and clean mixing plate
- * Mix the material thoroughly to an even colour using a clean spreader
- * Apply the material to the repair area with a spreader and force it to ensure a good “wet out” to the surface

05901

- * Insert the cartridges in the 3M 08190 application gun
 - * Remove the cap and ensure both Part A and B are being dispensed
 - * Cut the end of the mixing nozzle to the desired size and attach to the cartridge
 - * Apply directly to the repair area. Force with a spreader to ensure a good “wet out” to the surface
- The working time is about 6 minutes at normal room temperature. Allow the FPRM 20 minutes to cure.

Note: Working and curing time are dependent on temperature (ie the colder, the longer)

9. Remove the 3M 06945 tape from the outside of the part and repeat steps 6 and 8.
10. After curing (20 minutes min at normal room temperature), sand the repaired surface with 3M 255P discs. Start with P180, then P240 and finish with P400. Blow the surface with compressed air. Clean with 3M 08985 Cleaner and wipe dry.
11. Paint according to your paint supplier recommendations.

Notes:

To repair large damages (tears, holes), it is recommended to remove the bumper from the car to allow easy accessibility of the backside of the part.

Although FPRM will work with 3M 05917 Adhesion Promoter on most plastics, it is recommended to identify the plastic type (generally printed on the backside of the plastic part). On PC, PE, ABS and other rigid plastics, best results will be obtained when using the FPRM directly on the plastic. Using the Adhesion Promoter on ABS plastics may lead to poor adhesion.



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It is recommended to wear protective glasses and gloves when doing the repair.

5) Storage

Store in a cold, dry place. Best results are obtained when material is stored and applied at room temperature, 15-30°C.

Shelf Life is 1 year from date of manufacture under normal storage conditions. Refer to 'Best Before Date' and 'Lot Number' on tubes and cartridges.

6) Safety

Refer to Product Label and Material Safety Data Sheet for Health and Safety information before using this product.

3M Flexible Parts Repair Material (FPRM) is designed FOR PROFESSIONAL INDUSTRIAL USE ONLY.

7) Disclaimer

All statements, technical information and recommendations are based on tests we believe to be reliable but the accuracy or completeness thereof is not guaranteed. Please ensure before using our product that it is suitable for your intended use. All questions of reliability relating to this product are governed by the Terms of Sale subject, where applicable, to the prevailing law.



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For Additional Health and Safety Information

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