



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)



Technical Data Sheet

Effective: 18/08/2020 Supersedes: 29/05/2019

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.
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
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.



Technical Data Sheet

Effective: 18/08/2020 Supersedes: 29/05/2019

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.

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 as at the date of hereof, but the accuracy or completeness thereof is not guaranteed. Please ensure before using the product that it is suitable for your intended use. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, other than for fraudulent misrepresentation, 3M expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information



Technical Data Sheet

Effective: 18/08/2020 Supersedes: 29/05/2019

For Additional Health and Safety Information

<p>3M United Kingdom plc Automotive Aftermarket 3M Centre, Cain Road, Bracknell, RG12 8HT Tel: +44 (0)161 237 6391 aadukenquiries@mmm.com www.3Mbodyshop.co.uk</p>	<p>3M Ireland Limited Automotive Aftermarket The Iveagh Building Carrickmines Park Carrickmines , Dublin 18 Tel: +353 12160301 aadukenquiries@mmm.com www.3Mbodyshop.co.uk</p>	<p>3M Denmark a/s Automotive Aftermarket Hannemanns Allé 53 2300 København S Tel: +45 43480100 aadukenquiries@mmm.com www.3MAuto.dk</p>
<p>3M Finland, Suomen 3M Oy Automotive Aftermarket Keilaranta 6 02150 Espoo Tel: 09 5252 1 aadukenquiries@mmm.com www.3M.fi/autotuotteet</p>	<p>3M Svenska AB Automotive Aftermarket Herrjärva torg 4 170 67 Solna Tel: 08-922100 aadukenquiries@mmm.com www.3M.se/bileftermarkad</p>	<p>3M Norge AS Automotive Aftermarket Kanalveien 2 2004 Lillestrøm Tel: 06384 aadukenquiries@mmm.com www.3m.no/auto</p>
<p>3M Latvija K.Ulmana 5 Riga, LV-1004 Tel: +371 67066120 aadukenquiries@mmm.com www.3m.lv</p>	<p>3M Eesti OU Pärnu mnt. 158 11317 Tallinn Tel: +372 6 115 902 aadukenquiries@mmm.com www.3m.ee</p>	<p>3M Lietuva A.Goštauto str. 40 A LT-01112 Vilnius Tel: +370 5 2160780 aadukenquiries@mmm.com www.3m.lt</p>

© 3M 2020. 3M and Roloc are trademarks of the 3M company. All rights reserved