



GLOBAL REFINISH  
SYSTEM



March 2017

---

# Process Information

# TCB103



---

## **Mazda 46G Machine Gray EHP Repair Process**

## **Envirobase High Performance Basecoat**

### **PRODUCTS REQUIRED**

Mazda 46G Machine Gray mixed colour – Envirobase High Performance Line  
T409 Deep Black Tinter  
T490 Clear Additive  
T4705 Liquid Metal 2 Tinter

### **PRODUCT DESCRIPTION**

Mazda 46G Machine Gray is a special effect colour and requires a specific application process as outlined below.



These products are for professional use only.

TCB103 (RLD500V)

Page 1 of 4

---

## 1. REPAIR AND PREPARATION OF SUBSTRATE

1.1 The damaged body work of the vehicle should be repaired using the approved PPG repair and undercoating system for the substrate of the body panels being repaired (Aluminium, Steel, Plastic etc.)

1.2 Sealing the repair with a G7 Greymatic WOW Primer shade as a first step is recommended followed by T409 Deep Black tinter as a groundcoat colour over repaired areas used in Step 2 of the process.

---

## 2. GROUNDCOAT AND PREPARATION OF SUBSTRATE

2.1 When preparing the substrate as recommended below, suitable colour panels should be prepared alongside for use when checking the colour/effect of the basecoat as OEM colour variation can differ.

2.2 For the Mazda 46G Machine Gray EHP colour process, T409 Deep Black tinter thinned 20% is applied prior to the topcoat colour. When using the 46G EHP mixed colour thinned 20%, full coverage must be achieved. This also needs to be applied to the G7 colour panels when being prepared for the colour check process.

2.3 If only part of a body panel is repaired and primed, G7 WOW primer should be applied over the sanded/primed repair areas first. This should be followed by using Spot Blender or Aerosol Spot Blender, applied and blended on G7 edges. This should be followed by T409 Deep Black tinter applied over complete G7 WOW areas.

2.4 Where blending of the basecoat will occur as part of the repair, the area of the panel from the basecoat blend to the edge of the panel should be finished with P1000 Abralon damp using a 150MM orbital sander. 1 wet coat of T490 Clear Additive should be applied to the blend area as per normal blending process.

---

### 3. EHP MACHINE GRAY APPLICATION

3.1 Due to possible variation of the colour of a particular vehicle, it is essential that a colour check panel is prepared using the colour panels prepared as mentioned in Section 2 and using the basecoat application process recommended in this section (3).

3.2 Apply 1 wet coat of T490 thinned 20% over to the prepared Blend area for smooth lay down.

3.3 Mix T409 Deep Black at 20% thinner.

– Ensure T409 is applied 1 wet double coat to seal repair and enhance laydown of 46G colour

3.4 Thin mixed 46G ENV HP colour at 20% with T494 thinner

– Ensure 46G mixed colour is thoroughly stirred prior to thinning and after

3.5 Apply 46G as by normal TDS recommendation. 2 single coat ensure best patchiness control. Flash off until matt.

3.6 Apply Control coat (double coat can be done in case of patchiness) from a distance of about 20-30cm from panel and evenly applied @ 1.3-1.5 bar with material 1 ¼ turns open from closed position and the fan fully open or “Half Trigger” with no turns. Care should be taken to apply this final basecoat layer very lightly and evenly Flash off until matt.

3.7 Minor defects maybe denibbed with 3000 abralon **in between** coats and Tack ragged

3.8 Flash off for 15 - 20 minutes until completely matt before applying Clearcoat.

3.9 To blend the basecoat, apply the first double coat to the primed area, then extend each subsequent coat a little further into the blend area each time using normal blending techniques to achieve an even blend into the original colour. As with full panel application care should be taken apply this final basecoat blended edge very lightly and evenly without over wetting of the basecoat.

---

## 4. CLEARCOAT APPLICATION

- 4.1 Clearcoat with an approved PPG clearcoat.
- 4.2 The first coat of clearcoat must be applied as a light closed mist coat. Avoid wetting this first coat too much as over application can move the basecoat leading to patchiness.
- 4.3 Apply second coat of clear as recommended for the appropriate PPG Clearcoat.
- 4.4 Bake as indicated in TDS for the clear selected.
- 4.5 Polish as necessary to achieve finish required.

---

### Notes:

- 1- P800 followed by P1000 abralon damp with 150mm orbital sander to prepare blend areas. Do not hand sand afterwards.
- 2- Apply G7 WOW Primer on all new panels and blend over any correctly prepared and sanded areas including sanded primer areas. Where WOW edges may exist around primer patches apply Aerosol Blending thinner over the top to smooth the edges.
- 3- Use T490 thinned 20% blending into adjacent panels. This will assist with the polished metal look required.
- 4- Use T409 Deep Black thinned 20% over repaired areas. This will assist with the polished metal look and assist with the OEM process plus help control mottle
- 5- Thin 46G 20% with T494 thinner.
- 6- Use a recommended spraygun setup for waterbaoned basecoat the best mottle control and colour accuracy.
- 7- Basecoat may be de-nibbed with Abralon 3000 dry once it is flashed off.
- 8- Humidity may play part in the wetting of the basecoat however, this may slightly stay wetter longer.

---

## HEALTH AND SAFETY

**These products are for professional use only**, and are not to be used for purposes other than those specified. The information on this TDS is based on present scientific and technical knowledge, and it is the responsibility of the user to take all necessary steps in order to ensure the suitability of the product for the intended purpose. For Health and Safety information please refer to the material Safety Data Sheet, also available at: [www.ppgrefinish.com](http://www.ppgrefinish.com)

**PPG Industries.  
Auto Refinish  
Needham Road,  
Stowmarket,  
Suffolk.  
IP14 2AD,  
England.  
Tel: 01449 771775  
Fax: 01449 773480**

Copyright © 2016 PPG Industries, all rights reserved

*The PPG Logo* is a trademark of PPG Industries Ohio, Inc. *Envirobase* and *Deltron* are registered trademarks of PPG Industries Ohio, Inc. © 2016 PPG Industries Ohio, Inc. All rights reserved.