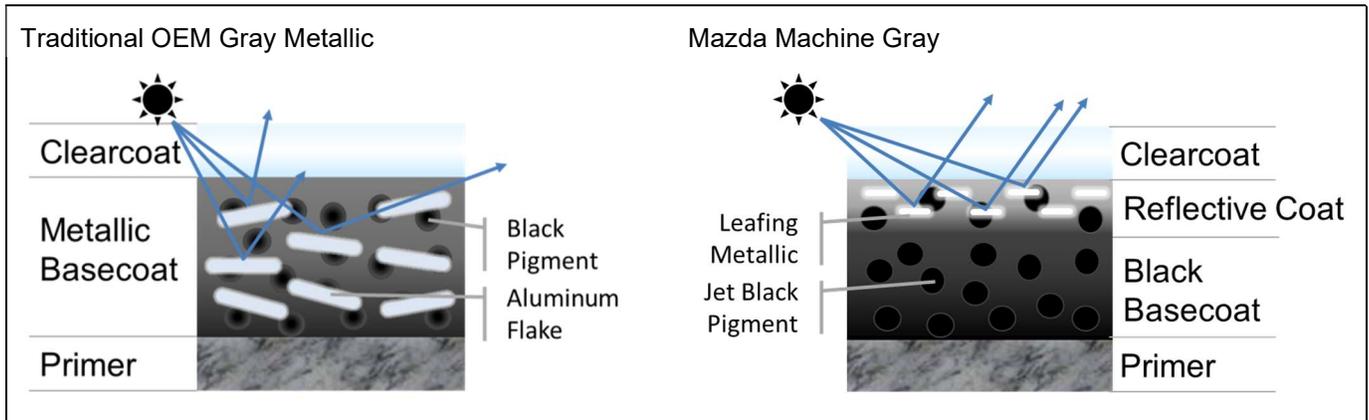


Basecoat SB Repair Process Mazda 46G Machine Gray

Description of Mazda 46G Machine Gray

Machine Grey 46G is one of Mazda's state of the art finishes designed to complement Kodo design using its Takuminuri paint technology. Mazda says that *"This color gives the impression that the vehicle's body has been sculpted from a solid steel ingot"*

Technology of This Effect Color



Mazda describes this technology as a reflective layer applied over a blemish free panel with extremely thin, high brightness aluminum flakes.

These bright aluminum flakes lay down extraordinarily flat and are what is referred to as a leafing metallic. Because of the small size of the flakes there is a very thin coating created that is 66% thinner than a normal base coat. The thin coating produces a dense layer of the flakes on the painted surface making for a special sheen and metal like appearance. In the case of Mazda 46G Machine Gray, a jet-black pigment is used in both the foundation color and the mid-coat layer creating a black-gray shade in areas between flakes with a light-dark contrast between light and shadow areas.

Repair Process – Mazda 46G Machine Gray

Due to the very small size of the metallic and the need for proper leafing of the flake to achieve the required appearance, special care must be taken in the preparation for and application of this color.

The recommended preparation of the substrate with this 46G color is mandatory. The substrate has to be flat and smooth, any texture and/or scratches that are too coarse in the repair or blending area will be visible after clearcoat application, especially with blending color into to the OEM finish.

Therefore, to avoid poor orientation of the fine metallic, the use of a fine sanding grit as described is of upmost importance for the preparation of the substrate.

Basecoat SB Repair Process

Mazda 46G Machine Gray



Mazda 46G Spraygun Selection

- Due to the fine texture of the metallic flake in Mazda 46G a smaller tip is recommended for application.
 - Less fluid and smaller tips generally provide the finest effect results.
 - 1.3mm HVLP or 1.2mm Compliant sprayguns are suggested for the best results. If these are not available, you may achieve suitable results by turning fluid adjustment in 1-½ to 2 turns.
 - More fluid and larger tip sizes produce a courser effect appearance.



Color Check Panels

- The coarseness and effect may differ due to different models/production locations, and therefore it is important to produce a set of 4 sprayout panels.
- Make 4 sprayout panels with black or dark grey primer sanded to a minimum of P1000 grit dry.
- Place the prepared sprayout panels next to each other so they can be sprayed together all at once.



Mixing – Mazda 46G

- 100** Grams Basecoat SB Mazda 46G
5-10 Grams Lesonal Clear Hardener

Stir together then mix –



- 100** parts Basecoat SB Mazda 46G with Clear Hardener
50 parts Sikkens Lesonal Reducer

Notes:

- Do not mix over 100:50 reduction.
- Once mixed the paint has a 4 hour pot-life.
- It is important to shake gently between each application to avoid settling.

**Basecoat SB Repair Process
Mazda 46G Machine Gray****Color Check Panels, Application**

Note: Ensure that you use the same application technique as you will on the repair for these panels.

1. Apply Basecoat SB MAZ46G mixed 100:50 according to TDS on all four of the prepared test panels including a final mist-coat. Do not mix with more than 50% reduction.
 - Remove one panel and mark as #1.
2. Apply mist coat as a standard drop-coat application on the remaining 3 panels with increased spraygun distance during application.
 - Remove one panel and mark it as #2.
3. Apply mist coat again as a standard drop-coat application on the remaining 2 panels with increased spraygun distance during application.
 - Remove one panel and mark it as #3.
4. Apply mist coat again as a standard drop-coat application on the remaining panels with increased spraygun distance during application.
 - Remove the panel and mark it as #4.
5. Use an extended flash of at least 20 minutes before applying clearcoat.
6. Apply Lesonal clearcoat
 - Apply a thin first coat so as to not move the metallic flakes then flash dry.
 - Apply a second flowing coat and dry.

To mimic the OEM color and effect the following steps are required to meet the appearance of the original car color.

**Primer Application**

- Primer color is important for the correct appearance.
- Apply Primer-Pro or Primer Pro LV surfacer Black (B) or Dark Grey (GB) as per TDS.

**Primer, Repair Preparation**

- Remove any texture from applied primer by sanding the filler with P500-600 dry.
- Further sand with P800 grit dry ending with P1000 dry.

Blend Area, Repair Preparation

- Sand blend area removing texture with P1000 grit dry.
- Further sand with P1500 grit dry to remove scratches.
 - Edges or touch up scuffing should be done with a gold scuff pad.

**Surface Cleaning**

- Remove any surface contamination using an appropriate surface cleaner.

**Pre-Coat Application**

- Apply one flowing coat of Basecoat SB Blending Additive to the entire repair area.

Read complete TDS for detailed product information.



Basecoat SB Repair Process

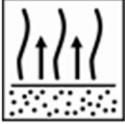
Mazda 46G Machine Gray

System

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**Flash-Dry**

- Flash off 5 minutes or until completely dry.

**Spray-Gun Set-Up:**

- 1.3mm HVLP Gravity
- 1.2mm Compliant Gravity

Application Air Pressure:

- HVLP – Use pressure 10-15% lower than maximum allowed by manufacturer.
- Consult manufacturers' specifications.

**Application, Foundation Color**

- Over black surfacer apply 2 medium wet coats or until covered.

**Flash-Dry, Between Coats**

- 5 minutes or until completely matte in appearance.

**Application, Effect Coats**

- Apply 1-3 mist or drop coats.
 - Increase the distance of the gun to the panel by 3-4 inches.
 - Do not further reduce pressure when applying the effect layers.
 - For larger repair areas, apply the effect layers using cross-coat method.
 - Do not over wet the application.

**Flash-Dry, Between Coats**

- Using accelerated air flow flash off 5 minutes or until completely matte in appearance.

Flash-Dry Before Clear Coat

- Flash a minimum of 20 minutes before the application of the effect coat.

**Clearcoat Application**

- Apply any Lesonal clearcoat approved for use over Basecoat SB.
- Apply the first coat of clear as a thin closed coat. Do not apply too wet.
 - Over application of this first coat may cause strike-in of the effect layer causing the fine metallic to move.
- Ensure adequate flash-off before the application of the second coat of clear.