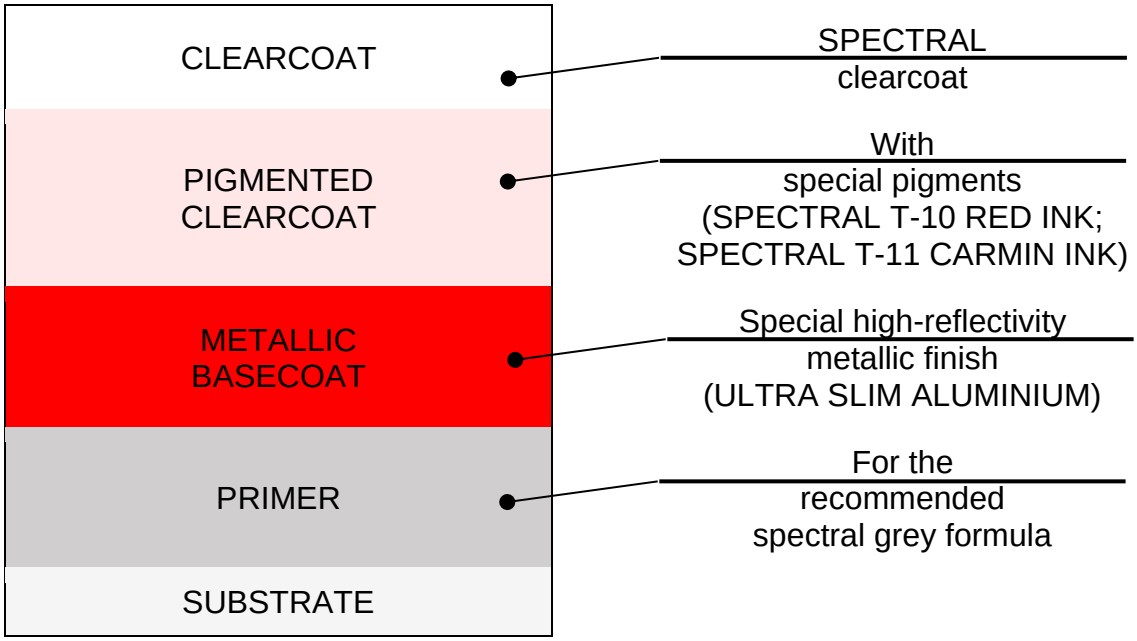
COLOUR CREATION FOR MAZDA 46V SOUL RED CRYSTAL

MAZDA 46V SOUL RED CRYSTAL was developed by Mazda as a three-coat body colour with a pigmented clearcoat. This technical specification is essential for rebuilding the OEM-specified body coat based on the BASE 2.0 colour matching system and SPECTRAL additives.



FORMULA-SPECIFIC SPECIAL PIGMENTS

SPECTRAL B-852 ULTRA SLIM ALUMINIUM
A very fine-grain special metallic effect pigment with a high reflectivity. When colour-matched with SPECTRAL BASE 2.0 pigments, it forms the basic component of the 1st layer of the three-coat system.

SPECTRAL T-10 RED INK; SPECTRAL T-11 CARMIN INK
Special ink-type pigments, which are pigment solutions for the vehicle. Their features include low opacity. The pigments are added to the clearcoat to increase its colour volume while remaining transparent (by which they transmit light and colour the vehicle). This leaves the 1st metallic-pigmented layer visible.
The final effect (colour) depends on the coat thickness of the pigmented clearcoat – the thicker the clearcoat, the darker the colour, shifting to burgundy (in this formula).

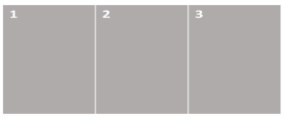
EXAMPLE COLOUR 46V FORMULA		
Layer no.	*Pigments / Component A*	Hardener/Thinner
1st layer: Basecoat (BASE 2.0)	*B-103* – 490,1 g *B-852* – 399,7 g *B-311* – 70,4 g	SOLV 885 thinner 70÷80% vol.
2nd layer: Pigmented clearcoat,	KLAR 565, 565-00, 525-00, 545-00 – 908 g *T-10 RED INK* – 58,3 g *T-11 CARMIN INK* – 35,4 g	H6115 hardener 2:1 vol.
3rd layer: Clearcoat,	KLAR 565, KLAR 565-00, KLAR 525-00 or KLAR 545-00	H6115 hardener 2:1 vol.

SELECTING THE CORRECT COLOUR OPTION

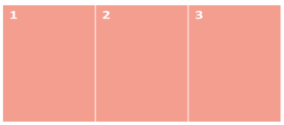
- Find the colour MAZDA 46V in CarColor®.
- Check the references to the colour box and pick all the listed colour cards.
- Polish the part adjacent to the part to be recoated.
- From the selected colour cards, choose the tone which is the best match for the polished part (inspect and compare in daylight to avoid metamerism).
- Compose the pigment mixture as specified in the formula from CarColor®. The mixing rack should run for 10 minutes, and at least twice a day.

COLOUR MATCH CHECK AND TEST SPRAYING

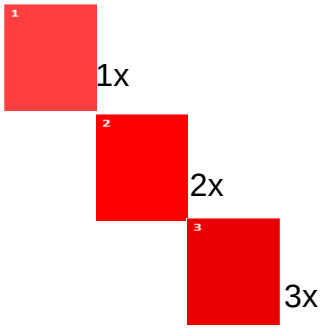
- Prepare 3 (three) test cards with the correct spectral grey colour of the primer specified in CarColor®.



- Apply the 1st layer of the colour on all three test cards according to the metallic colour processing application guidelines listed in SPECTRAL BASE 2.0.



- Apply the pigmented clearcoat to each test card to produce the colour match the cards with 1, 2, and 3 thin layers of the pigmented clearcoat.

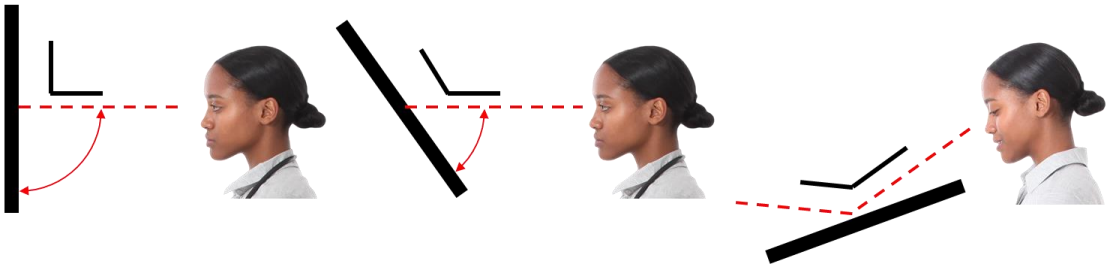


- Apply one layer of pure clearcoat to each test card.

SELECTING THE CORRECT APPLICATION OPTION FOR MAZDA 46V

- With the processed test cards dry, choose the one which best matches the body colour of the vehicle.
- Apply the MAZDA 46V colour just like the coats on the test card having the best colour match.

STRAIGHT LINE 45° FLOP



PREPARING THE SUBSTRATE FOR COLOUR APPLICATION

- SPECTRAL acrylic and epoxy primers: fill or priming version

  Dry power sand:
  - → Initial: P320÷P360
  - → Finish: P400÷P500
  - → Work out the finish with grey abrasive cloth and matting compound.
  - → Degrease with EXTRA 785, follow with EXTRA W785.

- Wet-on-wet version

  Follow the guidelines specified in the TDS of the SPECTRAL wet-on-wet primers.

- OEM finish

  Dry power sand with
  - → P400÷P500.
  - → Work out the finish with grey abrasive cloth and matting compound.
  - → Degrease with EXTRA W785, follow with EXTRA W785.

1ST LAYER APPLICATION (METALLIC BASECOAT), WHOLE PART COATING

- It is recommended to apply SPECTRAL BASE 2.0 at over 18°C with a humidity of 75% or lower.
- Apply a check layer (to verify correct substrate preparation) at 30% of the full layer.
- Apply 2 full layers.
  – Leave to flash off until matt between recoating and after the last layer.
- Apply a single drop layer.
  – spraying distance: as for the concealing layer.
- Dry the layers until fully matt
  + 5 min before applying the pigmented clearcoat.

SPRAY GUN SETTINGS FOR THE 1ST LAYER OF METALLIC BASECOAT

	Nozzle	Pressure	Gun setting Material quantity
Full layer	1.2 ÷ 1.3 mm	1.8 ÷ 2.0 bar	100%
Drop layer	1.2 ÷ 1.3 mm	1.4 ÷ 1.5 bar	30%
Recommended tool: low-pressure gravity fed spray gun.			

2ND LAYER APPLICATION (PIGMENTED CLEARCOAT) TO THE WHOLE ELEMENT

- Apply 1 to 3 thin layers of the selected pigmented clearcoat (follow the best matching test spray); use 565, 565-00, 525-00 or 545-00.
- The flash-off time between layers is 10 min/20°C.
- The flash-off time before applying the pure clearcoat is 10 min/20°C.

SPRAY GUN SETTINGS FOR PIGMENTED CLEARCOAT

	Nozzle	Pressure	Gun setting Material quantity
Thin layer	1.2 ÷ 1.3 mm	1.8 ÷ 2.0 bar	80%

3RD LAYER APPLICATION (PURE CLEARCOAT) TO WHOLE ELEMENT

- Apply 1 layer of pure clearcoat (use the same clearcoat as the pigmented one).
- The flash-off time before drying is 30÷40 min/20°C.

	Nozzle	Pressure	Gun setting Material quantity
Full layer	1.2 ÷ 1.3 mm	1.8 ÷ 2.2 bar	100%

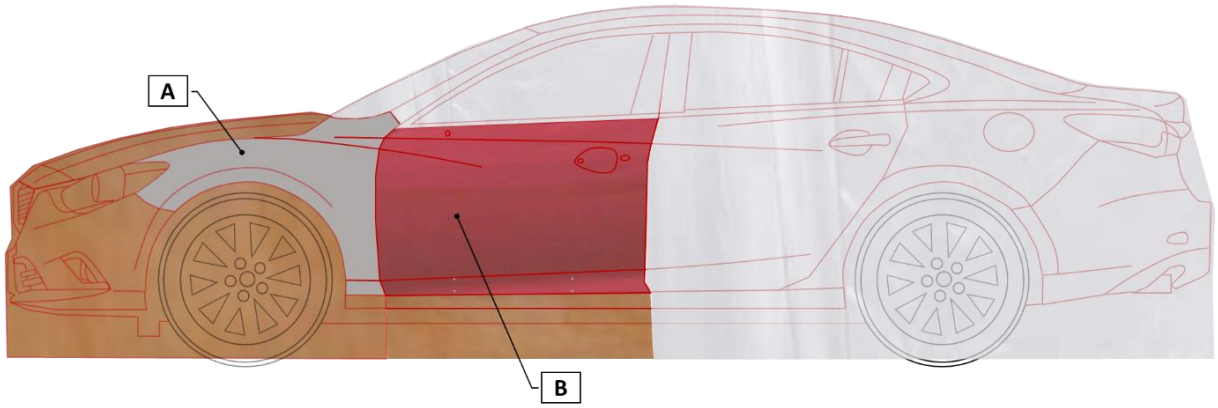
MAZDA 46V COLOUR FADE-OUT PROCESSING

It is difficult to reproduce MAZDA 46V, and the fade-out technique is the optimum choice. Coating of single elements will most likely will not provide the desired result due to visible differences in colour.

STEP 1 | STEP 2 | STEP 3 | STEP 4 | STEP 5

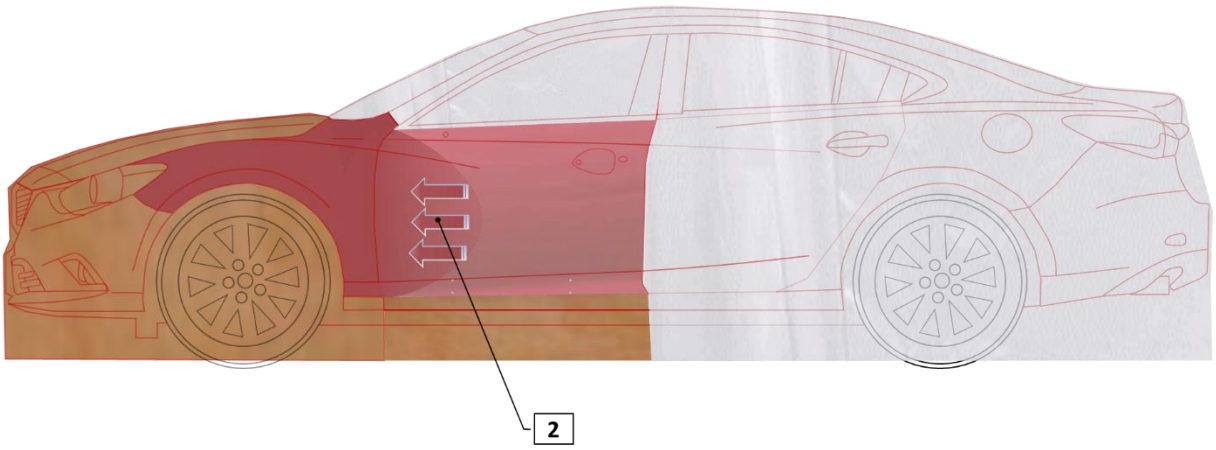
1. Prepare the repaired element [A] for the colour application and the adjacent element [B] for fading out.
   - → Initial sand with P320-P360 (random orbital sander 2.5÷3 mm orbit).
   - → Finish sand with P400-P500 (random orbital sander 2.5÷3 mm orbit).
   - → Finish with grey abrasive cloth and matting compound.
   - → Blow off all dust.
   - → Degrease with SPECTRAL EXTRA 785.
   - → Degrease with SPECTRAL EXTRA W785.

Caution!
The OEM coat has an extremely thin clearcoat layer, and it is enough to mat it down with grey abrasive cloth and matting compound to prepare it for the fading.



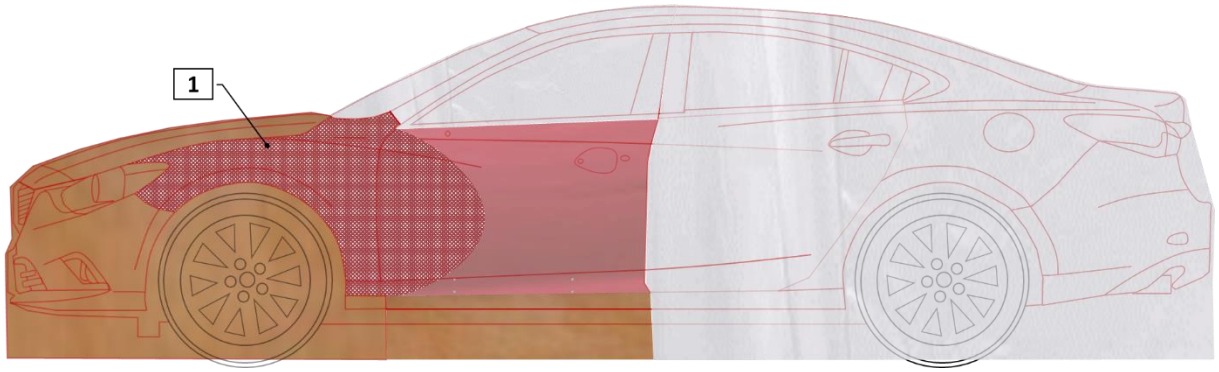
STEP 1 | **STEP 2** | STEP 3 | STEP 4 | STEP 5

→ [1] With the element already in the specified primer spectral grey colour, apply a 30% contact layer (use the test-sprayed SPECTRAL BASE 2.0 basecoat).
→ [2] Leave to flash off and follow by applying two layers of the SPECTRAL BASE 2.0 basecoat colour, using the technique fade-out on the element intended for this, paying attention not to "go too far", leaving room for fade-out of the tinted clear coat. Leaving each layer to flash off fully (until matt).



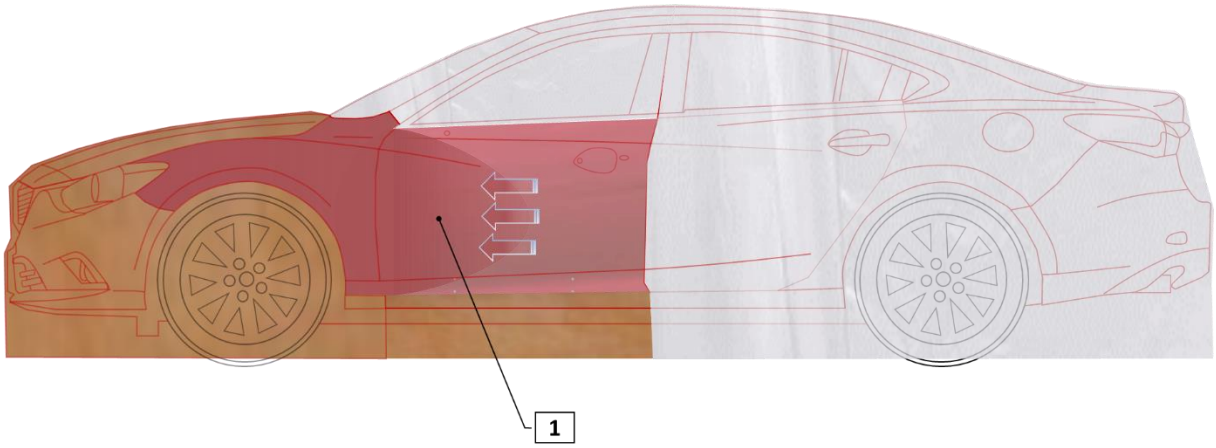
STEP 1 | STEP 2 | **STEP 3** | STEP 4 | STEP 5

→ [1] Apply the drop layer on the part to be recoated.



STEP 1 | STEP 2 | STEP 3 | **STEP 4** | STEP 5

→ [1] Apply the correct number of layers of the specified pigmented clearcoat, based on the best-matching spray test card. Fade out according to the process specifications by following the geometry of the parts.
→ The minimum flash-off time between layers is 10 min/20°C.
→ The flash-off time before applying the pure clearcoat is 30÷40 min/20°C.



STEP 1 | STEP 2 | STEP 3 | STEP 4 | **STEP 5**

→ [1] Coat the processed surfaces with 1 layer of pure clearcoat.
→ Given the thickness of the clearcoat, the drying time will be three times longer than specified in the TDS.
→ It is best to polish (if necessary) the next day.