Technical Bulletin

Ford Code RR / Ruby Red Application Process

PRODUCT DESCRIPTION

Ford code RR / Ruby Red uses a special pigment in the clearcoat to produce a very clean candy apple red effect. This color is currently available on several Ford manufactured vehicles including cars, SUV’s and light trucks.

This repair process utilizes a tinted mid-coat layer that is applied over AQUABASE® Plus, DELTRON® DBC, ENVIROBASE® High Performance, GLOBAL REFINISH SYSTEM® BC and NEXA AUTOCOLOR® 2K® basecoat systems. The tinted clear mid-coat layer is made by combining VM4350 Vivid Ruby Tinter with many of PPG’s popular express, production or glamour clearcoats.

![Ford Mustang with Ruby Red paint](image)

This refinish repair consists of a tri-coat process made up of a red metallic ground coat layer, a tinted clear mid-coat layer followed by a final clearcoat layer. See illustration below.

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Brand specific formulas for the ground coat and the tinted mid-coat layer are available in PPG’s PAINTMANAGER® software or by calling PPG at 800-647-6050 and follow the prompts to the Color Library.
SELECTING THE PROPER PAINT SYSTEM FROM PAINTMANAGER® SOFTWARE

• Searching Ford code RR in PAINTMANAGER will enter the user into their primary paint system. Choose one of these Tri-coat systems below for optimum color match. Note; Ford code RR formulas are also available from On-Line Color.
  o AQUABASE PLUS BC 3CT 2.1  (low VOC clearcoats)
  o AQUABASE PLUS BC 3CT NR  (National Rule – 4.2 VOC clearcoats)
  o DELTRON 2000 DBC TRICOAT
  o ENVIROBASE HP EHP TRICOAT 2.1  (low VOC clearcoats)
  o ENVIROBASE HP EHP TRICOAT NR  (National Rule – 4.2 VOC clearcoats)
  o GLOBAL BC TRICOAT
  o NEXA  2K LEAD-FREE BC 3CT

• All Tri-coat formulas start with a basecoat formula using toners from that specific paint system.

• All of these Tri-coat paint systems use the same tinter for the mid-coat: VM4350. This special clearcoat tinter is from the VIBRANCE COLLECTION® line and it is a limited use tinter, so please check available stock prior to mixing.
  o Note: 1 container holds 4 oz. of tinter and will tint approximately 3.5 gallons of clearcoat.

• Each of the Tri-coat paint systems will express the mid-coat formula as 2 components; VM4350 and a common clearcoat code.
  o AQUABASE PLUS BC 3CT 2.1  P190-YYYY
  o AQUABASE PLUS BC 3CT NR  P190-XXXX
  o DELTRON 2000 DBC TRICOAT  DCXXXX
  o ENVIROBASE HP EHP TRICOAT 2.1  ECYYYY
  o ENVIROBASE HP EHP TRICOAT NR  DXXXX
  o GLOBAL BC TRICOAT  DXXXX
  o NEXA  2K LEAD-FREE BC 3CT  P190-XXXX

• The common clearcoat codes refer to the premium clearcoats currently used in your shop.
  o Note: This instruction is given as a reminder within the mid-coat formula screen.

• It is recommended to use the same premium clearcoat for the mid-coat and final topcoat.

• To determine the proper hardener and reduction options proceed in PAINTMANAGER by clicking on the YES button for “Reduce formula” then select your preferred clearcoat from the selection menu.

• The creation of these common clearcoat codes are designed to allow each shop to use their preferred clearcoat to blend the mid-coat. These common clearcoat codes will also allow shops using PAINTMANAGER to keep track of paint usage and maintain accurate VOC reporting.
PREPARATION OF SUBSTRATE

- Damaged body work must be repaired using the approved PPG repair process including selecting the correct undercoating system for aluminum, steel and plastic substrates.

- For proper color alignment, finish the body work with the recommended sealer for that basecoat system using G6 color shade.

PREPARATION OF COLOR CHECK PANEL

NOTE: Due to OEM color variation from model to model it is essential that a color check panel be prepared to align the color before applying any ground coat color to the vehicle. The color check panel should be prepared as follows:

- Mix and apply G6 sealer to three color check panels insuring full coverage and allow to flash.

- Mix and apply the ground coat until proper coverage is achieved (Waterborne systems require a control coat).

- Prepare the tinted mid-coat by mixing VM4350 Vivid Ruby Tinter into a premium clearcoat.

**To avoid potential clearcoat compatibility issues between the tinted mid-coat and the top clearcoat layer, it is strongly recommended to use the same clearcoat throughout the repair process. A minimum of 1 topcoat clear layer must be applied over the tinted clear mid-coat.**

**The tinted mid-coat must be reduced and catalyzed as normal following the addition of VM4350 Vivid Ruby Tinter. See the specific clearcoat product bulletin for proper reduction prior to application.**

- Apply 1 tinted mid-coat layer over all three color check panels. After flash off, remove one panel and apply a second coat to the remaining panels. After flash off, remove another panel and apply a third coat to the last panel. Allow to flash.

CHECKING THE COLOR

- Use the completed color check panels to evaluate the color on the car.

- When one of the color check panels is considered “blendable” to the car, proceed in refinishing the vehicle. Be sure to spray the vehicle in the same manner and technique as the color check panels to achieve proper color alignment.

- If a color adjustment is necessary tint the ground coat in the appropriate color direction and prepare another series of color check panels by repeating the above process. Continue in this fashion until a blendable match is achieved. Be sure to spray the vehicle in the same manner and technique as the color check panels.

- **Important:** The tinted mid-coat layer can only be tinted with VM4350 Vivid Ruby Tinter. Any color adjustments must be made to the ground coat. If necessary, contact the Color Library for additional assistance.

- **When completing the repair, a minimum of 1 topcoat clear layer must be applied over the tinted clear mid-coat.**