

Thermo-graphic Heat Paint

..... ON DBA PERFORMANCE SERIES ROTORS

Does the heat paint return to its original colour?

The thermo-graphic heat paint used in DBA Performance 4000 and 5000 series disc rotors has been developed to measure the core temperature of the discs when operating in the most extreme conditions.

The colour transition occurs when the disc rotor maintains temperature above the designated level for more than 10 minutes. This eliminates the measurement of short term temperature spikes. To enable an accurate measurement to be recorded, it is essential that the heat monitoring paint makes a permanent change at this critical point in braking.

The three paint stripes on these DBA performance rotors are;

THERMO-GRAPHIC TEMPERATURE MONITORING Markings are placed on the outer edge of each rotor		
Initial Colour	When the rotor exceeds this core temperature:	The colour will change to:
GREEN	458°C / 856°F	WHITE
ORANGE	550°C / 1022°F	YELLOW
RED	630°C / 1166°F	WHITE

The Green, Orange and Red indicator stripes represent the three critical temperatures when selecting appropriate friction materials or determining the rotor life cycle.

Temperatures below and up to 458°C (856°F) are considered the normal operating range for disc rotors and pads. It is expected that normal wear and tear would occur with standard or entry level performance friction materials. No colour change would occur.

Temperatures above 458°C (856°F) but not exceeding 550°C (1022°F) are considered to be in the heavy duty operating range for disc rotors and pads. Slightly accelerated wear is not unusual and careful selection of friction material is recommended to maintain consistent braking performance. The green paint will change to white and no other change would occur.

Temperatures above 550°C (1022°F) but not exceeding 630°C (1166°F) are considered to be in the extreme use operating range for disc rotors and pads. Accelerated wear and stress accumulation will occur shortening the life cycle of the disc rotors and pads. Typically race category friction material is recommended to maintain consistent braking.

The Green stripe will change to white and the Orange stripe to yellow. The red stripe will not change.

Temperatures above 630°C (1166°F) are considered to be severe motor sport applications, with exposure to thermal stresses beyond the intended limits of grey cast iron disc rotor material. Whilst a disc rotor can endure limited exposure to these elevated temperatures, product life cannot be easily predicted and multiple event use may put the driver at risk. It is recommended that modifications are implemented to reduce rotor temperatures

The Green stripe will change to white and the Orange stripe to yellow. The red stripe will change to white.