

<b>Subject:</b> <b>CALIFORNIA REFORMULATED GASOLINE (EFFECT ON VEHICLE PERFORMANCE AND FUEL ECONOMY)</b>	<b>Bulletin No:</b> 01-041/06
	<b>Last Issued:</b> 09/12/2006

## BULLETIN NOTE

This bulletin supersedes the previous bulletin F-014/96 issued on June 6, 1996. The APPLICABLE MODELS have been revised.

## APPLICABLE MODEL(S)/VINS

1995-2007 B-Series  
1997-2003 Protege  
1997-2005 Miata  
1997-2002 626  
1997-2002 Millenia  
1997-2006 MPV  
2001-2006 Tribute  
2003-2007 Mazda6  
2004-2007 Mazda3  
2004-2007 RX-8  
2006-2007 Mazda5  
2006-2007 MX-5  
2007 CX-7

## DESCRIPTION

This bulletin is issued to provide service personnel with information to answer commonly asked questions regarding California Reformulated Gasoline (CaRFG). Please use this information to address customer concerns.

## BACKGROUND

- The purpose of CaRFG is to reduce emissions.
- CaRFG replaces the traditionally high pollution generating gasoline distributed in Northern California.
- CaRFG improves the reformulated gasoline distributed in Southern California.

The California Air Resources Board (CARB) expects smog forming emissions from motor vehicles to decrease by approximately 15% due to CaRFG.

## **MAZDA'S POSITION ON CaRFG**

- CaRFG does not affect the new vehicle or emission warranty.
- Mazda recommends the use of CaRFG as a cost effective means of reducing emissions to provide cleaner air.
- Vehicle and laboratory testing of CaRFG ensures that CaRFG is acceptable for customer use.
- Based on the above studies, no unusual vehicle performance concerns are expected.

## **DIFFERENCES BETWEEN CaRFG AND OTHER GASOLINES**

CaRFG consists of the same basic components as other gasoline, but pollutes less due to cleaner burning components and fewer toxic components. These components provide:

- Reduced aromatic hydrocarbons to form less smog emissions.
- Added oxygenates to reduce emissions.
- Decrease the amount of vehicle fuel evaporation.
- Lower sulfur to provide more efficient catalytic converter operation.
- Reduced benzene by approximately 50%.

## **CaRFG EFFECT ON VEHICLE PERFORMANCE**

Properly blended CaRFG should have no adverse effect on vehicle performance, engine durability or fuel system components. Basic components of CaRFG are not significantly different from other cleaner burning gasoline used in the United States.

## **CaRFG EFFECT ON FUEL ECONOMY**

A very small reduction in miles per gallon (MPG) is possible (less than one-half MPG) if the customer uses gasoline without oxygenates. This is attributed to the lower energy content of oxygenates, which have been included in all Southern California gasoline since January 1995.

**NOTE:** Driving habits, vehicle maintenance and weather conditions all affect fuel economy. Fuel economy may vary more than 1 MPG from one fill up to the next using the same gasoline.

## **NO SPECIAL ADDITIVES ARE NECESSARY WHEN USING CaRFG**

It is not necessary to add anything to the vehicle's fuel tank after CaRFG is purchased from the service station. California regulations require deposit control additives in CaRFG to avoid port fuel injector and valve deposits.

## **OLDER VEHICLE'S PERFORMANCE USING CaRFG**

Older vehicles are expected to operate satisfactorily on CaRFG because these vehicles have been operating on gasoline similar to CaRFG for a number of years. However, considerable testing indicates that older, high mileage vehicles are more susceptible to fuel system problems due to age and normal wear and tear regardless of whether they are operated on conventional or CaRFG gasoline.

**NOTE:** Owners of older vehicles; are encouraged to have their vehicle's fuel systems inspected periodically and to follow their vehicle manufacturers recommendations regarding vehicle maintenance.

## **ODOR EMMITTED FROM CaRFG**

CaRFG is not expected to smell different from gasoline most vehicles currently use. If unusual odor is noticed, it is probably from oxygenates. Most service stations use vapor recovery systems to minimize gasoline vapor release to the atmosphere during refueling.

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## **ADDITIONAL INFORMATION REGARDING CaRFG**

Customers can receive more information on CaRFG from the California Air Resources Board at the following toll-free number 1-800-242-4450 or visit [www.arb.ca.gov](http://www.arb.ca.gov).