

Technical Bulletin

Model
All

Group
2

Subject
Sulfer-Like Smell from the Exhaust System

Part Identifier
2673

Number
9604

ATTENTION: Service Manager / Service Technician

Concern: Some customers may complain of a sulfur or rotten egg smell from the exhaust system.

General Information: Sulfur found in gasoline is normally converted during combustion and catalytic after-treatment processes into sulfur dioxide (SO₂). Under certain operating conditions, hydrogen sulfide (H₂S) is formed instead of sulfur dioxide. To what extent this occurs depends largely on two factors: Sulfur content of the fuel and operating condition of the catalytic converter.

When the engine is running a rich mixture, such as under acceleration or under heavy load, there may be a relative lack of oxygen available in the catalytic converter to form sulfur dioxide. Hydrogen sulfide is formed instead. If there is an excess of sulfur in the fuel, more hydrogen sulfide is formed. It is the hydrogen sulfide which produces the sulfur or rotten egg smell. Hydrogen sulfide can be detected by the human nose at extremely low concentration levels, on the order of several parts per billion. Under normal operating conditions, hydrogen sulfide is not formed at a level detectible by the customer.

If you have a customer complaint of a sulfur or rotten egg smell, you should do the following:

1. Check to make sure that there are no faults stored in the engine control module and that the engine and fuel systems are operating properly.
2. If there are no problems found with these systems, advise the customer to change to a different fuel brand. Since the sulfur content of available fuels can vary greatly, changing to a different brand of fuel with lower sulfur content should reduce the formation of hydrogen sulfide.

Please note that if there are no problems found in the engine or fuel systems, replacement of emission related components such as oxygen sensors or catalytic converters will not reduce the smell since the primary cause lies in the fuel. In this case, replacement of these or other emissions components will not be considered a warranty matter, and is strongly discouraged.

Important Notice: Porsche Cars N.A Technical Bulletins are intended for use by professional technicians, not a "Do-it-yourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Special tools may be required to perform certain operations identified in these bulletins. Use of tools and procedures other than those recommended in these bulletins may be detrimental to the safe operation of your vehicle. Properly trained technicians have the equipment, tools, safety instructions and know-how to do a job properly and safely. If a condition is described, do not assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your Porsche Dealer for information on whether your vehicle may benefit from the information. Part numbers listed in these bulletins are for reference only. Always check with your authorized Porsche dealer to verify correct part numbers. ©1996 Porsche Cars North America, Inc.

Dealership	Service Manager _____	Shop Foreman _____	Service Technician _____	_____	_____	_____
Distribution	Asst. Manager _____	Warranty Admin. _____	Service Technician _____	_____	_____	_____
Routing						

The trademarks Porsche®, Targa®, Carrera®, Tiptronic®, Varioam® and the Porsche Crest are registered trademarks of Dr. Ing. h.c.F. Porsche AG and its affiliate, Porsche Cars North America, Inc.

©1996 Porsche Cars North America, Inc. All rights reserved. Cannot be reproduced without written permission. Service & Parts Publications.



SERVICE

Page 1 of 1
July 11, 1996

PORSCHE CARS NORTH AMERICA INC .