



Mercedes-Benz

**Service**

---

# **Service Manual Engine 103**

Mercedes-Benz of North America, Inc.

S-2421-103

© Mercedes-Benz of North America, Inc., 1990, Reprinted 1993.

All rights reserved. Reproduction by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system or translation in whole or part is not permitted without written authorization from the publisher.

Published by Mercedes-Benz of North America, Inc.  
Printed in U.S.A. (1293.1000)

**Order No. S-2421 -103**

# Introduction

This service manual is the product of existing technical publications. Special care has been taken to provide accurate information on removal, disassembly, inspection, installation, and adjustment procedures, together with the necessary technical data for the particular job.

The material in this manual is divided according to the Mercedes-Benz Component Group System as outlined on the GROUP INDEX page. This page will quickly direct the reader to the Major Component Group. Each Major Component Group begins with a JOB INDEX listing all jobs within that group.

Mercedes-Benz of North America, Inc. recommends that repairs to, and maintenance of Mercedes-Benz automobiles be performed by trained Mercedes-Benz personnel at authorized Mercedes-Benz dealerships.

The information contained in this special publication is ordinarily issued by Mercedes-Benz of North America, Inc., in conjunction with supplementary service literature and special tools supplied only to its authorized dealers. The repair and maintenance procedures outlined herein are intended for use by trained Mercedes-Benz service and dealership personnel. This manual can also be useful for Mercedes-Benz owners in diagnosing vehicle systems and performing repairs. Supplementary service literature will not be provided with this publication, but may be contained in reprints of this service manual.

Please note that this manual has been compiled from various sources, some of which cover models other than the subject of this book. Always refer to the engine and vehicle identification table for model and component information.

Special tools required in performing certain service jobs are identified in the manual and are recommended for use. Any part numbers given are only used for identification and easier differentiation between individual components, and are not intended for ordering purposes.

If your Mercedes-Benz model differs from the specifications contained in the manual you select, consult your authorized Mercedes-Benz dealer.

All procedures, illustrations and specifications contained in this manual were based on the latest information available at the time of publication. All rights are reserved to make production, design and specification changes at any time, without notice and without obligation to give notice. Any such changes will not be contained in this manual.

## **Caution!**

The proper performance of service and repair procedures is essential for both the safety of the mechanic and the safe and efficient operation of the vehicle. The use of incorrect service procedures and tools may greatly increase the risk of personal injury and render the vehicle unsafe. The procedures in this manual are described in such a manner that the service may be performed safely and accurately.

However, it is a general assumption that the reader is familiar with basic automotive repair procedures and Mercedes-Benz vehicles. You should not attempt to use this manual if this is not the case.

Mercedes-Benz of North America, Inc. assumes no liability for any damage to person or property caused by the utilization of this publication to effect maintenance or repair work on Mercedes-Benz automobiles.

## Group Index

---

<b>General, Technical Data</b>	<b>00</b>
<hr/>	
<b>Crankcase and cylinder head</b>	<b>01</b>
<hr/>	
<b>Crankshaft assembly</b>	<b>03</b>
<hr/>	
<b>Engine timing, valves</b>	<b>05</b>
<hr/>	
<b>Mechanically/electronically controlled gasoline injection system (CIS-E)</b>	<b>07.3</b>
<hr/>	
<b>Air cleaner</b>	<b>09</b>
<hr/>	
<b>Belt drive</b>	<b>13</b>
<hr/>	
<b>Intake manifold, exhaust manifold</b>	<b>14</b>
<hr/>	
<b>Electrical system, engine</b>	<b>15</b>
<hr/>	
<b>Engine lubrication</b>	<b>18</b>
<hr/>	
<b>Engine cooling</b>	<b>20</b>
<hr/>	
<b>Engine suspension</b>	<b>22</b>
<hr/>	
<b>Throttle control</b>	<b>30</b>
<hr/>	
<b>Fuel system</b>	<b>47</b>
<hr/>	
<b>Exhaust system</b>	<b>49</b>

---