



Service Manual B3.9, B4.5, B4.5 RGT, and B5.9 Volume 1

SYMPTOM: COOLANT TEMPERATURE ABOVE NORMAL

Cause	Correction
Low Coolant Level	Add Coolant. Refer to Section
Collapsed Radiator Hose	
Engine Lubricating Oil Level is too High or Low	
Engine is Receiving too Much Fuel	
Dirty Engine (Exterior)	
Loose Fan Drive Belt	
Radiator Shut Opening Closed	
Temperature Sensor Faulty	
Thermostat Stuck Closed	
Water Pump Faulty	

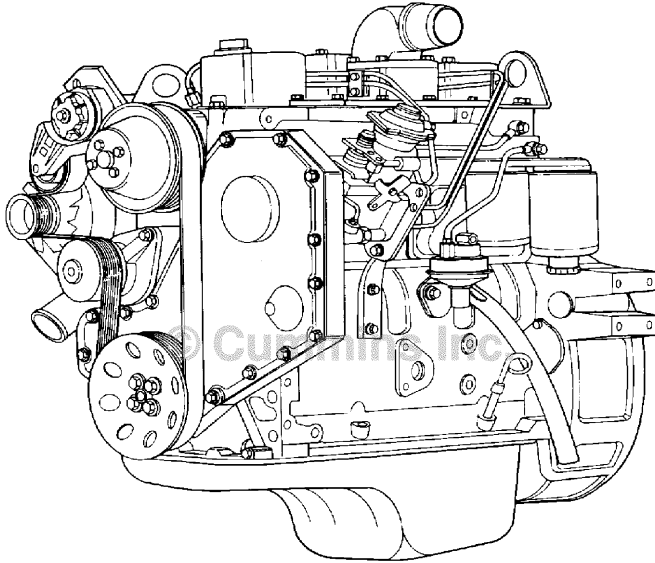
Continued

The illustration shows a circular temperature gauge with a needle pointing towards the right. Below the gauge are several wrenches of different sizes. To the right of the wrenches is a diagnostic tool with a screen displaying various engine parameters: Fuel/Lean, Bc/Ac, Vvdly, Oil/Water, and Intake/Water. The tool has several cables and connectors attached to it.

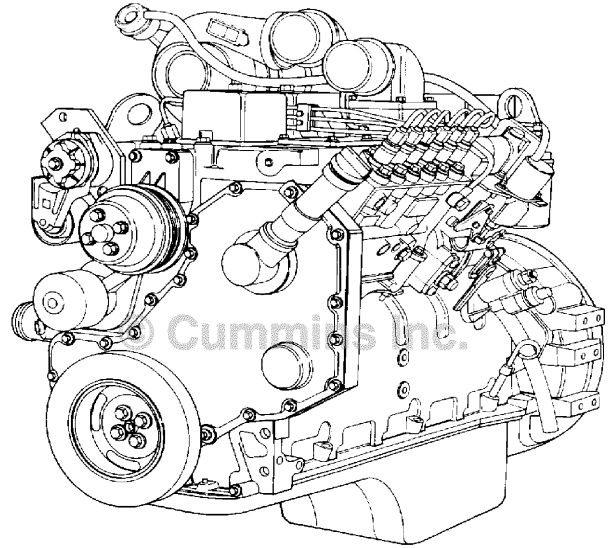




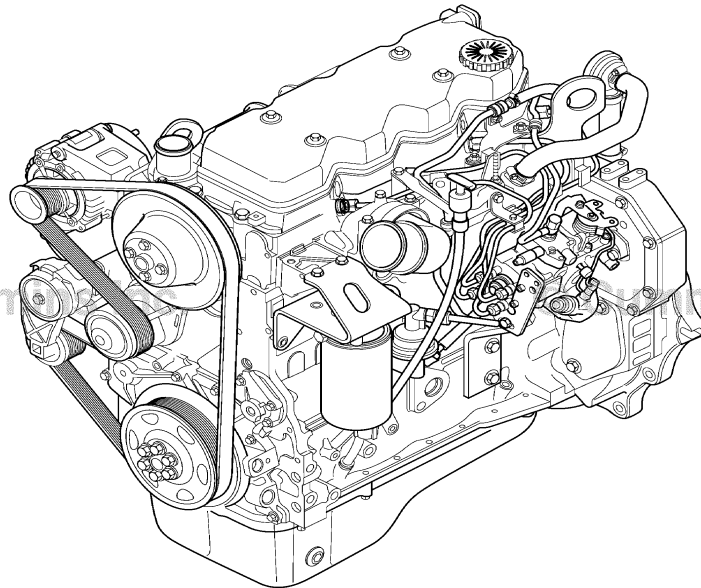
Service Manual
B3.9, B4.5, B4.5 RGT, and B5.9
Volume 1



B3.9 and B4.5



B5.9



B4.5 RGT

00900463

Foreword

This manual contains instructions for troubleshooting and repairing this engine in the chassis, complete rebuild procedures and specifications. Disassembly, cleaning, inspection, and assembly instructions are included. A listing of accessory and component suppliers is located in Section M - Component Manufacturers. Suppliers can be contacted directly for any information not covered in this manual.

Read and follow all safety instructions. Refer to the WARNING in the General Safety Instructions in Section i - Introduction.

The manual is organized to guide a service technician through the logical steps of identifying and correcting problems related to the engine. This manual does not cover vehicle or equipment problems. Consult the vehicle or equipment manufacturer for repair procedures.

The repair procedures in this manual are based on the engine or component removed from chassis. Some rebuild procedures require the use of special service tools. Make sure the correct tools are used as described in the procedures.

When a specific brand name, number, or special tool is referenced in this manual, an equivalent product can be used in place of the recommended item.

A series of specific service manuals (for example: Troubleshooting and Repair, Specifications, and Alternative Repair) are available and can be ordered by contacting your local area Cummins Regional office. A Cummins Regional office listing is located in Service Literature (Section L).

Cummins Inc. encourages the user of this manual to report errors, omissions, and recommendations for improvement. Please use the postage paid, pre-addressed Literature Survey Form in the back of this manual for communicating your comments.

The specifications and rebuild information in this manual is based on the information in effect at the time of printing. Cummins Inc. reserves the right to make any changes at any time without obligation. If differences are found between your engine and the information in this manual, contact a Cummins Authorized Repair Location or call 1-800-DIESELS (1-800-343-7357) toll free in the U.S. and Canada.

The latest technology and the highest quality components are used to manufacture Cummins engines. When replacement parts are needed, we recommend using only genuine Cummins or ReCon® exchange parts.

Table of Contents

	Section
Introduction	i
Engine and System Identification	E
Familiarization	F
Troubleshooting Symptoms	TS
Complete Engine - Group 00	0
Engine Disassembly - Group 00	DS
Engine Assembly - Group 00	AS
Cylinder Block - Group 01	1
Cylinder Head - Group 02	2
Rocker Levers - Group 03	3
Cam Followers/Tappets - Group 04	4
Back	back