



BARBER-GREENE®

A Division of Caterpillar Paving Products Inc.

Operation & Maintenance Manual

3116T & 3116TA Engine Supplement for BG-245B, BG-260B, BG-265B, BG-270B Asphalt Pavers & BG-750 Road Widener

98Z1 - Up

Maintenance Management Information Included

BG0079



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Foreword

Literature Information

This manual contains safety, operation instructions, lubrication and maintenance information.

Some photographs or illustrations in this publication show details or attachments that may be different from your engine. Guards and covers may have been removed for illustrative purposes.

Continuing improvement and advancement of product design may have caused changes to your engine which are not included in this publication. Read – study – and keep this manual with the engine.

Whenever a question arises regarding your engine, or this publication, please consult your dealer for the latest available information.

Safety

The safety section lists basic safety precautions. In addition, this section identifies the text and locations of warning labels used on the engine.

Read and understand the basic precautions listed in the safety section before operating or performing lubrication, maintenance and repair on this product.

Maintenance

The maintenance section is a guide to engine care. The illustrated, step-by-step instructions are grouped by preventive maintenance intervals. Items in the Maintenance Management Schedule are referenced to detailed instructions that follow.

The Maintenance Management Schedule items are organized for a Preventive Maintenance Program.

If the preventive Maintenance Management program is followed, a periodic tune-up is not required. The implementation of a preventive Maintenance Management program should minimize operating costs resulting from reductions in unscheduled downtime and failures.

Maintenance Intervals

Use the fuel consumption figures to determine maintenance intervals. Calendar intervals and service hour units can be used instead of fuel consumption intervals if they provide more convenient maintenance schedules and approximate the indicated fuel consumption figures. Recommended maintenance should always be performed at the interval that occurs first.

The maintenance interval for each item listed in the Maintenance Management Schedule is primarily based on the item and its relationship to either engine speed (rpm) or load.

Under extremely severe, dusty or wet operating conditions, more frequent lubrication than is specified in the Maintenance Management Schedule might be necessary.

We recommend that these schedules be reproduced for ease of inspection. We also recommend that a maintenance record be maintained as part of the engine's permanent record.

Perform maintenance on items at multiples of the original requirement. For example, at Every 2000 Hours, also service those items listed under Every 1000 Hours and Every 250 Hours.

See the Maintenance Log and Maintenance Records topics in this publication for information regarding documents that are generally accepted as proof of maintenance or repair.

Your dealer can assist you in tailoring your schedule to meet the needs of your operating environment.

Engine Description

The 3116 T and 3116 TA diesel engines described in this manual are for use in the BG-245B, BG-260B, BG-265B, BG-270B Asphalt Pavers and BG-750 Road Widener.

Important Safety Information

Most accidents involving product operation, maintenance and repair are caused by failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing potentially hazardous situations before an accident occurs. A person must be alert to potential hazards. This person should also have the necessary training, skills and tools to perform these functions properly.

Improper operation, lubrication, maintenance or repair of this product can be dangerous and could result in injury or death.

Do not operate or perform any lubrication, maintenance or repair on this product, until you have read and understood the operation, lubrication, maintenance and repair information.

Safety precautions and warnings are provided in this manual and on the product. If these hazard warnings are not heeded, bodily injury or death could occur to you or other persons.

The hazards are identified by the "Safety Alert Symbol" and followed by a "Signal Word" such as "WARNING" as shown below.



The meaning of this safety alert symbol is as follows:

Attention! Become Alert! Your Safety is Involved.

The message that appears under the warning, explaining the hazard, can be either written or pictorially presented.

Operations that may cause product damage are identified by NOTICE labels on the product and in this publication.

Caterpillar cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this publication and on the product are therefore not all inclusive. If a tool, procedure, work method or operating technique not specifically recommended by Caterpillar is used, you must satisfy yourself that it is safe for you and others. You should also ensure that the product will not be damaged or made unsafe by the operation, lubrication, maintenance or repair procedures you choose.

The information, specifications, and illustrations in this publication are on the basis of information available at the time it was written. The specifications, torques, pressures, measurements, adjustments, illustrations, and other items can change at any time. These changes can affect the service given to the product. Obtain the complete and most current information before starting any job. Caterpillar dealers have the most current information available. For a list of the most current publication form numbers available, see the Service Manual Contents Microfiche, REG1139F.

Safety

Warning Signs and Labels

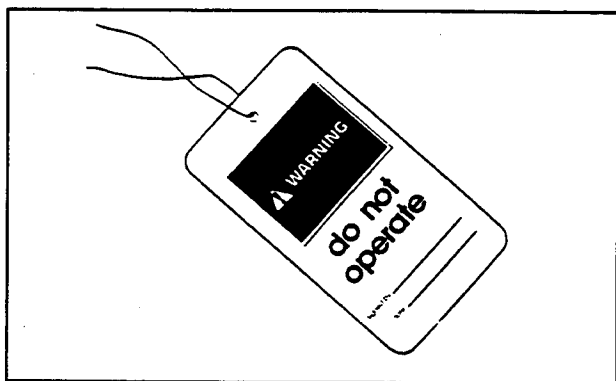
There may be several specific safety signs on your engine. Please take the time to familiarize yourself with the location and the information stated on the safety signs.

Make sure that you can read all safety signs. Clean or replace these if you cannot read the words or see the pictures. When cleaning the labels use a cloth, water and soap. Do not use solvents, gasoline, etc., to clean safety signs. The use of solvents, gasoline, etc., could loosen the sign's adhesive and cause the sign to fall off.

You must replace a label if it is damaged, missing or cannot be read. If a label is on a part that is replaced, make sure a new label is installed on the replaced part. See your dealer for new labels.

Do not operate or work on this engine unless you have read and understand the instructions and warnings in the Operation and Maintenance Manual. Failure to follow the instructions or heed the warnings could result in injury or death. Contact any dealer for replacement manuals.

General Hazard Information



Attach a "DO NOT OPERATE" or similar warning tag to start switch or controls before servicing or repairing the engine. These tags, Form SEHS7332, are available from your dealer.

Do not allow unauthorized personnel near the engine when maintenance or repair is being performed.

Ensure protective locks or controls are in the applied position.

Wear a hard hat, protective glasses and other protective equipment as required by job conditions.

Wear ear protective devices to prevent hearing damage if working inside an enclosed area with engines running.

Do not wear loose clothing or jewelry that can catch on controls or other parts of the engine.

Make certain all protective guards and covers are secured in place.

Use all cleaning solutions with care.

Never put maintenance fluids into glass containers since glass containers can break.

Report all needed repairs.

Do not attempt repairs you do not understand. Do not use tools or equipment you do not know how to use.

Unless Instructed Differently, Perform All Maintenance as Follows:

- Stop the engine. Do not attempt any repairs or adjustments to the engine or driven equipment while it is in operation.
- Lock out all electrical panels associated with the generator set being serviced.
- Ensure the protective locks or controls are in the applied position.
- Disconnect the batteries before performing maintenance on the electrical system.
- Lock out all electrical panels associated with the generator set being serviced.
- Do NOT attempt repairs you do not understand.
- Use proper tools; replace or repair broken or damaged equipment.
- Start the engine only from the operator's station. Never short across the starter terminals or the batteries as this could bypass the engine neutral-start system as well as damage the electrical system.
- In case there is an overspeed on start-up when starting an engine after repairs have been made to the fuel system, be prepared to shut off the engine's in-take air or fuel supply to stop the engine.