

**DIAGNOSTIC
TROUBLESHOOTING
MANUAL**

**GLC050LX [A967];
GLP/GDP20-25LX (GLP/GDP050LX) [A974]**

SAFETY PRECAUTIONS

TROUBLESHOOTING PROCEDURES

- When lifting parts or assemblies, make sure all slings, chains, or cables are correctly fastened, and that the load being lifted is balanced. Make sure the crane, cables, and chains have the capacity to support the weight of the load.
- Do not lift heavy parts by hand, use a lifting mechanism.
- Wear safety glasses.
- DISCONNECT THE BATTERY CONNECTOR before doing any maintenance or repair on electric lift trucks. Disconnect the battery ground cable on internal combustion lift trucks.
- Always use correct blocks to prevent the unit from rolling or falling. See HOW TO PUT THE LIFT TRUCK ON BLOCKS in the **Operating Manual** or the **Periodic Maintenance** section.
- Keep the unit clean and the working area clean and orderly.
- Use the correct tools for the job.
- Keep the tools clean and in good condition.
- Always use **YALE APPROVED** parts when making repairs. Replacement parts must meet or exceed the specifications of the original equipment manufacturer.
- Make sure all nuts, bolts, snap rings, and other fastening devices are removed before using force to remove parts.
- Always fasten a DO NOT OPERATE tag to the controls of the unit when making repairs, or if the unit needs repairs.
- Be sure to follow the **WARNING** and **CAUTION** notes in the instructions.
- Gasoline, Liquid Petroleum Gas (LPG), Compressed Natural Gas (CNG), and Diesel fuel are flammable. Be sure to follow the necessary safety precautions when handling these fuels and when working on these fuel systems.
- Batteries generate flammable gas when they are being charged. Keep fire and sparks away from the area. Make sure the area is well ventilated.

NOTE: The following symbols and words indicate safety information in this manual:



WARNING

Indicates a condition that can cause immediate death or injury!



CAUTION

Indicates a condition that can cause property damage!

**On the lift truck, the WARNING symbol and word are on orange background.
The CAUTION symbol and word are on yellow background.**

TABLE OF CONTENTS

SECTION 9010—OPERATIONAL DIAGNOSTIC PROCEDURES
 Group 05 - Operational Checkout..... 9010-05-1

SECTION 9020—ENGINE
 Group 10 - Principles of Operation..... 9020-10-1
 Group 30 - Observed Symptoms..... 9020-30-1
 Group 40 - Tests and Adjustments 9020-40-1

SECTION 9030—ELECTRICAL SYSTEM
 Group 03 - General Maintenance and Diagnostic Data 9030-03-1
 Diagnostic Trouble Code (DTC) Chart..... 9030-03-6
 Group 10 - Principles of Operation..... 9030-10-1
 Group 20 - Diagnostic Trouble Codes 9030-20-1
 Group 30 - Observed Symptoms..... 9030-30-1

SECTION 9040—DRIVE TRAIN
 Group 10 - Principles of Operation..... 9040-10-1
 Group 30 - Observed Symptoms..... 9040-30-1
 Group 40 - Tests and Adjustments 9040-40-1

SECTION 9050—HYDRAULIC SYSTEMS
 Group 10 - Principles of Operation..... 9050-10-1
 Group 33 - Observed Symptoms-Gear Pump 9050-33-1
 Group 43 - Tests and Adjustments-Gear Pump 9050-43-1

SECTION 9060—OPERATORS STATION
 Group 10 - Principles of Operation..... 9060-10-1

SECTION 9070—FRONT END (MAST) AND CHASSIS
 Group 10 - Principles of Operation..... 9070-10-1
 Group 30 - Observed Symptoms..... 9070-30-1

SECTION 9080—SUPPLEMENTARY DATA
 Group 50 - Abbreviations and Acronyms..... 9080-50-1
 Group 60 - Special Tools List 9080-60-1
 Group 70 - Fault Mode Indicator Reference 9080-70-1
 Group 80 - Supplier Specification Data 9080-80-1

<p>This manual covers the following models:</p> <p>GLC050LX [A967]; GLP/GDP20-25LX (GLP/GDP050LX) [A974]</p>

How To Use This Troubleshooting Manual

GENERAL INSTRUCTIONS AND SAFETY INFORMATION



WARNING

DO NOT add to or modify the lift truck. Any modification that affects the safe operation of the truck cannot be undertaken without written authorization of the Yale company.

Any change to the lift truck, the tires, or its equipment can change the lifting capacity. The lift truck must be rated as equipped and the nameplate must show the new rating capacity.



WARNING

The technician must be aware of, and follow, all general safety precautions that are published in the Operating Manual and that are posted as Safety Decals on and in the lift truck.

Before starting, the technician should be familiar with certain policies, requirements, and instructions used in the troubleshooting procedures. Using the troubleshooting procedures correctly helps the technician to perform the procedure safely and prevents damage to the machine and support equipment.

HOW TO USE DIAGNOSTIC TROUBLESHOOTING MANUAL

Manual Layout:

Sections: The manual is divided into eight sections, each representing a major system, functional area, or specific operation on the lift truck.

- 9010 – Operational Diagnostic Procedures
- 9020 – Engine
- 9030 – Electrical System
- 9040 – Powertrain
- 9050 – Hydraulic Systems
- 9060 – Operator's Station
- 9070 – Front End (Mast) and Chassis
- 9080 – Supplementary Data

Groups: The sections of the manual are further subdivided into groups, where applicable, that identify specific functions, operating criteria, or maintenance tasks.

- 01 – Introduction to the Troubleshooting Manual
- 03 – General Maintenance/Diagnostic Data
- 05 – Operational Checkout
- 10 – Principles of Operation
- 20 – Diagnostic Trouble Codes
- 30 – Observed Symptoms
- 40 – Test and Adjustments

For Diagnostic Trouble Code listings, see General Maintenance and Diagnostic Data, Diagnostic Trouble Codes, Page 9030-03-6.

NOTE: Not all groups will appear in all sections.

Supplementary Data: The supplementary data section of the manual includes information and data that apply to many sections or groups and is stored here for access by all users of the manual. This data includes, but is not limited to:

- Abbreviations and Acronyms
- Special Tools List
- Fault Mode Indication Reference Table
- Supplier Specification Data

GENERAL INSTRUCTIONS

1. Become familiar with the content, layout, and access provisions of data in this manual. This will improve your efficiency and decrease the time required to resolve the problems.
2. Use all sections of the manual for relevant information on the subject system.
3. Once you begin a troubleshooting procedure, do not skip steps.
4. If you reach the end of a procedure without resolving the problem and you are not directed to another procedure contact Resident Service Engineering through the Contact Management System.
5. Do not limit yourself, remember to apply your own experience and knowledge to assist in resolving the problems, but do not compromise safety in doing so.
6. Most of the cross-reference data in the manual will be electronically linked for rapid and easy access. Use the links wherever the cursor highlights an item as a linkable option.

As an example of this linking option:

Assume that during a procedure or test, it is necessary to refer to a different section of manual, in this case, the Light Circuit Check in the Operational Checkout part of this manual.

The instruction would read, "refer to, or see" followed by text identifying what the reference is (for hard-copy, paper manual use). When the cursor is placed over the text, it will then indicate that it is active, and left-clicking will direct the system to take you directly to that reference.

Try it using the process below:

See Operational Checkout, Light Circuit Check, Page 9010-05-2.

When you have reviewed the reference document or manual, and need to return to the troubleshooting procedure, the "BACK" button will permit you to do this.

Yale 

SECTION 9010

OPERATIONAL DIAGNOSTIC PROCEDURES

TABLE OF CONTENTS

Group 05 - Operational Checkout

Operational Checkout Procedures	9010-05-1
DTC Check.....	9010-05-2
Horn Circuit Check	9010-05-2
Light Circuit Check	9010-05-2
Indicator Light Power Check.....	9010-05-3
Cold Start Check	9010-05-3
Engine Malfunction Indicator Check.....	9010-05-4
Engine Malfunction Indicator Check.....	9010-05-4
Brake Pedal Check.....	9010-05-4
Backup Alarm Check (If equipped)	9010-05-5
Brake and Inching Pedal Check	9010-05-5
Park Brake Sensor Check	9010-05-5
Park Brake Check	9010-05-6
Engine Power Check	9010-05-7
Engine Speed Check	9010-05-7
Brake and Axle Drag Check	9010-05-7
Hydraulic Pump Flow Check	9010-05-8
Hydraulic Pump Flow Check	9010-05-8
Lift Drift Check.....	9010-05-9
Tilt Function Drift Check.....	9010-05-9
Mast Cushion Check	9010-05-10
Lift/Tilt Mast Adjustment Check.....	9010-05-10
Tilt Racking Check	9010-05-10
Chain and Header Hose Adjustment Check	9010-05-11
Mast Mounting Check	9010-05-12
Mast Channel Check.....	9010-05-12
Carriage Adjustment Check	9010-05-12
Chain Sheave Check.....	9010-05-12
Carriage Adjustment Check (Standard and Integral Side Shift).....	9010-05-12

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