

Document Title

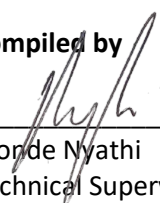
FL047 ENGINE OVERHAUL

Project Title

FL047 Engine overhaul as per SOW at Pier 1 Container Terminal

1. Authorization of Signatures

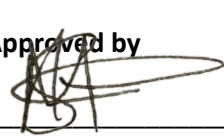
Compiled by



Monde Nyathi
Technical Supervisor

Date: 16/01/2025


Approved by



Nkululeko Ndamane / Mondli Kwani
Act. Senior Engineering Manager

Date: 16/01/2025

Reviewed by



~~Mondli Kwani~~ Bongani Zaphi
Act. Technical Manager

Date: 16/01/2025

1. Scope Background

Pier 1 CT has 2(two) 5 Ton Forklifts (2017) under its fleet of equipment. These forklifts are utilized in most of our day-to-day activities, they have a very big role in the functioning of our Terminal. FL047 currently requires an engine overhaul to revive and prolong the life span of this equipment.

2. Scope of Works

Note: The approved contractor shall perform the job according to the provided scope of work. Please note that any deviations from the scope must be discussed and approved by the project leader before work can commence. Any work done by the contractor is subject to be inspection by Transnet and incompetent practice shall be disapproved.

2.1 Objective of Scope

The objective of this scope of works is for contractor to repair the damages as per OEM Standard and specifications. The outcome of this project is to achieve the following:

- Ensure safe operating condition of the equipment.
- Eliminate possible engine failures.
- Prolong the life of the equipment by ensuring continuous reliability of the equipment

2.2 Work to Be Conducted

Equipment ID: LONKING FORKLIFT

Model: LG50DT

CAPACITY: 5000KG

S/N: 317050519547

DATE OF MANUFACTURE: 2017/07/01

ENGINE OUTPUT: 82.4/2000 KW/rpm

SCOPE:

The forklift must be washed and prepared for the removal of the engine

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The forklift must be parked in a designated area for the repairs and must be isolated

Engine oil must be drained, and an oil sample must be taken for root cause analysis

The engine must be removed from the forklift and taken away for repairs

Engine Overhaul:

All engine Subcomponents must be replaced (Starter motor, Alternator, Water pump, Thermostat, Injectors, Glow plugs, Fan belt.)

Engine must be stripped from Sump, Crank case, Bottom end, Cylinder head, intake & Exhaust manifolds, Flywheel.

Cylinder Head:

Inlet/exhaust valves must be replaced

Valve stem seals must be replaced

Valve seats must be replaced

Cylinder head must be sanded and pressure tested, compression and crack test

Cylinder head gasket kit must be replaced

Engine block

All pistons must be removed, and Oil/Compression rings must be removed and replaced

Small and big end bearings must be replaced

All main bearings must be replaced

Cylinder bore sleeves must be replaced

Oil pump and strainer must be replaced

Sump gasket must be replaced

Manifolds

Inlet and exhaust manifold gaskets must be replaced

Filters and Lubricants

Oil, fuel and air filters must be replaced

Engine oil and coolant must be topped up upon fitment

The engine must be assembled and Dyno tested, A Dyno test certificate must be provided.

All disposable items must be returned to Transnet

The engine must be fitted in the forklift and commissioned

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NB* ALL SPARES USED MUST BE
OEM STANDARDS.

LEAD TIME MUST BE SPECIFIED ON QUOTATION.
WARRANTY OF THE REPAIRS MUST BE STIPULATED.

COMPULSORY SITE MEETING:
VENUE: TRANSNET TPT PIER 1 EES WORKSHOP
DATE: TBA
TIME: TBA

CONTACT INFO:

MONDE

067 415 8376

3. Quality Control

As a minimum, the following standards must be complied with:

Quality Management (Transnet Standard)	EEAM-Q-009
Commissioning And Handover Specification for Supplier/Construction	EEAM-Q-013

Transnet Port Terminals reserves the right to inspect the forklift to ensure that original OEM material is used, and to ensure workmanship is of Transnet's standards.

4. Evaluation Criteria

Please refer to the evaluation criteria. It is the responsibility of the bidder to go through the evaluation criteria and submit all relevant documentation. Please note that if a bidder does not meet the minimum eligibility criteria, the bid will be disqualified.

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