

KOMATSU MACHINE MAINTENANCE

MODULE 2: STRUCTURE AND FUNCTION

1. Module Details

1.1 Module Name

Structure and Function

1.2 Nominal Duration

8-12 hours

1.3 Discipline Group

4.1.1.1 General Mechanical Engineering Trades Person

4.2.1.1 Motor Mechanic

4.2.1.2 Automotive Electrician

4.3.1.1 Electricians

2. Module Purpose

This module provides people who hold trade qualifications in either automotive, engineering or electrical or equivalent industry experience with an understanding of the principles of operation and construction of the various systems on the machine, required as a base for developing test and adjust and troubleshooting skills as included in subsequent modules.

3. Pre-requisites

Holding trade qualifications in either automotive, engineering or Electrical or equivalent industry experience.

Komatsu Machine Maintenance Introduction and General Service

4. Content

On the completion of this module the participants will be able to:

- a) Demonstrate safety precaution relevant to the machine system being covered.
- b) Describe the design concepts of each of the machine systems.
- c) Identify; locate components of all major systems on the Komatsu machine.
- d) Describe the principles of operation of all major systems on the Komatsu machine.
- e) Demonstrate a working knowledge of circuit diagrams relevant to the Komatsu machine.

It is suggested that the following areas be covered in the learning process:

- Safety requirements and considerations when working on equipment including Komatsu's OHS & E policies, procedures and programs.

- **Location of significant components (as applicable):**

Engine	Hydraulic System
Powertrain	Work Equipment
Steering System	Electrical and Electronic Systems
Hoist System	
Propulsion System	

- **Principles of Operation:**

Engine	Hydraulic System
Powertrain	Work Equipment
Monitor Panel	Electrical and Electronic Systems
Hoist System	Steering System
Propulsion System	

- **System Schematic Drawings:**

Powertrain
Steering System
Hydraulic System
Electrical and Electronic