I. JOB TITLE : SERVICING MECHANIC

[Maintenance Mechanic Fitter, Machinist]

II. JOB LEVEL : CRAFTSMAN

III. JOB DESCRIPTION: Fits, assembles, installs, repairs and maintains plant and

machinery and makes replacement parts when required.† OR

Sets up and operates machine tools to produce components

according to specifications.*

IV. TRADE SKILLS : Ability to:

1. Install plant and machinery.†

- 2. Carry out preventive maintenance programmes.†
- 3. Diagnose faults, repair or replace defective parts in plant and machinery, and keep records of such repairs or replacements.†
- 4. Use and care for measuring instruments and standards.†
- 5. Undertake proper marking out on workpieces.
- 6. Fit to specified tolerances.
- 7. Carry out simple sheetmetal work such as cutting, bending, folding, rolling and seaming.†
- 8. Perform arc and gas welding, soldering and brazing.
- 9. Perform heat treatment of metals to give specified properties.
- 10. Carry out simple pipe work such as bending, threading and jointing.†
- 11. Read and interpret engineering drawings and specifications.
- 12. Use and care for hand and machine tools.

- 13. Carry out all necessary safety precautions.
- 14. Set up and operate common machine tools including:*
 - (a) centre lathes,
 - (b) milling machines (horizontal, vertical and universal),
 - (c) grinding machines (surface and cylindrical),
 - (d) shapers.
- 15. Use and care for measuring instruments and standards.*
- 16. Identify and select materials in accordance with specifications.*
- 17. Select and sharpen cutting tools.*
- 18. Select and use correct speeds, feeds, lubricants and coolants for efficient machining.*

V. TRADE THEORY : Knowledge of:

- Workshop technology including fitting, hand and machine tools, metrology, fabrication processes, properties and heat treatment of materials.
- 2. Workshop technology including machine and hand tools, metrology, properties and heat treatment of materials.*
- 3. Engineering science and workshop calculations.†
- 4. Engineering drawing.†
- 5. Principles of electricity, hydraulics and pneumatics.†
- 6. Industrial hazards including those associated with power driven machinery and other electrical and mechanical work, and safety precautions to be observed.

- 7. Relevant sections of the Factories and Industrial Undertakings Ordinance, national and international safety standards and regulations, and codes of practice.
- Standards of measurement.*
- 9. Standards and specifications of surface finish.*
- 10. Basic electrical theories.*

VI. *QUALIFICATIONS AND TRAINING*

Stream 1

Successful completion of Secondary 3, plus 4-year organized craft apprenticeship with attendance at a relevant part-time day release or block release craft course in a technical institution.

Stream 2

Successful completion of a relevant 1-year full-time basic craft course or a relevant 3-year full-time course in a prevocational school, plus 3-year organized craft apprenticeship with attendance at a relevant part-time day release or block release craft course in a technical institution.

Note: [] Equivalent job title

* For Machinist only.

† For Maintenance Mechanic Fitter only.