#### **SCHEDULE E/1**

#### COACHING STOCK DIVISION

The following operations in the assembling and/or manufacturing and/or renovation and/or repair of Coaching Stock: Work classified at Rate A not specified in this Division is subject to the general wage provisions of Schedule G.

## WAGE RATES APPLICABLE TO OPERATIONS SCHEDULED IN SCHEDULE E/1 ARE PRESCRIBED IN CLAUSE 3(a) OF PART II OF THIS AGREEMENT

#### Section (a): Electrical work and related activities

## RATE AA

1. Repetition making up of cable harnesses where the course of the wire is marked by cleats and/or lines and/or saddles and/or fixtures and where no wiring diagram is used.

## RATE C

1. Repetition electrical assembly work, including connecting to terminal boards, but excluding connecting to control boxes under the supervision of a Rate A employee.

## RATE DDD

1. Soft soldering and/or sweating.

## RATE F

- 1. Repetition crimping of terminals and/or stripping ends of wires.
- 2. Repetition pulling through only of cables and/or wires to predetermined lengths.
- 3. Repetition tinning of earth straps connecting the frame of the bogey to the roller bearing housing pad and/or interconnecting battery busbars and/or sweating of the battery lugs.
- 4. Tinning by hand.

## RATE G

1. Repetition cutting and/or identification of wires to length gauges under the supervision of Rate D employee.

#### Section (b): Mechanical work and related activities

## RATE A

1. \*Coach plumbing.

\*'Coach plumbing' means work on coaches for all sanitary purposes and/or water services and/or domestic heating, washing or drinking purposes.

- 2. Panelbeating.
- 3. Rigging and/or splicing.

## RATE AA

- 1. Assembly of motors and/or gear cases to bogies.
- 2. Functional mechanical testing and/or fault localising to schematic drawings and/or specifications and/or rectifications other than final testing.
- 3. \*Machinist's work (n.e.s.) viz, shaping, slotting, planing, milling (excluding universal milling), grinding (excluding universal grinding) and the operation of gear cutting and rotary machine tools, including vertical turret machine with built-in mono-slide turret and with a table diameter not exceeding 1 250 mm, but excluding centre lathes (with or without copying and/or profiling attachments), boring mills (vertical and horizontal type with or without copying and/or profiling attachments), die-sinking machines and universal machines.

\*Employees employed on machinist's work shall be permitted to set up their own work, grind and set their own tools and work to and with precision measuring instruments, including rules, callipers and the like.

4. Straightening of coach body side panels (free-hand work).

## RATE B

- 1. Cold sawing where the sawyer marks direct from cutting list (structural metal-work).
- 1. Drilling machine work (n.e.s.).

3. Supervisory work (n.e.s.), including marking off and/or making adjustments to the assembly of underframes, bogies and components of underframes and/or bogies (n.e.s.).

## RATE C

- 1. Operating multi-head oxyacetylene cutting machines and/or flame planing and/or bevel cutting machines (including setting up).
- 2. Riveting and/or caulking (n.e.s.).
- 3. Roller bending other than repetition roller bending (n.e.s.).
- 4. Setting (n.e.s.) (excluding tool setting) of dies and/or fixtures and/or guides on production machines, including drilling machines, but excluding all other rotary and reciprocating machines.

## RATE D

- 1. Arc and/or gas cutting (n.e.s.).
- 2. Assembly work, where the components and/or subassemblies are positively located, including adjustments, but excluding marking off of components and/or subassemblies to drawings and/or the use of precision measuring instruments.
- 3. Bending and/or forming to jigs and/or stops in press-brake and/or power folding machine.
- 4. Bending of conduits and/or pipes and/or tubes by pipe-bending machine to data sheets and/or sketches.
- 5. Drilling and/or counter-sinking, including drill sharpening (n.e.s.).
- 6. Drilling on radial drilling machine to jigs and/or fixtures and/or marks (n.e.s.).
- 7. Hand welding by mechanically fed electrodes.
- 8. \*Marking off material (n.e.s.).

\*'Marking off' means marking off material to given lengths for cutting off purposes, using only length gauges and/or rule and/or tape measure and marking material.

- 9. Operating automatic arc and/or gas and/or foil welding machine.
- 10. Operating power saw (n.e.s.), including marking off with rule and/or tape only and including setting of stops (n.e.s.).
- 11. Operating single head oxyacetylene profiling and/or straightline cutting machine to templets.
- 12. Preliminary shrinking and/or straightening of interior panels by hand tools.
- 13. Preliminary shrinking of body ends by hand tools.
- 14. Preliminary welding for positioning of jobs prior to welding and/or riveting and/or bolting up (runs of not more than 40 mm in length).
- 15. Press operating (n.e.s.), including the affixing and/or removal of dies where there is a positive location, but excluding setting up.
- 16. Repetition assembly of pre-prepared sets of pipes and/or tubes and/or conduits.
- 17. Repetition operation of templet copying punch machine.
- 18. Repetition roller bending and/or forming, involving the use of metal not exceeding 4 mm in thickness.

#### RATE DD

1. Operating mechanical bevelling machine.

## RATE F

- 1. Attending automatic submerged arc and/or gas shielded wire and/or flux cored wire arc welding machine where the operator is confined to loading, starting, stopping and unloading the machine and the setting up of which is done by a Rate A or AA employee.
- 2. Repetition bending of conduits and/or pipes and/or tubes in manually operated machines to templets and/or stops (excluding setting of stops).
- 3. Repetition cutting and/or cropping of bars and/or billets to stops and/or length gauges and/or repetition cutting and/or cropping of scrap.
- 4. Supervising employees employed on classes of work scheduled below Rate F (when so appointed).

## RATE G

- 1. Assisting a Rate D employee in the loading of pre-manufactured components and/or subassemblies into jigs and/or underframes and/or shells and bolting up, excluding fitting and/or adjustment but including deburring.
- 2. Fly and/or treadle and/or manual pressing and/or notching where the work is operated upon with pre-set dies (excluding setting of the dies) and/or to stops.
- 3. Hand bending and/or forming to jigs and/or stops.
- 4. Huck type fastening.
- 5. Operating hand portable and/or pedestal grinding machine where the operator is not required to grind to marks and/or gauges and/or templets.
- 6. Operating power saw for repetitive cutting off to stops and/or length gauges and/or graduated scales (other than the setting of stops and other than in toolroom).
- 7. Reaming, using non-adjustable reamers.
- 8. Repetition operating arc spot and/or butt and/or flash and/or projection and/or resistance and/or seam and/or spot and/or stud welding machine.
- 9. Repetition cutting of conduits and/or pipes and/or tubes to templets and/or fixtures and/or stops and/or length gauges.
- 10. Repetition drilling and/or counter-sinking to fixtures and/or gauges and/or jigs and/or stops and/or templets, excluding radial drill.
- 11. Repetition drilling of fixing holes up to 16 mm holes with portable drilling machines in connection with body sides and/or roofs and/or gutters and/or ends and/or underframes, using jigs and/or fixtures and/or templets.
- 12. Repetition threading and/or tapping by machine.
- 13. Re-threading and/or re-tapping.
- 14. Screwing machine operating, excluding setting up.
- 15. Shrinking of coach bodysides in a heating jig under supervision of a Rate A or AA employee.

## RATE H

- 1. Affixing slings under supervision of a Rate A to D employee.
- 2. Holding up and/or backing up for riveting.
- 3. Lagging of pipes and/or securing of lagging by clips.
- 4. Repetition deburring and/or fettling by hand and/or by machine.
- 5. Stamping and/or affixing metal labels and/or name-plates.
- 6. Baling of scrap.
- 7. Boiler stoking and/or attending.
- 8. Descaling by chipping.
- 9. General labouring.
- 10. Rivet heating.

#### Section (c): Woodworking and related activities

#### RATE A

1. \*Coach finishing.

\*'Coach finishing' means the fitting and/or machining and/or assembly of exterior and/or interior fittings and/or components and/or assemblies and/or woodmachining and/or carpentry work from drawings.

2. Positioning, identification and fixing of timber furrings.

#### RATE C

1. Repetition assembly of pre-prepared interior fittings and/or components and/or subassemblies, including adjustments under the supervision of a Rate A or AA employee, but excluding lining up and/or the use of precision measuring instruments.

## RATE D

1. Assembly of washbasin and/or metal door on bench (excluding alteration and/or fitting).

2. Woodmachining including setting up and including the use of hand tools.

## RATE F

- 1. Floor sanding.
- 2. Glueing for and laying of anti-squeak strip (including preparation of under-frame members by rough grinding and/or deburring).
- 3. Laying and/or marking to templets and/or drilling and/or countersinking for securing purposes of premanufactured machined floorboards under supervision of a Rate A to C employee.
- 4. Repetition marking to jigs and/or length gauges and/or templets for the drilling of mouldings.

## RATE G

- 1. Cutting lino to templets.
- 2. Repetition drilling of mouldings to jigs and/or templets and/or stops and/or length gauges and/or marks on pedestal drill.
- 3. Repetition loading and/or unloading and/or starting and/or stopping of woodworking machines, excluding setting up.
- 4. Repetition sawing of mouldings to stops and/or templets and/or length gauges and/or marks.
- 5. Sandpapering of wooden parts by hand.

#### Section (d): Painting and related activities

#### RATE A

1. Painting and/or signwriting and/or polishing and/or staining and/or varnishing and/or veneering for finishing and decorating (n.e.s.).

## RATE AA

1. Applying transfers.

#### RATE D

1. Application of last two coats of paint and/or enamel prior to the finishing coat (n.e.s.).

#### RATE F

1. Preliminary stopping of bodysides and/or ends.

#### RATE G

- 1. Application of anti-corrosive and/or anti-fouling and/or protective coatings (n.e.s.).
- 2. Application of prime and/or anticorrosive coatings.
- 3. Application of sealing compounds and/or adhesives.
- 4. Application of sound deadening materials.
- 5. Attending, cleaning and/or degreasing of acid and/or rinsing and/or fluxing baths under the supervision of a rate A to D employee.
- 6. Hot dip coating and/or galvanising, under supervision.
- 7. Oiling and/or greasing machinery.
- 8. Rough masking for priming only.
- 9. Sand and/or shot and/or hydro and/or grit blasting.
- 10. Spraying of enamel and/or paint to bogey and/or underframe and/or pre-manufactured components under supervision of a Rate A to D employee.
- 11. Stencil painting.
- 12. Wet rubbing.

#### RATE H

1. Dipping in enamel and/or lacquer and or paint.

#### **DIVISION E/2**

#### BURGLAR AND OTHER SIMILAR ALARM SYSTEMS DIVISION

The following operations in the installation and/or repair and/or servicing and/or manufacture of burglar and other similar alarm systems, viz:

#### WAGE RATES APPLICABLE TO OPERATIONS SCHEDULED IN DIVISION E/2 ARE PRESCRIBED IN CLAUSE 3(a) OF PART II OF THIS AGREEMENT

#### Section (a): Manufacturing Section

## RATE AA

1. Final testing.

## RATE B

1. Supervisory work, including batch checking and/or grading.

#### RATE D

1. Repetition adjusting of cores and/or components and/or mechanically operated assemblies to pre-set limits by electrical measurements, including replacement of defective mechanically adjustable components identified by the test process.

#### RATE DD

1. Repetitive batch mechanical and/or electrical checking and/or adjusting of equipment and/or sub-units and/or components by comparison of fixed standards with predetermined limits by means of comparators and/or deviation meters and/or special purpose test gear, including replacement of defective components identified by the testing process, under supervision of a Rate AA employee.

## RATE DDD

1. Wiring and/or assembling of alarm units and/or devices to instructions and/or running out lists and/or planning cards and/or pictorial sketches and/or samples and/or audio aids and/or photographs.

## RATE F

- 1. Application of infra-red filter lacquer.
- 2. Laying and binding of cable forms from prepared running out lists on pre-prepared cable form boards.

## RATE G

- 1. Affixing dust proof seals.
- 2. Application of anti-corrosive and/or protective coatings.
- 3. Assembling of pre-manufactured components from stock requiring no fitting or adjusting, but including deburring.
- 4. Dressing and deburring by hand and/or by grinding and/or by portable power tools.
- 5. Making of terminal boards by hand operated punch.
- 6. Manual and/or treadle pressing and/or notching and/or punching where the work is operated upon with dies and/or stops (excluding setting of dies).
- 7. Repetition cold bending and/or forming to jigs and/or length gauges and/or stops.
- 8. Repetition cutting to stops and/or templets and/or jigs and/or length gauges and/or fixtures and/or marks (excluding setting up).
- 9. Repetition drilling to fixtures and/or jigs and/or stops and/or templets.

#### Section (b): Installation Work

## RATE A1

- 1. Final testing.
- 2. Installation and/or wiring and/or repairing and/or servicing of main alarm unit, alarm signalling devices, control equipment and any other specialised equipment involved (n.e.s.) (including leads from a plug point at normal mains voltage).

- 3. Indicating the actual wiring routes of the alarm system.
- 4. Marking out all attached points for alarm components on areas to be protected.
- 5. Supervising installation of all low-voltage electrical wiring.

Learnership rates in respect of Rate Al work:

First twelve months of experience	Refer to table
Second twelve months of experience	of wage rates
Thereafter	Rate Al

#### **Operative Grade 1:**

#### RATE D

- 1. Range adjustment of volumetric detectors such as ultrasonic and microwave units under supervision of a Rate AA employee.
- 2. Setting up infra-red barriers by means of a test meter or the like to predetermined levels under supervision of a Rate AA employee.
- 3. Rectification of installation faults diagnosed by and under the supervision of a Rate AA employee, excluding repairs to electronic units.
- Connecting of cables to pre-marked and/or predetermined positions between electronic detection devices and control panels.

#### **Operative Grade 2:**

## RATE DDD

- 1. Connecting cables to electro mechanical devices.
- 2. Adjustment of vibration contacts to pre-set limits.
- 3. Soft soldering by hand.
- 4. Foiling of windows.

#### *Operative Grade 3* (under supervision of a Rate AA employee):

#### RATE F

- 1. Affixing of pulleys, window switches, door contacts and similar minor components, excluding adjustments, but including the running out and connecting up of trip wiring.
- 2. Running low-voltage alarm leads.
- 3. Affixing of all electronic or electro-mechanical detection devices to predetermined positions.
- 4. Mounting of control panels.
- 5. Affixing of tension switches and the affixing of tension wire to such switches.
- 6. Chasing and/or plugging and/or drilling (n.e.s.) (not precision drilling) to marks and/or pops and/or dimples.

#### **Operatives Grades 1, 2 and 3:**

No person shall be permitted to perform operations in a higher Operative Grade than that at which he is rated unless he has served at least three months in the Grade immediately below that in which the higher operations are specified; unless he has served an equivalent period with any employer in this Industry:

Provided that no employee shall be remunerated at a lower rate of pay than he is currently receiving as a result of this requirement.

#### RATE H

1. General labouring.

#### Section (c): Standby duty for employees engaged on Rate A1 work (Operations 1, 2, 3, 4 and 5 in section (b))

1. An employer may require a Rate A1 employee to do standby duty for one week at a time:

Provided that should such employee be required to do standby duty he must be in receipt of not less than the amount of money specified for Rate A1 after 24 months' experience:

Provided further that the employee shall be given not less than one week's notice to that effect. At least one full

week must elapse before an employee may be called upon to do standby duty again.

- 2. When an employee is required to do stand-by duty in terms of subsection (1) above, he shall be paid a standby allowance of six hours at the highest Rate AI rate of pay specified.
- 3. Where an employee is called out on a service when on standby duty he shall receive a minimum payment of R4,00 per call except when the call is on a Sunday or a statutory holiday, when he shall be paid R6,00 per call, in addition to the allowance stated in subsection 2 above.
- 4. Where an employee uses his own transport he shall be paid an allowance to be mutually agreed upon.

#### **SCHEDULE E/3**

#### INDUSTRIAL REFRIGERATION AND AIR-CONDITIONING INDUSTRY DIVISION

#### WAGE RATES APPLICABLE TO OPERATIONS SCHEDULED IN SCHEDULE E/3 ARE PRESCRIBED IN CLAUSE 3(a) of PART II OF THIS AGREEMENT

For purposes of this Division the Industrial Refrigeration and Air-Conditioning Industry is defined as the industry concerned with manufacture, fabrication, assembly and installation (erection on site) of systems comprising ventilation, exhaust, filtration, refrigeration, heating, humidification, dehumidification, fluid reticulation (including controls), instrumentation and associated electrical works, which either in total combination or part thereof are applied to a building, structure, ship or any space where artificial environment is required.

For ease of reference, the operations contained herein have been split into the following sections:

Section (*a*): Manufacture and fabrication section.

Section (b): Installation section.

Subsection (b)(i): General.

Subsection (*b*)(ii): Piping.

Subsection (b)(iii): Ductwork.

Subsection (b)(iv): Insulation.

Subsection (b)(v): Electrical.

Subsection (b)(vi): Pneumatic.

#### SECTION (a)—MANUFACTURE AND FABRICATION (SHOPWORK)

Manufacture and fabrication involves the use of metal 4 mm and thinner and may include integral light metal sections of material not exceeding 7 mm thickness.

#### RATE A

The Rate A operations of Schedule G of this Agreement shall apply. (No person other than a journeyman or apprentice may be employed on work classified as Rate A without the prior permission of the Council.)

## RATE AA

- 1. Marking out with tape and/or rule of centres and working lines of articles and/or material preparatory to machining and/or processing.
- 2. Setting out of stock on the floor or the bench to sketch and/or drawings and/or dimensions.
- 3. Assembly of pre-manufactured components from stock (including adjustment).

#### RATE C

- 1. Operating power-driven guillotine (n.e.s.).
- 2. Operating press-brake (n.e.s.).
- 3. Operating roller-bending and/or forming equipment (n.e.s.).
- 4. Setting (n.e.s.) of dies and/or fixtures and/or stops and/or jigs and/or guides and/or trips on production machines.

#### RATE D

- 1. Assembling of pre-manufactured components from stock where no fitting is required (n.e.s.).
- 2. Automatic welding where the welding head is automatically fed and speed of weld mechanically controlled.

- 3. Marking off material to given lengths for cutting-off purposes, using only rule and/or tape measure and marking material.
- 4. Operating power-driven folding machine (n.e.s.), including setting up.
- 5. Press operating (n.e.s.), excluding setting up.
- 6. Welding and/or brazing, including hard and/or silver soldering, of parts located in jigs and/or parts so located as to obviate the need for a jig (n.e.s.).
- 7. Operating a reciprocating and/or circular power saw, including marking off with a rule and/or tape (including setting of stops) (n.e.s.).
- 8. Cropping and/or shearing and/or punching to stops and/or templets and/or length gauges and/or marks (including the changing of composite dies).
- 9. Operating single-head gas profile machine and/or single and/or multi-head straight line cutting machine, including setting up.
- 10. Operating repetitive and/or continuous automatic welding machines, including adjustment due to voltage variation.
- 11. Operating continuous semi-automatic gas shielded and/or flux cored wire arc welding machine, excluding setting up.
- 12. Manufacture of brackets where used in piping and/or duct erection using angle iron up to 75x75x6 mm.
- 13. Manufacture of flanges where used in ducting systems and/or equipment.
- 14. Operating press-brake (n.e.s.) to stops and/or jigs and/or length gauges where the stroke is controlled by the operator, excluding setting up.

#### RATE DD

- 1. Welding and/or brazing to fixtures or parts so located as to obviate the need for a fixture (weld length not to exceed 55 mm and material thickness not to exceed 2,5 mm).
- 2. Repetitive soft soldering and/or sweating.

#### RATE E

1. Operating automatic duct making machines, excluding setting up. (Setting up to be carried out or supervised by a Rate A employee.)

#### RATE F

- 1. Operating reciprocating and/or circular power saw to stops and/or jigs and/or marks, excluding setting up.
- 2. Operating power-driven folding machine to stops and/or jigs, and/or fixtures and/or marks, excluding setting up.
- 3. Operating power-driven guillotine to stops, and/or marks, excluding setting up.
- 4. Repetition production screwing of bar and/or tube on screwing machines to stops where the work is

eld by devices not necessitating centralising or trueing (excluding setting up). (This operation is limited to a machine not exceeding a 52 mm nominal bore diameter.)

- 5. Operating manually operated rollers-the setting and forming in the manufacture of round ducting, bends, and spigots, including the adjustment of the rollers.
- 6. Insulating of ducting in general-using pinspotter, spray-gun, tape measure or any other tools used in the insulation of ducting.
- 7. Drilling by hand of holes in flanges to be fitted to ducts by rivets, pop rivets or tinman's rivets or other means of fastening, setting out holes by means of fixed gauges.
- 8. Assembling of pre-manufactured components from stock requiring no fitting and/or adjusting, but including drilling of holes with hand drill up to 6 mm and/or the use of hammer in knocking over the flange, i.e. Pittsburgh lock or spigot.
- 9. Spraypainting.

## RATE G

- 1. Beading and/or seaming and/or grooving and/or trimming and/or curling and/or wiring and/or dishing and/or flanging and/or locking double side top and bottom.
- 2. Leak-testing of finished products, other than by pressure testing.
- 3. Loading of rolled sheet coils onto uncoiler and setting of uncoiler release under supervision of a Rate A to D

employee.

- 4. Operating manually operated folding machine and/or brake and/or hand folder and/or finger bending brake to stops and/or jigs and/or fixtures and/or marks, excluding setting up.
- 5. Operating press-brake and/or guillotine to stops and/or jigs and/or length guages where the stroke is not controlled by the operator.
- 6. Riveting (10 mm diameter or less).
- 7. Using lock forming machine and/or seaming machine in any of the operations used in the manufacture of rectangular or round duct, including "S" and drive cleats.
- 8. Random drilling with a hand-held drill where the location of the holes is not critical.
- 9. Repetition application of insulating materials, including cutting and/or marking to templets under supervision of a Rate A to D employee.
- 10. Repetition bending and/or forming by machine to jigs and/or dies and/or stops and/or length gauges and/or marks (excluding press-brake and excluding setting up).
- 11. Repetition butt and/or spot and/or flash and/or projection and/or resistance and/or percussion welding by machine.
- 12. Repetition cutting and/or cropping and/or shearing to stops and/or templets and/or jigs and/or length gauges and/or fixtures and/or marks (excluding power-driven guillotines and excluding setting up).
- 13. Repetition drilling to jigs and/or prelocated parts and/or templets and/or pops and/or fixtures and/or marks (excluding radial drilling machines).
- 14. Repetition machine punching and/or slotting and/or notching to jigs and/or guides and/or stops and/or marks. (Material not to exceed 7 mm in thickness.)
- 15. Repetition marking to templets and/or jigs.
- 16. Repetition operating nibbling machines and/or shears to jigs and/or stops and/or templets and/or marks in sheets of 4 mm and thinner, including repetition marking to templets and/or jigs.
- 17. Repetition pop marking to jigs and/or templets.
- 18. Repetition reaming with non-adjustable reamers.
- 19. Repetition roller bending and/or roller forming and/or re-rolling.
- 20. Repetitive counter-sinking to stops.
- 21. Repetitive threading and/or tapping.
- 22. Rough straightening of components and/or materials using tinman's hammer and/or mallet and/or pliers only.
- 23. Screwing on and/or riveting and/or clipping of assembled louvre stiles into metal frames.

#### RATE H

- 1. Application of adhesive and/or anti-corrosive and/or protective coatings.
- 2. Cutting timber by hand and/or machine for crating purposes and/or crate making.
- 3. Dressing and/or deburring by hand and/or grinding by portable power tools.
- 4. Re-threading and/or re-tapping.
- 5. Sand and/or shot blasting.
- 6. Scrap cutting and/or baling.
- 7. Preparing work for painting and/or soldering and/or brazing.
- 8. General labouring.

## SECTION (b): INSTALLATION SECTION Subsection (b)(i): General

#### RATE AA

- 1. Installation and/or erecting of refrigeration and air conditioning plant, including piping, ductwork and insulation equipment, in field or on site (erector) (n.e.s.).
- 2. Affixing of fan coil units, washers, coils and associated articles.
- 3. Setting out of equipment in position and the aligning of such equipment, including marking out by tape and/or rule.

- 4. Use of explosive tool for fixing or fastening.
- 5. Final knocking out of dents and/or final straightening by use of hammer spoon, dolly or wrench bar.
- 6. Repairing and/or altering and/or adjusting and/or erecting on site or building of doors and/or door frames, window surrounds and curtain walling.
- 7. Moving of all components used in refrigeration and air-conditioning plants without the use of rigging equipment.

## RATE F

- 1. Supervising employees employed on classes of work scheduled below Rate F.
- 2. Spraypainting.

## RATE G

- 1. Assembling of pre-manufactured components from stock requiring no fitting or adjustment, but including deburring.
- 2. Attending cleaning and/or degreasing and/or acid and/or rinsing and/or fluxing bath.
- 3. Metal cleaning and/or degreasing and/or pickling.
- 4. Operating hand portable and/or pedestal grinding machine where the operator is not required to grind to marks and/or gauges and/or sizes and/or templets.
- 5. Repetition marking off to jigs and/or length gauges under supervision of Rate A to D employee.
- 6. Rough straightening and/or rough flattening of material, excluding use of rules and straight edges.
- 7. Straightening and/or flattening of gussets and/or cleats.
- 8. Cutting openings in walls.
- 9. Repetition hand drilling and/or tapping and/or thread cleaning.

## RATE H

- 1. Dressing and/or deburring and/or grinding by hand and/or portable power tools.
- 2. Application of anti-corrosive and/or protective coatings using brush or roller.
- 3. Affix name plates.
- 4. Buffing and/or finishing and/or polishing by hand and power tools.
- 5. Preparing work for painting.
- 6. Hand loading and/or unloading of materials.
- 7. General labouring.
- 8. Oiling and/or greasing.
- 9. Removal of rust and/or coatings.

#### Subsection (b)(ii): Piping

Piping used not to exceed 200 mm diameter and 7 mm wall thickness.

## RATE AA

- 1. Setting out of stock on floor or on bench to sketch and/or drawings and/or dimensions.
- 2. Assembling and installation of pre-manufactured components from stock, including adjustment.
- 3. Bending of tubes and/or pipes (n.e.s.).
- 4. Arc and/or gas welding of air-conditioning pipes, including light frames and brackets only.
- 5. Drilling machine work (n.e.s.).

## RATE D

- 1. Screwing and/or cutting of pipes, including resetting and/or size changing of dies.
- 2. Bending, swaging, flaring of tubes and/or sections in manually operated machine.
- 3. Dismantling of structure and/or pipe installations, including use of gas and/or electric torch.
- 4. Arc and/or gas cutting (n.e.s.).
- 5. Operating power saw (n.e.s.), including marking off with rule and/or tape only and including setting of stops.
- 6. Preliminary tack welding of jobs prior to riveting or bolting up (runs of not more than 25 mm in length).
- 7. Assembling by means of jigs and/or templets (n.e.s.).
- 8. Operating single and/or double-headed oxyacetylene profiling machine and/or single and/or multi-head straight

line cutting machine, including setting up.

- 9. Punching and/or shearing and/or cropping to jigs and/or stops, including marking off with rule and/or tape.
- 10. Welding and/or brazing, including hard and/or silver soldering of parts locating in jigs and/or parts so located as to obviate the need for a jig (n.e.s.).
- 11. Soldering (n.e.s.).
- 12. Soft soldering and/or sweating by hand.
- 13. Hand welding with mechanically fed electrodes (excluding pressure vessels) (including flanges as in piping).
- 14. Operating automatic arc and/or gas welding machine (excluding setting up).
- 15. Manufacture of brackets where used in piping and/or duct erection using angle iron up to  $75 \times 75 \times 6$  mm.
- 16. Manufacture of flanges where used in piping and/or equipment.

## RATE G

- 1. Repetition beveling of pipe ends.
- 2. Repetition random drilling by hand.
- 3. Repetition screwing and/or cutting of pipes and/or tubes with die heads and/or taps and/or cutters by machine, including mounting of pre-set screwing and/or cutter heads.
- 4. Repetition swaging and flaring of pipes.
- 5. Operating pipe cutting machine (excluding setting up).
- 6. Repetition threading and/or tapping by machine (n.e.s.).
- 7. Operating power saw for repetitive cutting off to stop and/or length gauges, excluding setting of stops.
- 8. Screwing machine operating, excluding setting up.
- 9. Repetition installation of straight pipework.
- 10. Application of preformed insulation material to pipework.

## RATE H

- 1. Gasket cutting, using templets.
- 2. Sand and/or shot blasting.

## Subsection (b)(iii): Ductwork

# RATE AA

- 1. Marking out with tape and/or rule of centres and working lines of articles and/or material preparatory to cutting out.
- 2. Setting out of stock on floor or on bench to sketch and/or drawings and/or dimensions.
- 3. Erection of manufactured and/or fabricated ductwork and/or associated articles from drawings using a tape measure (n.e.s.).
- 4. Modifying and cutting back of straight pre-manufactured ducts, excluding final connecting.

# RATE D

- 1. Marking off of duct sections to given lengths for cutting off purposes, using only length gauges and/or tape measure and/or templets and marking material.
- 2. Marking and affixing of hangers from predetermined duct run positions (excluding use of explosive tools).
- 3. Erection of ducting and associated articles to predetermined positions under supervision of a Rate AA employee.
- 4. Cutting in and fixing of branches and spigots to predetermined positions.
- 5. Erection and affixing of fire dampers, volume dampers, attenuators, canvas connections, in-line coils and in-line fans to premarked positions under supervision of Rate AA employees.
- 6. Fixing of dampers, grilles, diffusers, constant volume boxes, fan air terminals and other air terminals to premarked positions (excluding setting out).

## RATE G

- 1. Assisting Rate D employees on fixing of dampers, grilles, diffusers, constant volume boxes, fan air terminals and other air terminals.
- 2. Repetition hand riveting (10 mm diameter or less).

3. Erection of flexible connections between spigots and air terminals.

## Subsection (b)(iv): Insulation

# RATE D

- 1. Application of insulating materials to pipe fittings, ductings and equipment using tape and or rule.
- 2. Cladding duct, pipe or equipment insulation with sheetmetal, aluminium or other rigid covering using tape and/or rule and under supervision of Rate AA employee.
- 3. Plastering of insulation applied to ducts, piping and equipment.
- 4. Application of insulation materials to walls, floors, and ceilings as used in plenums and/or plant rooms, using tape and/or rule and under supervision of Rate AA employee, including the fixing of brandering, metal sections and rigid covering or expanded metal cladding.

# RATE G

- 1. Assist in the application of insulating materials, including trimming, to manufactured duct work or installed straight pipework using a spraygun or pinspotter or strapping under supervision of Rate D employee.
- 2. Laying of fibreglass or other insulating materials on ceilings.
- 3. Applying sealant and/or adhesive.
- 4. Repetition hand riveting (10 mm diameter or less).
- 5. Touching up with paint and/or prime coating.
- 6. Repetition marking and/or tracing to templets.
- 7. Trimming by hand and/or by power tools.
- 8. Application of polyurethane foam into enclosed spaces.
- 9. Application of vapour seal to pipe and/or duct insulation, including the application of canvas or other facings.
- 10. Buffing and/or finishing and/or polishing by hand and/or power tools.
- 11. Repetition hand drilling and/or tapping and/or thread clearing.

## RATE H

- 1. Cementing of insulation.
- 2. Cleaning by hand.
- 3. Coating by brush and/or dipping.

## Subsection (b)(v): Electrical

# RATE AA

- 1. Marking out by tape or rule of the centres and working lines of articles and material for erection of cable racks.
- 2. Modifications to pre-manufactured cable racks.
- 3. Fixing of cables and/or conduit to cable racks, excluding preparation of leads for fitting of glands.
- 4. Running of cables, excluding preparation of leads for fitting of glands.
- 5. Repetition making up of cable harnesses where course of wire is marked by cleats and/or lines and/or saddles and/or fixtures and where no wiring diagram is used.

## RATE D

- 1. Erection of pre-manufactured and/or fabricated cable racks and associated articles using tape and/or rule and under supervision of Rate AA employee.
- 2. Bending of conduits by hand.
- 3. Repetition crimping of terminals and/or stripping ends of wires.
- 4. Repetition pulling through only of cables and/or wire pre-cut to predetermined lengths.
- 5. Installation of control components to predetermined positions.

## Subsection (b)(vi): Pneumatic

# RATE AA

1. Marking out by tape and/or rule of centres and working lines of articles and material for erection of pneumatic lines.

- 2. Modification to racks.
- 3. Testing for leaks by air, including preparatory work.
- 4. Supervising Rate D employees on site.

## RATE D

- 1. Erection of manufactured and/or fabricated racks and/or associated articles.
- 2. Fixing of pneumatic tubes to racks.
- 3. Installation of pneumatic controls.
- 4. Setting of pre-calibrated pneumatic controls under instruction of Rate A employee.
- 5. Testing for leaks by air under supervision of Rate AA employee.

#### SCHEDULE F

# MANUFACTURE AND/OR REMANUFACTURE OF ELECTRIC CABLE AND/OR ELECTRICAL CONDUCTORS (EXCLUDING BUSBARS)

#### WAGE RATES APPLICABLE TO OPERATIONS SCHEDULED IN SCHEDULE F ARE PRESCRIBED IN CLAUSE 3(d) OF PART II OF THIS AGREEMENT

Applicable to the operations specified herein in the manufacture and/or remanufacture of electric cable and/or electrical conductors (excluding busbars).

#### Section (a): Exceptions

Schedule G of this Agreement shall not apply to the manufacture or remanu-facture of electric cable and/or electrical conductors (excluding busbars) provided for in this Schedule.

#### Section (b): Employment at Group Z work

No person, other than a journeyman or an apprentice, may be employed on work classified at Group Z without the prior permission of the Council.

The following operations in the manufacture and/or remanufacture of electric cable and/or electrical conductors (excluding busbars):

#### **GROUP Z**

1. Plant maintenance and/or installation and/or tool-room work, namely fitting, electrician's work, tool and jig making, plating and welding (n.e.s.).

## **GROUP Y**

- 1. Crane driving (n.e.s.).
- 2. Supervisory work (other than group leaders).

#### **GROUP IX**

1. Group leader supervising operations in Wage Groups V and VI.

#### **GROUP VIII**

#### **GROUP VII**

#### **GROUP VI**

- 1. Operating catenary or vertical continuous vulcanising extrusion line.
- 2. Operating composite armouring machine with bobbins over 410 mm in diameter.
- 3. Operating extrusion machine exceeding 120 mm diameter and/or horizontal CV line.
- 4. Operating laying-up machines on paper insulated cables-shaped conductorsbobbins over one meter in diameter.
- 5. Operating lead extruder.

#### **GROUP V**

- 1. Attending heat treatment and/or vulcanising and/or drying plant.
- 2. Cutting and/or screwing of piping and/or conduit.

- 3. Group leader supervising operations in Wage Group IV.
- 4. Operating composite armouring machine up to and including 410 mm diameter.
- 5. Operating extrusion machine up to and including 120 mm diameter.
- 6. Operating hand portable and/or pedestal grinding machine (where the operator is not required to grind to marks and/or gauges and/or sizes and/or templates).
- 7. Operating internal mixer, eg. Banbury type.
- 8. Operating laying-up telephone cables machine more than 102 bobbins.
- 9. Operating rod break-down machine (inlet size 6 mm and above).
- 10. Operating stranding machine using over 22 bobbins.
- 11. Operating thermoplastic compounding and granulating plant.
- 12. Polishing and cleaning of wire-drawing dies (excluding setting up and adjusting).

## **GROUP IV**

- 1. Attending cable impregnating plant.
- 2. Capping cable ends.
- 3. Crane driving (n.e.s.) power-operated jib cranes and/or cab-operated overhead cranes and/or floor-operated power cranes, powered in all three directions and controlled by one man so employed, and confined to the movement of drums and cablemaking materials.
- 4. Group leader supervising operations in Wage Groups I to III.
- 5. Mill mixing (open roll type).
- 6. Operating armouring machine (n.e.s.).
- 7. Operating calendering machine.
- 8. Operating laying-up machines (shaped conductors) (n.e.s.).
- 9. Operating laying-up machine, more than seven circular cores (not more than 61 bobbins).
- 10. Operating laying-up machine on paper insulated cables-shaped conductors-bobbins one meter in diameter and smaller.
- 11. Operating laying-up telephone cables machine, up to and including 102 bobbins.
- 12. Operating longitudinal covering machine.
- 13. Operating paper impregnating machine.
- 14. Operating paper lapping machine (over 18 papers).
- 15. Operating stranding machine with more than seven bobbins and up to and including 22 bobbins.
- 16. Operating wire-drawing machine.
- 17. Winding, measuring, cutting and drumming cables.

## **GROUP III**

- 1. Application of anti-corrosive and/or anti-fouling and/or protective coatings.
- 2. Assembling of cable drums.
- 3. Assistant to operator of composite armouring machine, at whose direction he is responsible for changing tapes and/or jutes and filling compound pots.
- 4. Assistant to continuous vulcanising extrusion line operator, at whose direction he is responsible for controlling water pressure and opening and shutting splice box.
- 5. Assistant to operator of lead extrusion machine, at whose direction he is responsible for flaking-filling containers and monitoring conditions of cable entering lead extruder.
- 6. Bituminising steel wire and/or tape and/or paper and/or jute and/or textiles.
- 7. Loading of insulation and/or sheathing materials into warming mill and unloading of same.
- 8. Mass-measuring of materials prior to the mixing process.
- 9. Operating braiding machine.
- 10. Operating bunching machine.
- 11. Operating hot dip and/or electrolytic tinning plant (excluding preparation and/or testing of chemicals).
- 12. Operating incinerators.

- 13. Operating laying-up machine, up to and including seven circular cores.
- 14. Operating sieving and/or straining machine.
- 15. Operating slitting machine for insulating, binding or screening materials.
- 16. Operating stranding machine with seven and less bobbins.
- 17. Operating stripping machine.
- 18. Packing and/or unpacking vulcanising trays and/or cylinders, including spark testing and repairing.
- 19. Preparing ends of insulated conductors and/or cables for testing.
- 20. Repetition cutting and/or planing and/or drilling of material for cable drums to stops and/or jigs.
- 21. Vertical and/or horizontal taping and/or lapping, up to and including 18 tapes and/or papers.
- 22. Winding and/or spark testing and/or repairing and/or measuring and/or marking of cores.

## **GROUP II**

- 1. Assistants on machines with crews of more than one, who help on the machine as directed by the machine operator, and who are in attendance during machine running time, and who are engaged in loading and unloading the machine.
- 2. Boiler attendant.
- 3. Lagging of wooden drums.
- 4. Length measuring, winding and joining copper, aluminium, galvanised steel wire and/or strip.
- 5. Operating granulating machine.
- 6. Operating marking machine for single cores.
- 7. Operating twinning and/or quadding machine for control and/or telephone cables.
- 8. Sealing cable ends.
- 9. Stencil painting on drums.
- 10. Watchman's work.
- 11. Wrapping, packing and labelling of finished materials.

## **GROUP I**

- 1. Baling of scrap.
- 2. General labouring.
- 3. Scrap recovery.
- 4. Spraying and/or applying preservative coating to drums.