



Post title	Horticultural Engineer
Division / Section	Fleet and Workshops - Environment
Department	Place
Responsible To	Team Leader
Number of Posts	

Purpose of Job

To provide a comprehensive horticultural engineering maintenance and repair service to all grounds maintenance equipment throughout the City of Edinburgh and other organisation out with the Council.

Major Tasks / Job Activities

Complete horticultural engineering related work. 100%

Carry out services and repairs to machinery in accordance with Manufacturers schedules and Council servicing requirements.

Diagnose Hydraulic and Electrical System faults within the components using, laptop computer, specialist test equipment, pressure gauges and schematic diagrams and rectify problems found.

Design, machine manufacture and fabricate any necessary parts, tools and equipment.

Design and manufacture grass cutting decks to various sizes and strengths for specialist ground maintenance operations.

Carry out inspections of machinery before repair and compile a report including estimated cost, repair time and machine down time for managers/charge-hands.

Identify spare parts, materials and order from the store-person, external suppliers or manufacturers

Assist in the management, control and development of the departments on fare ware and tare misuse of equipment/machinery and provide solutions/modifications to reduce misuse and damage.

Carry out test run of machinery after repairs/service before it is released from workshop in accordance with current Health and Safety regulations.

Carry out all work in accordance with the Departments Health and Safety policy.

Do all types of tyre repairs/punctures.

Attend machine breakdown on site and carry out repairs or uplift to workshop for further investigations.

Identify damage/misuse to machinery and compile a report for Manager/Chargehand for remedial training to be implemented.

Fabricate any necessary parts including lathe work.

Carry out maintenance/repairs of ground maintenance equipment for other local authorities and external customers.

Provide all ground maintenance staff and customers with on going operator/maintenance training on current and new machinery.

Clean, prepare and paint machinery before and after service/ repairs.

Maintain and adjust all types of grass cutting units to fine tolerances.

Carry out repairs on diesel and petrol engines, fuel and ignition systems and all types of transmission systems.

Calibrate precision equipment and tools.

Calibrate and adjust sprayers and spraying implements.

Install, maintain and monitor GPRS tracking systems.

Develop, plan and programme, computerised cylindrical and surface grinding equipment for the maintenance of the grounds maintenance equipment.

Assist the Blacksmith in all types of fencing and railings.

Ensure all operations are carried out in a cost effective manner consistent with the requirements to achieve best value.

Maintain machine service and maintenance records.

Complete jobs within the required timescale.

Liaise and provide information to customers which provide a customer focussed service.

Attend team meeting, performance reviews, in-house and other training courses applicable to the post.

Undertake any other reasonable duties as directed by the Workshop Manager

Standby, all operatives must participate in the out of hours emergency standby rota within their service division.

Multi skilling, you will be expected to carry out multi trade tasks that compliment and are associated with the core work activity tasks which you carry out.

Supervision and Management of People (Numbers and type of staff)

When responsible for an apprentice will carry out on the job training and provide regular assessment and feedback to workshop manager, college supervisor and training manager.

Provides training and instruction for up to 15 departmental staff on the correct use of ground maintenance equipment.

The post holder will share with the Charge Hand Horticultural Engineer, the management and day to day responsibility for running the satellite workshop/stores.

Will be responsible for visitors while on site e.g. Dealers and manufacturers.

Creativity and Innovation

The post holder is required to solve on the job problems which arise when carrying out repair, maintenance or installation work to ensure the work is completed to an acceptable standard. They are also required to ensure that all sites are a safe place to work, this may require problem solving skills / risk assessments to ensure work is able to progress safely.

The post-holder is required to use their initiative without prompt or specific instructions.

Carry out specialist electrical, mechanical, hydraulic and pneumatic fault diagnosis using computer and manual testing equipment.

Required to fabricate parts for cutters, shafts, metalwork components etc. Make and replace blades, hydraulic hoses and wires in wiring looms.

Must be able to create and design a computer programme for Cylindrical Grinder machinery.

For on site repairs and recovery will use technical procedures to safely release hydraulic systems to enable recovery.

For winter weather operations will design, manufacture and modify equipment and adapt grass cutters to mini snow ploughs and gritters.

Inspect, assess and provide to all customers detailed quotations of work to be carried out.

Carry out long term proto type machinery testing.

Recognise emerging challenges and opportunities and develop procedures to aid service improvements within the workshop but also within the wider operational service.

Initiate review process for all equipment. Identify where service improvements or financial savings can be made and make recommendations to senior management.

Contacts and Relationships

The post holder will be required to develop and maintain effective relationships with a diverse range of people and organisations, including:-

- Manufacturer's technical staff to seek technical advice and assisting in the development and trialling of new machinery.
- Provide training and instruction on the correct use of ground maintenance equipment to council staff and customers.
- Taskforce Managers, Parks and Green Spaces staff, Specialist Ground Maintenance staff, and customers from other council departments etc to discuss and advise on availability of equipment, identify misuse of equipment and identifying training issues.
- External customers to maintain and repair machinery.
- Liaise with other councils on the effectiveness of machinery to aid improvement to the service.
- Parts suppliers to source materials and parts.

- Workshop Supervisor/ Charge Hand in relation to operational provision, health and safety, performance and to resolve complex technical problems.
- Professional bodies in relation to legislative and/or technical advice/guidance.
- Statutory authorities e.g. John Deere, Kubota etc in relation to legislative requirements.
- Liaise with dealers re ongoing warranty issues and machine reliability.
- Members of the public when working on site to provide information.
- Fleet Services in relation to vehicle checks and maintenance.
- Emergency services when dealing with roadside breakdowns.

Decisions (Discretion)

The post holder will be required to make the following decisions:

- Solve operational problems that arise whilst carrying out their duties.
- Carry out repairs to machinery that has not been reported by operators.
- Plan the most efficient cost and time to carry out repairs and service machinery.
- Attend and take part in machine evaluation and report findings to management.
- Decides on the viability and cost implications of equipment whilst carrying out service/repairs and report proposals to management.
- Decides on the competence of those using the machinery and recommend training.
- Plan and prioritise work load to ensure standards are met.
- Decides on the correct materials and equipment for each job.
- Decides on competency of Apprentice before allocating tasks.
- Will take part in the evaluation of new machinery before purchase, and report to management on the most efficient and cost effective purchase.

The post holder may recommend to management whether to repair or replace machinery or the most economical solution to a repair/installation.

The post holder may advise and recommend to customers the correct equipment for each particular job.

Decisions (Consequences)

The decisions made in the course of the job will impact on the health and safety of themselves, customers and colleagues and customer satisfaction.

Decision making and planning are essential to ensure required schedules and standards are met and the overall service delivery within the workshop and operational services are maintained.

Planning the work process in the most appropriate way will result in cost savings.

Ensure that H & S procedure are followed and make recommendations.

Resources

The post holder is responsible for the safe use and safekeeping of equipment, tools, specialist test equipment, scientific instruments, large plant, machinery and vehicles including an LGV recovery vehicle with winch and beaver tail.

The post holder will carry up to £30k of plant equipment and £10k of stock within the vehicle allocated to them. They are fully responsible for the safe keeping, monitoring and replenishment of these resources.

Shares responsibility with the Charge Hand for the security and locking up of the satellite workshop.

The post holder is required to complete Operators training records, machine service and maintenance records, vehicle check sheets, standby sheets and job sheets.

Environment – Work Demands

The post holder is fully responsible for completing the repair/maintenance once a full assessment has been carried out by them. They are expected to make the assessment and inform the customer.

The post holder is required to deal with the changing priorities within the workshop and operational service delivery. This is due to the changing requirements and demands on the service and customer needs.

The post holder in conjunction with the Charge Hand organises the day to day running of a satellite workshop/stores in the west of the city.

Can be called to assist other staff groups, depending on the operational demands of the service.

In emergency situations work out of hours to recover broken down machinery and where required make safe public areas.e.g. Broken railings due to RTA.

When responsible for an apprentice, will assess competency, then allocate and check work on completion.

Environment – Physical

This is an operational post and physical demands such as manual handling, carrying, bending, kneeling and generally working in awkward spaces are required as part of the job.

The post holder will be required to manually handle heavy grounds maintenance machinery and parts e.g. sit on and push mowers, tractors, rotivators and metalwork components. This will include loading/unloading of delivery and operational vehicles.

The post holder will be bending, pushing, pulling, walking and standing for long periods of time when repairing and maintaining machinery. Will be standing, lying on their back, on hands and knees bending in awkward spaces under machinery for the duration of the shift.

Environment – Working conditions

The post holder is required to work in a hazardous workshop environment for the majority of the time and is exposed to high levels of vibration from power tools and machinery, noise and fumes from machinery, dirt, oils and various chemicals.

Required to take care when undertaking repairs at roadside breakdowns.

May be exposed to rotting waste, pet excrement sharps etc when working on site.

The post holder will work outside undertaking repairs in all weather conditions in order to provide a continuation of the service.

The post holder must be tactful when dealing members of the public as they may be subject to challenging behaviour.

The post holder must take care due to the potential hazards from working with heavy machinery, cutting blades on machinery, power tools, welding equipment etc.

The post holder will have to take care when carrying out repairs or uplifting machinery/plant from the roadside to the workshop.

Knowledge and Skills

The post holder must have:

- An appropriate SVQ Level 3 or City and Guilds qualification in Horticulture or Agriculture
- An Abrasive Wheels Certificate.
- A Counter Balance Fork Lift licence.
- A full UK driving licence
- CPC for driving LGV's
- BAGMA, British Agricultural of Garden Machinery Association, Handover & Installing Products and Services to Customers.
- Certificate in the Maintenance, Repair and Safe use of Chain Saws
- Certificate in the Safety Inspection of Compressed Gas Cylinders and equipment.
- Certificate in the Repair and Use of Chainsaws.

The post holder must be part of the ongoing BAGMA recognised Cutting Edge Training Scheme.

The post holder must be able to carry out detailed quotations of work to be carried out.

Good communication and management skills when training operators in the use of equipment / machinery.

Must have the necessary technical training to operate computer controlled cylinder and surface grinding machinery and the GPRS tracking systems.

Must have experience of working with operational grounds maintenance equipment, working on own initiative, as part of team and working in a workshop environment.

Must have past Manufactures Technical Training, Ransomes, Kubota, John Deere etc.

Must be trained in Webster high pressure test equipment and electrical systems.

Trained and competent in the use of Microsoft, Word, Excel etc

Trained to approved Health & Safety standards in the use of all types of welding and Oxy Acetylene cutting.

Must have a high level of manual dexterity when working on intricate hydraulic and engine parts and under machinery.

Have a high level of knowledge and understanding in Health & Safety Policies and Procedures.

Health and Safety

The Council must abide by relevant health & safety and employment law, as well as the common law duty of care. All members of staff are required take care for their personal health and safety and that of others who may be affected by their actions or inactions. You are therefore required to carry out your duties in a safe manner in accordance with instructions and in compliance with safety rules/procedures, regulations and codes of practice. You are required to advise your line manager if you become aware of any unsafe practice or condition or if you have any other safety concerns and should comply with accident and near-miss reporting procedures.

If you supervise, manage or lead other staff, you are also responsible for ensuring that the Council's operations are carried out in such a way that ensures, so far as is reasonably practicable, the health, safety and welfare of those staff and that of any others who may be affected. You will therefore conduct relevant risk assessments and assign duties with appropriate instructions, in compliance with safety rules/procedures, regulations and codes of practice. You will address and/or escalate any issues of any unsafe practice, condition or any other safety concerns you identify or that are brought to your attention, taking appropriate advice as necessary and will ensure that accident and near-miss reporting procedures are understood and complied with.

Organisation Structure

(attach structure - specific to area of operation).