

# Field Service Engineer

## MODEL RISK ASSESSMENT

Sustainability & Management Systems

Canon (UK) Limited

First created September 1996

Reviewed annually

Revised 24-Jul-2018 v 5.4

<b>Job Title:</b> Field Service Engineer		<b>Department:</b> All UK & Ireland			
<b>Description:</b> Service & Repair of Information Technology Equipment		<b>Review Date:</b> 24-Jul-2018			
<b>Department:</b> All Field Service Representatives (Document Solutions)					
IDENTIFIED HAZARD TYPES:		Detail	Initial Risk Rating	Risk Controls	Final Risk Rating
List Key	Description				
1 9 10 11 12 13	General Workplace Walking & Working Surfaces / Stairs Factory Transport Temperature / Light / Ventilation Slips, Trips and Falls Falling Objects	For the purposes of a Model risk assessment of a field based job function it is not possible to identify hazard types which may be inherent on remote customer locations. These environmental issues cannot therefore be risk assessed, however, it is our expectation that each customer will complete their own risk assessments of their workplace and fully comply with the Health & Safety at Work Act etc. 1974.  Experience has however shown over the years since our original assessment, that this will not always be the case. It in fact, is reasonable to expect a range of adverse site / workplace situations i.e. Poor lighting or ventilation & a lack of space.	10	The risks associated with these factors can be significant, therefore our Service Representatives are directed to carry out their own 'natural' risk assessment of the general workplace escalating to management as necessary all significant hazards identified. The Service Representative is expected to continue work only where the documented safe system of work & criteria for good housekeeping can be implemented effectively & safely. Engineers are instructed to report any hazards "observed", (which may affect our installation or work methods) to a senior member of customers staff and their Service Management for necessary remedial action.	3
2 3 6 8 15 16	Manual Handling Harmful Substances (chemicals, dust, fumes, vapour) Hazardous Energy Sources (working near live electrical conductors & Lone working) Hot Work Use of Hand Tools Handling Sharp Parts of Machinery	Manual Handling, Use of Cleaning Agents, Handling of Toner Powder, Working on Hot Assemblies & Use of Hand Tools will naturally present some risk if not managed or properly controlled.  <b>Working near live conductors &amp; testing hazardous voltages</b> (for Fault Analysis Purposes) presents a risk of electrocution; whilst the need for such work is minimal.  <b>Lone working</b> presents a risk in that; timely aid may not be available in the event of an incident or ill health.	10	All Service Representatives undergo a mandatory training program which is supported by 'in field' ongoing coaching and documented best practice support material.  Competence assessment as a primary risk control measure, this is supported by documented safe systems of work and 'in field' work practice development.  Hazardous work such as 'testing hazardous voltages' is not carried out in a lone situation. For all other work, suitable communication is established with the host employer and agreed prior to any identified requirement for lone work. (as described in our 'solitary working' procedures).	2

5	Work Equipment: (working on Unguarded Machinery, able to isolate source of energy & deterioration of electrical integrity)	<p><b>Failures of source energy integrity &amp; isolation</b></p> <p>Most of our printing systems are classified as portable appliances and as such 'isolation' is by means of removing the three-pin plug from the mains outlet. Assuming no unauthorised adaptations, isolation will present no risk. Three phase machines must be isolated by means of disconnection &amp; by isolator with "lock off" and emergency stop facility.</p> <p><b>Servicing electrically faulty equipment.</b></p> <p>Electrical tools &amp; test equipment can suffer failure and loss of integrity through constant use.</p>	10	<p>Engineers are equipped with and trained to use (self-testing) mains socket testers to assure correct functionality &amp; to optimise mains power safety.</p> <p>Machines are installed in accordance with laid down instructions.</p> <p>With respect to continued electrical integrity; many customer / owners will have P.A.T. testing scheduled and carried out. In addition to this the representative conducts full product safety checks as appropriate before and after service work is performed. These tests are more rigorous than the standard P.A.T. regime.</p> <p>Tools are regularly checked by the engineer (user). Whilst formal checks/ tests are carried out regularly &amp; records kept in order to establish trends and remedial action.</p>	2
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List Key	MANUAL HANDLING (Task) Description	Detail	Initial Risk Rating	Risk Controls	Final Risk Rating
1	<b>MANUAL HANDLING ACTIVITY</b> (Excessive carrying distances & One handed lifting)	Walking Service Engineers at risk from carrying equipment between service calls.  Increasingly – mobile Service Engineers have to walk greater distances from public parking facilities.	5	Engineers are encouraged to minimise their personal load, i.e. tools and equipment, in order to reduce adverse physical stress and effort. Carrying equipment ‘backpacks’ & ‘trolleys’ are constantly undergoing review and development with this in mind. They are also encouraged to take full advantage of public transport and the use of courier services for the delivery of spare parts. Sensible adherence to good practice guidelines should result in very low risk. However, a more specific assessment of the risks in this area is separately available for individuals with less than ‘normal’ fitness levels or with impaired abilities.  Excessive walking distances can also apply to mobile engineers in such cases the minimising of personal loads as stated above are taken to apply equally, as is the introduction of ‘backpacks’ & ‘trolleys’ (bespoke carrying equipment).	2
2	<b>UNSATISFACTORY BODILY MOVEMENT OR POSTURES</b> (Holding the load at a distance from the trunk, Lifting above the shoulder or below the knee)	Mobile Service Engineers may become involved in holding a load at a distance from the trunk when loading and unloading the vehicle.	5	This should be both rare and very brief - where possible completely avoided since the drivers own management of vehicle stock can and should eliminate the need for this type of activity.	2
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MANUAL HANDLING (Load)		Detail	Initial Risk Rating	Risk Controls	Final Risk Rating
List Key	Description				
1	<b>WEIGHT AND SIZE</b> <ul style="list-style-type: none"> <li>• Too heavy</li> <li>• Too bulky or awkward to lift</li> </ul>	Movement of machinery and handling of large machine components.	5	Training on the special needs of any specific equipment is carried out on the product training courses which are a mandatory element of the Service Engineers training program. Where required instructions state the requirement of more than one person to handle the item (team lift activities) and any other special requirements such as detachable handles and the identifying of lifting points/correct techniques to be used.	2
2	<b>CONDITION OF LOAD</b> <ul style="list-style-type: none"> <li>• Hot / Cold</li> <li>• Wet / Slippery</li> <li>• Dirty / Contaminated)</li> </ul>	Service Engineers do encounter, during their service work, hot, slippery and/or dirty loads, which take the form of sub-assemblies.	4	Risk is managed to low levels by the engineer working in accordance with their product specific training and laid down safe systems of work. As a result, hot units are allowed to cool prior to work and slippery or dirty components are (as far as is practicable) cleaned prior to handling.	1
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MANUAL HANDLING (Individual)		Detail	Initial Risk Rating	Risk Controls	Final Risk Rating
List Key	Description				
1	<b>SUITABILITY</b> <ul style="list-style-type: none"> <li>Creates a hazard to pregnant, unhealthy or disabled persons</li> </ul>	Movement of machinery and handling of large machine components in respect of affecting those of less than normal fitness levels.	5	Some tasks would be unsuitable for new and expectant mothers, unhealthy or disabled Service Engineers, however, these are not expected to report for normal duties if not fit to do so. Separate assessments of risk are carried out for such individuals whereupon we will endeavour to meet their needs; and or assist in the recovery of the unwell.	3
2	<b>TRAINING</b> <ul style="list-style-type: none"> <li>Require specialised training</li> <li>Require lifting training</li> </ul>	Individuals using either the wrong techniques or not understanding the need to consider their own ability.	5	Training on the special needs of any specific equipment is carried out on the product training courses which are a mandatory element of the Service Engineers training program. Where required instructions state the requirement of more than one person to handle the item (team lift activities) and any other special requirements such as detachable handles and the identifying of lifting points/correct techniques to be used.  In addition, local training & refresher is carried out – focusing on correct techniques and individuals assessment of their own ability.	3
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List Key	WORK EQUIPMENT Description	Detail	Initial Risk Rating	Risk Controls	Final Risk Rating
1	<b>GUARDING OF MACHINERY</b> <ul style="list-style-type: none"> <li>Moving machinery which is not guarded adequately</li> <li>Machinery which is not fitted with adequate protection devices</li> <li>Guards, interlocks or protection devices NOT regularly maintained</li> <li>Guards easily removable or by-passed</li> <li>Guards restrict the view of operation</li> <li>Working without protective devices, e.g. for running adjustments?</li> </ul>	<p>Risk assessment of these areas is separately catered for in our product development undertaking, however, the following considerations should be made regardless of ongoing product safety improvements.</p> <p>Whilst the machines in question have operator protection in the form of fixed panels and covers, these are often removed by the Service Engineer during servicing and maintenance. There are "safety" switches to remove the risk of danger in the case of interlocked opening doors, however, our employees are supplied with safety interlock tools which override the protective switches to allow running machine adjustments.</p>	9	<p>Engineers are specifically trained in the safe methods &amp; permissible circumstances for the use of override tools.</p> <p>The design prohibits the unsafe reassembly of panels and covers and the Service Engineer will take all reasonable steps to assure the safety of others whilst the product is in this condition.</p> <p>All guards and interlocks are routinely checked on service visits for proper functionality whether these have been overridden during the service visit or not.</p> <p>In addition engineer ongoing personal development activity by supervisors ensures full implementation of risk controlling policy (i.e. the safety check regime) and Safe Systems of Work.</p>	3
3  4	<b>TEMPERATURE</b> <ul style="list-style-type: none"> <li>Equipment LIKELY to cause injury by burning or scalding</li> </ul> <b>CONTROLS</b> <ul style="list-style-type: none"> <li>Self-starting or restarting</li> <li>Controls NOT requiring deliberate action to invoke</li> </ul>	<p>The risk of burning, residual energy after isolation and the possibility of self-initiated machine actions differ from one product to another and with the use of different technologies – therefore this assessment considers the worst case.</p>	7	<p>Risks are reduced to a near negligible level by product risk assessment &amp; subsequent design developments. This risk reduction is further enhanced by continuous product / refresher training for all Service Engineers to ensure full awareness of the risks.</p>	2
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PERSONAL PROTECTIVE EQUIPMENT List Key	Description	Detail	Initial Risk Rating	Risk Controls	Final Risk Rating
1	<b>PARTS OF THE BODY AT RISK</b> (Is PPE provided, Is it necessary) <ul style="list-style-type: none"> <li>Eyes</li> <li>Hands</li> <li>Skin</li> <li>Respiratory System</li> </ul>	Relatively low risk of personal injuries to Service Engineers in their role of installation, maintenance and repair of Information Technology Equipment & Systems.	3	Company Health & Safety guidelines for Service Engineers are clearly laid down, instructed, regularly revised, and reinforced by field coaching in order to negate the need for P.P.E.  The main thrust of the guidelines places responsibility upon the field based personnel to use careful cleaning techniques, and <u>proven safe</u> testing techniques.  We do on occasions issue un-powdered 'Nitrile' gloves for use with bubble jet inks, this is for convenience & welfare issues only to prevent staining of the hands.	1
2	<b>Injury / Health Risk Type:</b> <ul style="list-style-type: none"> <li>Stabs, cuts, grazes</li> <li>Heat, fire</li> <li>Electrical</li> <li>Radiation</li> <li>Dust, fibres</li> <li>Vapour</li> <li>Splashes, spurts</li> </ul>	Sharp parts of machinery and use of hand tools.  Burns from hot parts of the machine.  Electric shock from live testing.  High intensity light from scanning lamps during running adjustments. Visible & invisible laser light emitted by Class 1 – 3B fully enclosed low hazard devices.  Release/escape of toner powder / Bubble jet ink.  Evaporation of alcohol based cleaning solvents.  Splashes into eyes from cleaning agents.	9	Awareness training, tuition on use of correct tools and practice monitored.  Awareness training/advised allow to cool before work and practice monitored.  Proven safe testing techniques are trained and training material doubles as a working document, and practice monitored.  Awareness training provides precise and full information re: severity of hazard, along with best practice work methods to avoid direct exposure, and practice monitored.  Minimised by trained best practice methods and use of careful cleaning techniques & specialised cleaning equipment.  Use is restricted to avoid any possibility of respiratory irritation and audited.  Use is restricted and careful cleaning techniques are advised.	3
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