

63-02 Automatic Vehicle Barrier

Date: 17 Aug 2021

Version: 6

Unit of Measure: Nr

Summary	
Frequencies	Tasks
6M (Months) 60 mins	3 4 5 6 7 8 9 10 11 12 13
0U (Unspecified)	1 2
Annual Timing	120 mins

Introduction
<p>Inform client before withdrawing or restoring electricity supply to barrier.</p> <p>Isolation electrically should be secure i.e. it should either be at the point of work or precautions should be taken to prevent anyone else switching on again when work is in progress. This may require a Permit To Work.</p> <p>Please refer to the overarching introduction (SFG 00-01) to make sure you are of the correct skill level as indicated within the task schedule to carry out the described works. Ensure you have read and understood the manufacturer's recommendations, carried out risk assessment(s) on each item of plant to identify the correct frequency of maintenance, identified all safety procedures that need to be applied and recorded in order to carry out the work in a safe and reliable manner.</p> <p>Notes: Refer to (SFG 63-06) for information on a Manual Vehicle Barrier.</p>

Display Order	Tasks
1	<p>Formal visual inspection of electrical equipment</p> <p>Criticality: Red Frequency: 0U Skill Set: Electrical</p> <p>Action: Before this formal visual inspection is carried out, the test operative should obtain a copy of the previous findings, if available, so that any deterioration can be assessed and advice given accordingly.</p> <p>The formal visual inspection shall be recorded and include the following checks:</p> <ol style="list-style-type: none">1 The equipment is installed and operating in accordance with the manufacturer's instructions including:<ol style="list-style-type: none">1.1 Correct voltage.1.2 Frequency.1.3 Operating current.1.4 Electrical protection (fuse, breaker, RCD, etc.).1.5 Secure terminations, etc.2 The suitability of the equipment for the environment including:<ol style="list-style-type: none">2.1 Mechanical/heat damage.2.2 Weather.2.3 High/low temperatures.2.4 Water.2.5 Pressure.2.6 Dirty conditions.2.7 Corrosive conditions.2.8 Flammable/explosive substances, etc.3 Switching & isolation of equipment including:<ol style="list-style-type: none">3.1 Normal functional use.3.2 Perform maintenance (lockable).

<p style="text-align: center;">1 continued</p>	<p>3.3 Emergency disconnection, etc.</p> <p>4 Where possible, the user should be consulted if they are aware of any faults and correct operation.</p> <p>5 Carry out user checks including inspect:</p> <ul style="list-style-type: none">5.1 Equipment casing/housing - check for cracks, warping, discoloration, scorching or burns.5.2 Flex/cable - Check for damage or splits in the cable, twisting or repairs with adhesive tape.5.3 Accessories, including extensions and adapters - Check the plug and sockets, length of cable. Reels should be uncoiled when being used.5.4 A valid label is attached.5.5 Look for a 'T' or test button on RCD device. Press before use to check RCD trips and disconnects equipment. Reset after test.5.6 Plugs, sockets, fused connection unit or similar - check for heat damage, loose or bent screws/pins, and broken and loose casings. <p>6 Plugs, couplers and the like (unless non-rewireable) should be opened and the connections within inspected. Fuses, if fitted, should be checked for correct rating. (See current IET code of practice.)</p> <p>If equipment is found to be damaged or faulty, it should be immediately removed from use, reported, and labelled. The duty holder must be informed of any equipment failing the formal visual inspection.</p> <p>Notes:</p> <ul style="list-style-type: none">1 The scope of this inspection includes the electrical equipment and the supply cable from the point of isolation (where available) to the electrical equipment. The point of isolation is usually the demarcation boundary between the electrical equipment covered by this Schedule and the fixed wiring electrical installation.2 The inspection should be undertaken in accordance with the current IET code of practice.3 The findings from the inspection are to be recorded, a model form is provided within the current IET code of practice. (Specialised electrical equipment may require further tests necessitating a more detailed form.)
<p style="text-align: center;">2</p>	<p>Combined inspection and testing of electrical equipment</p> <p>Criticality: Red Frequency: 0U Skill Set: Electrical</p> <p>Action: Before this combined inspection and testing is carried out, the test operative should obtain a copy of the previous findings, if available, so that any deterioration can be assessed and advice given accordingly.</p> <p>The combined inspection and testing shall be recorded and include the following checks:</p> <ul style="list-style-type: none">1 A preliminary visual inspection.2 Suitable means of isolation of equipment.3 Where necessary, identify and disconnect ancillary equipment e.g. control/comms.4 Undertake user checks from the formal visual inspection and shown below.5 The suitability of the equipment for the environment including:<ul style="list-style-type: none">5.1 Mechanical/heat damage.5.2 Weather.5.3 High/low temperatures.5.4 Water.5.5 Pressure.5.6 Dirty conditions.5.7 Corrosive conditions.5.8 Flammable/explosive substances, etc. <p>The in-service testing, to be completed, in the order shown:</p> <ul style="list-style-type: none">1 A protective conductor continuity test on Class I equipment.2 An insulation resistance test.3 Where required, a protective conductor current/touch current test.4 Where required, RCD operating time test.5 A functional check of the equipment. <p>If equipment is found to be damaged or faulty, it should be immediately removed from use, reported and labelled. The duty holder must be informed of any equipment failing the combined inspection and testing.</p> <p>Notes:</p> <ul style="list-style-type: none">1 The scope of this inspection includes the electrical equipment and the supply cable from the point of isolation (where available) to the electrical equipment. The point of isolation is usually the demarcation boundary between the electrical equipment covered by this Schedule and the fixed wiring electrical installation.

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2 continued	<p>2 The inspection should be undertaken in accordance with the current IET code of practice.</p> <p>3 The findings from the inspection are to be recorded, a model form is provided within the current IET code of practice. (Specialised electrical equipment may require further tests necessitating a more detailed form.)</p>
3	<p>Barriers</p> <p>Criticality: Amber Frequency: 6M Skill Set: Electrical</p> <p>Action: Check vertical and horizontal positions.</p> <p>Notes:</p>
4	<p>Limit switches</p> <p>Criticality: Amber Frequency: 6M Skill Set: Electrical</p> <p>Action: Inspect condition and adjust as necessary.</p> <p>Notes:</p>
5	<p>Safety switch</p> <p>Criticality: Amber Frequency: 6M Skill Set: Electrical</p> <p>Action: Check operation.</p> <p>Notes:</p>
6	<p>Barrier operation</p> <p>Criticality: Amber Frequency: 6M Skill Set: Electrical</p> <p>Action: Check operation and condition if push button system. Check operation of card reader or magnetic operator (by driving vehicle over magnetic operator).</p> <p>Notes:</p>
7	<p>Intercom system (if fitted)</p> <p>Criticality: Amber Frequency: 6M Skill Set: Electrical</p> <p>Action: Check operation of intercom and interface systems remote operation (if fitted).</p> <p>Notes:</p>
8	<p>Drive motor and brushes</p> <p>Criticality: Amber Frequency: 6M Skill Set: Electrical</p> <p>Action: Check for correct operation.</p> <p>Notes:</p>
9	<p>Motor overload</p> <p>Criticality: Amber Frequency: 6M Skill Set: Electrical</p> <p>Action: Check for correct operation and adjust as necessary.</p> <p>Notes: See also Motors - Drive Elements (SFG 39-01).</p>
10	<p>Electrical terminations and wiring</p> <p>Criticality: Amber Frequency: 6M Skill Set: Electrical</p> <p>Action:</p> <ol style="list-style-type: none"> 1 Check the current drawn on operation and check with the initial design data. Investigate any significant shortfall. 2 Check any heaters and thermostats associated with the equipment. 3 Ensure earthing connections are secure. <p>Notes:</p>
11	<p>Mechanical items</p>

11 continued	<p>Criticality: Amber Frequency: 6M Skill Set: Mechanical</p> <p>Action:</p> <ol style="list-style-type: none"> 1 Check gearbox oil levels (where fitted) and top-up as necessary. 2 Check all mechanical parts for adjustment and tensions of any driving chains and the condition of any shear bolts, or shear plates. 3 Check top and bottom limits for positions on cam and adjust as necessary. <p>Notes: Responsibility for the maintenance of these items should be agreed with the client.</p>
12	<p>Induction loop</p> <p>Criticality: Amber Frequency: 6M Skill Set: Electrical</p> <p>Action: Check operation.</p> <p>Notes:</p>
13	<p>Inspection and maintenance</p> <p>Criticality: Amber Frequency: 6M Skill Set: Mechanical</p> <p>Action:</p> <ol style="list-style-type: none"> 1. Inspect and sweep out any debris from motor pits and rail gullies. 2. Clean and lubricate hinge bearings, locks, drive systems and control gear. 3. Check mechanical clearances and running tolerances. 4. Check physical stops at each end of travel of gates/barrier arms. Report any signs of damage or over-run. 5. Upgrade processor firmware to approved version of safety software to meet current safety standards (if applicable). 6. Check operation of any lamps or signals associated with the barrier. <p>Notes: Risk based to ensure compliance with current regulations, at least 12M. Operating system may fall under PSSR. Inspect and maintain in accordance with current regulations.</p>

Legislation, Regulations and Guidance
<p>http://shop.bsigroup.com/ProductDetail?pid=000000000030342613 BS 7671:2018+A1:2020. Requirements for Electrical Installations. IET Wiring Regulations.</p>
<p>http://shop.bsigroup.com/ProductDetail?pid=000000000030033501 BS EN 12445:2001 Industrial, commercial and garage doors and gates. Safety in use of power operated doors. Test methods</p>
<p>http://shop.bsigroup.com/ProductDetail?pid=000000000030298213 BS EN 12453:2017 - Industrial, commercial and garage doors and gates. Safety in use of power operated doors. Requirements and test methods</p>
<p>http://shop.theiet.org/code-of-practice-for-in-service-inspection-and-testing-of-electrical-equipment-5th-edition IET Code of Practice for in-service inspection and testing of electrical equipment</p>