For guidance on managing construction health risks go to
www.hse.gov.uk/construction

Redistributed under licence from HAE by Alliance Tool Hire Ltd. Licence expires on 31/01/2024

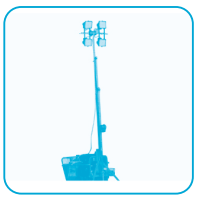
1024 Safety Guidance
DIESEL v:112016

ALLIANCE TOOL HIRE of course!

Lighting Towers

The rules and procedures in force where people are at work may require the person responsible for this equipment to carry out a specific risk assessment.

It is important to read all of this leaflet BEFORE you use the Mobile Lighting Tower



1. Electricity produced by this equipment can be hazardous and must always be used with great care.
2. Diesel is flammable. Take care not to cause a fire or explosion.
3. This lighting tower's generator must only be used as instructed by the hire company. Some models may have a spare socket permitting the use of an appropriate tool. Do not tamper with the wiring, or alter connections to plugs and sockets.
4. This equipment is designed to provide a self – contained mobile lighting system. The lights can be evaluated several meters above the ground, usually on a hand operated telescopic mast.
5. This equipment may cause injury to persons or damage to itself or other property if it is not transported and set up carefully and properly.
6. If you have not used mobile lighting equipment before, take the time to study and understand it, so it can be used safely.
7. Plan how to do the job and try to foresee any problems that may occur so that you can safely deal with them.
8. Anyone working near the equipment should have at least the following items of personal protective equipment: Ear muffs or plugs giving protection for levels up to 89db (A).
9. This lighting tower is designed must not be set up or used by minors, or by anyone under the influence of drugs or alcohol.
10. This lighting tower is designed for operation by an able bodied adult. Anyone with either a temporary or permanent disability must seek expert advice before using it.

Every effort has been made by HAE/EHA to ensure that the information given in this document and supporting material is accurate and not misleading. HAE/EHA cannot accept responsibility for any loss or liability perceived to have arisen from the use of any such document/material. Only Acts of Parliament and Statutory Instruments have the force of law and only the courts can authoritatively interpret the law.

HANDLE START *(continued...)*

3. When the engine has started, take the handle off and store in the proper place.
4. If you let go of the handle when the engine fires up, do not try to grab it. Stop the engine using the stop control. Then start the engine again.
5. Never stop the engine using the decompression lever. This may damage the engine and will be regarded as misuse by the hire company. Only use the proper RUN / STOP control.

REFUELLING

1. No smoking.
2. When refuelling in the dark, a safe alternative light source will be needed that will not ignite the diesel fumes, before continuing.
3. Stop the engine and let it cool down.
4. Clean the filter cap and the area around it to prevent dirt falling into the diesel tank.
5. Use a funnel and clean diesel when refuelling. Do not spill any diesel on yourself or the machine.
6. Wipe any fuel off the machine. Dispose of diesel soaked cloth carefully.
7. If any fuel is spilt on the ground, wipe it up and cover it with soil.
8. If any diesel is spilt on your clothes, change them straight away.
9. Put all fuel caps back on properly, and move the fuel can to a safe, cool place.

USING THE LIGHTING TOWER

1. Keep a close check on any cables that are being used – especially extension cables. If they appear to be damaged in any way, stop the generator and replace them.
2. The generator has fuses or circuit breakers to protect it in case of overload. If you think a fuse has blown, get a competent person to replace it.
3. The generator may switch itself off if it gets too hot. This may mean that too much power is being drawn from it or that the oil level is low. If this happens the lights will go out. Be prepared for this.
4. Allow the generator to cool down before restarting. If this happens repeatedly, have the generator checked by a competent person or hire the company.
5. Make sure the generator and the lighting tower are safe before leaving them unattended.
6. If the equipment does not work properly, do not try to repair it. Contact the hire company.

Keep this leaflet safe as it may be required for reference at a future date

v:112016

HIRE ASSOCIATION EUROPE

Hire Association Europe
2450 Regents Court
The Crescent
Birmingham Business Park
Solihull B37 7YE

Telephone: 44 (0) 121 380 4600
Fax: 44 (0) 121 333 4109
Email: mail@hae.org.uk
website: www.hae.org.uk

Before Starting Work...

WORK AREA

1. Do not use this lighting tower where there is a danger of explosion. It will ignite fumes from petrol or gas cylinders.
2. Using this equipment indoors or in confined spaces could cause **fatal** carbon monoxide poisoning. **Never** use it in domestic premises and only use it in other indoor situations if its suitability and the ventilation required has been **fully** assessed. Mechanical extraction ventilation will almost always be required.
3. Set up the lighting tower on a firm and level surface well away from any overhead power lines. There must be no part of the lighting tower within 5m (16ft) of any overhead cable. Do not forget that high – voltage electricity can jump across large gaps.
4. The generator has a canopy to protect it from normal weather conditions, protect it from rain or spray.

OPERATORS

1. The following items of personal protective equipment (PPE) are the minimum that should be worn whenever using this lighting tower. Particular jobs or environments may require a higher level of protection.
2. This equipment is likely to cause noise levels up to 89db (A). Wear appropriate ear muffs or plugs giving hearing protection for this level as a minimum when continuously working near to the generator.
3. Anyone who is working near the lighting tower will also need to wear appropriate personal protective equipment.

LIGHTING TOWER

1. Check the generator, engine, wheels and tyres, and all equipment. Check that the telescopic mast cranks up and down easily. Do not use anything found damaged – contact the hire company.
2. Do not attempt to move the mobile lighting tower while the mast is elevated, or while the generator is running.
3. If the lighting tower is the type that can be towed behind a vehicle, the mast must be lowered, stop the generator, and make safe before towing.
4. Some generators are fitted with a large capacity fuel tank to enable the lighting to remain on all night long.
5. The generator which is part of the lighting tower may not be suitable for use with some power tools that have electronic speed control, and sensitive electronic equipment such as laser surveying, video, or computer equipment. Check with the hire company before connecting anything other than the lighting tower.
6. Make sure you understand all of the controls. Before using the equipment, know how it works.

ELECTRICAL CONNECTIONS

1. The electrical supply from a generator should be treated with greater care than normal mains electricity.
2. Do not use the generator to provide power for tools or equipment, other than the lighting tower, unless the generator has a suitable socket provided.
3. The generators on some lighting towers provide both 110V (yellow) sockets and 230V (blue) sockets. Use only the right tools in the right sockets.
4. Use 110 volts supply whenever possible. If using 230 volts use an red plugged directly into the generator. Plug the tool or extension cable into the red.
5. Do not use distribution boxes, or more than one tool or cable plugged into each socket, without consulting a competent person.
6. If extension cables are used, they should be kept as short as possible. Lay them out carefully where they will not get damaged, and so that the connection s will not get wet. Keep a close check on their full length.
7. Use only double insulated tools. Do not use earthed tools (those that need an earth wire) without consulting a competent person.
8. Check the generator's power rating against the power usage of the lights and any tool that is plugged in.
9. The generators rating will be shown on its case. It will probably be 3kVA, which means it can supply about 2,400 watts, or 5 kva, which means about 4,000 watts.
10. The lights on the tower normally take 4x500 watts, which adds up to 2,000 watts. This means on 3 kva generator there will be 400 watts spare and on a 5 kva generator there will be 2,000 watts spare.
11. Check the label on each of the tools to find their power usage, or check with a competent person. Make sure that the lights and the tools combined will not draw more power than the generator can supply.
12. In any event, certain site conditions will require that the generator is earthed and bonded. This must be done by a competent qualified electrician.

STARTING AND STOPPING THE ENGINE

If the hire company has given special instructions, follow them. If not, follow the instructions below

1. The lighting tower should be on a level surface.
2. Check that there is no electrical load on the generator; this means that all the tools and equipment that will draw power have been unplugged.
3. Check that the oil level has not fallen too low. This may automatically prevent the engine running.
4. Check that the engine and generator controls are set correctly, and that the fuel is turned on.
5. The generator will have a handle start, or recoil start. Read the instructions below for the machine.

RECOIL START

1. Make sure that the machine is held firmly so it will not move when pulling the starter.
2. Pull the starter handle slowly until you can feel that the starter has engaged with the engine, then pull it quickly and strongly. Don't pull it too far, or it might break.
3. Guide the cord back into place so that it recoils correctly.

HANDLE START

1. Fit the starting handle.
2. Do not wrap your thumb around the handle. If the engine backfires while cranking, the handle will spin backwards and could break your wrist.

(continued overleaf...)

HIRE ASSOCIATION EUROPE

Hire Association Europe
2450 Regents Court
The Crescent
Birmingham Business Park
Solihull B37 7YE

Telephone: 44 (0) 121 380 4600
Fax: 44 (0) 121 333 4109
Email: mail@hae.org.uk
website: www.hae.org.uk

Any unauthorised reproduction – manually or electronically – is STRICTLY prohibited

©Copyright Hire Association Europe April 2011

Useful Reference Points • www.hae.org.uk/businessguard