

# Atlas Copco

# Instruction Manual



Instruction Manual  
For Portable Light Tower Generator  
English

QLT M10

Engine Kubota D1105

*Atlas Copco*



**Instruction Manual**  
**For Portable Light Tower Generator**  
**QLT M10**

**Original instructions**

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ATLAS COPCO - PORTABLE ENERGY DIVISION  
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### **Warranty and Liability Limitation**

Use only authorized parts.

Any damage or malfunction caused by the use of unauthorized parts is not covered by Warranty or Product Liability.

The manufacturer does not accept any liability for any damage arising from modifications, additions or conversions made without the manufacturer's approval in writing.

Neglecting maintenance or making changes to the setup of the machine can result in major hazards, including fire risk.

While every effort has been made to ensure that the information in this manual is correct, Atlas Copco does not assume responsibility for possible errors.

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## Preface

Please read the following instructions carefully before starting to use your compressor.

It is a solid, safe and reliable machine, built according to the latest technology. Follow the instructions in this booklet and we guarantee you years of troublefree operation.

Always keep the manual available near the machine.

In all correspondence always mention the compressor type and serial number, shown on the data plate.

The company reserves the right to make changes without prior notice.

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ITEM	MAIN PARTS
A	LAMP
B	LIFTING DEVICE
C	DRAW BAR
D	CUBICLE
E	CANOPY
F	ENGINE
G	FRAME
H	UNDER CARRIAGE

# Safety Information

## Operating Safety



### **WARNING**

**Improper use of equipment could cause serious injury or death.**

Prior to using this product, carefully read, understand, and observe all instructions in this manual and the engine manual.



### **CAUTION**

**Crush hazard.**

When operating or working on the light tower, keep hands and body parts clear of pinch points.

## Prior to use

To reduce the risk of personal injury, ensure the surrounding area is in good order and free of debris.

To reduce the risk of shifting, rolling, or overturning, locate the light tower on a firm, level surface, with enough space to deploy the trailer's outriggers.

Do not allow water to accumulate around the base of the light tower.

To improve stability, deploy the outriggers prior to raising the light tower mast.

The light tower mast can be extended to 30 feet (9.14 meters) in height. Ensure the area above the trailer is clear of obstructions.



### **DANGER**

**Electric shock hazard.**

**Contact with overhead electrical power lines will cause serious injury or death.**

Do not position light tower under power lines.

Ensure the light tower is in good operating condition:

Check tires, lights, protective lamp covers, electrical wiring, and the engine for obvious signs of wear or damage.

Never use any equipment that is damaged or in need of repair.

## During operation

### **WARNING**

**Falling equipment could cause serious injury or death.**

When raising or lowering the light tower mast, ensure the area directly behind the trailer is clear of people.

When using the light tower, ensure the vertical-lock pin is properly engaged (see Page 21).

If the mast “hangs up” or the winch cable develops slack while raising or lowering the mast, stop immediately, move away from the unit and contact Atlas Copco.

- Ensure the trailer is well grounded, per all applicable regulations.
- Never raise, lower, or move the trailer while the light tower is in use.
- Do not collapse the outriggers or move the trailer while the light tower mast is vertical.
- When not in use, or in case of high winds, lower the light tower mast to the travel position (see page 23).
- Light bulbs can be extremely hot. Always allow bulbs to cool at least 15 minutes before handling.



 **CAUTION**

**Risk of severe burn.**

Before handling lights, allow lights to cool for 15 minutes.

## Engine safety

### Operator safety



 **DANGER**

**Explosion hazard.**

- Keep engine, fuel, and other combustibles away from sparks, open flame, and burning objects.
- Do not smoke near engine.
- Stop engine before filling or draining fuel tank.
- Use only diesel fuel.
- Replace fuel tank cap after refuelling.
- Do not use gasoline, other fuels, or flammable solvents to clean parts.



 **DANGER**

**Asphyxiation hazard.**

- Operate the engine outdoors and keep away from engine exhaust.
- If operating in an enclosed area, vent exhaust fumes to outdoors and maintain adequate ventilation.
- Refill and drain fuel tank only in a well ventilated area.
- Perform maintenance in a well ventilated area.



 **WARNING**

**Fire hazard.**

**A hot muffler can ignite flammable materials.**

Keep area around muffler free of debris such as leaves, paper, and cartons.



**CAUTION****Risk of severe burn.**

- Do not touch the engine, exhaust pipes, or areas near the exhaust at rear of trailer.
- Do not remove radiator cap when engine is hot. Contents are hot and under pressure.

## California Proposition 65

**DANGER****Health hazard.**

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

## Spark arresters

**IMPORTANT!**

State and local safety codes specify that, in certain locations, internal combustion engines that use hydrocarbon fuels must be used with spark arresters.

A spark arrester is a device constructed of nonflammable materials specifically for the purpose of removing and retaining carbon and other flammable particles from the exhaust flow of an internal combustion engine.

## Service safety

### Before servicing

**DANGER****High voltage.**

**Contact with live electrical circuits will cause severe injury or death.**

- Turn off power before servicing any component on the light tower.
  - Only a qualified electrician should service the light tower electrical system.
- ∞ Never perform even routine service (such as changing oil and filters, or cleaning the engine) unless all electrical components are shut down:
    - Ensure all light tower power circuits are shut off.
    - Turn the engine key to OFF and set all circuit breakers to the OFF position.
    - Disconnect cable from negative terminal on battery.
  - ∞ If the ground under or around the trailer is damp or wet, move the trailer to a dry location and allow it to dry before servicing. Do not allow water to accumulate around the base of the light tower.
  - ∞ Do not service the light tower if clothing or skin is wet.

## During servicing

- ∞ Keep hands, feet, and loose clothing away from moving parts on engine and generator.
- ∞ Keep the light tower and all its components clean.
- ∞ Keep labels legible. Replace damaged or missing labels. (Replacement labels are available from the factory.)
- ∞ When hoisting or loading the trailer:
  - Ensure devices such as slings, chains, hooks, ramps, and jacks are secure and will bear the weight of the trailer. The trailer's gross vehicle weight rating (GVWR) is displayed on the light tower vehicle identification tag.
  - Be aware and cautious of people's proximity to the trailer. Always ensure the safety of nearby people.

# Labels

Labels provide instructions and information. They also warn of hazards. For convenience and safety, keep all labels in legible condition, replacing labels when damaged or missing. Replacement labels are available from the factory.

Samples of labels and their descriptions are provided in Table 1.1.

**Figure 1.1 Label locations**

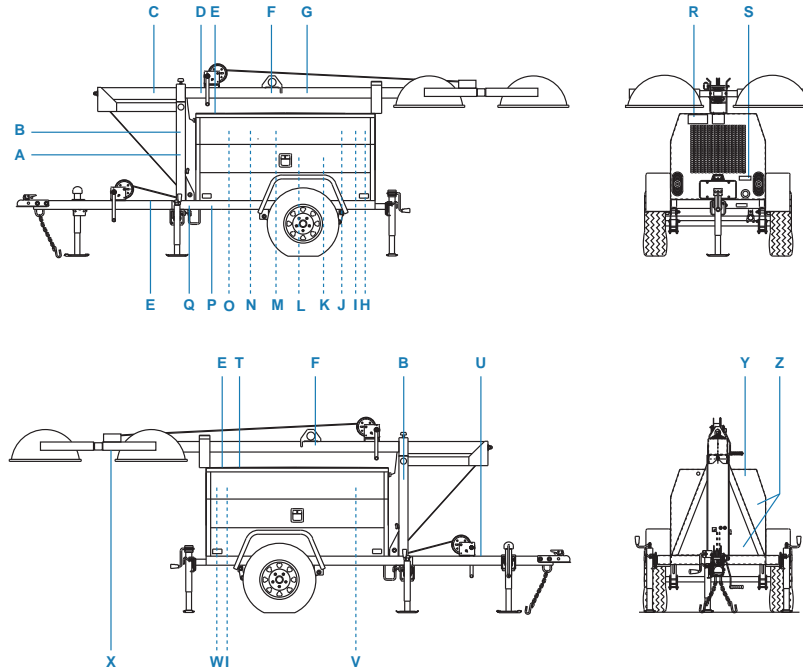

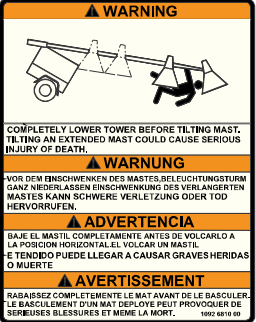

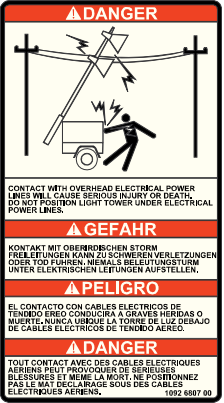

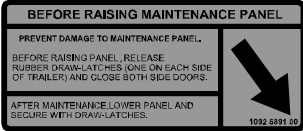
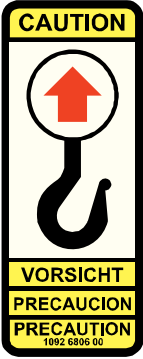

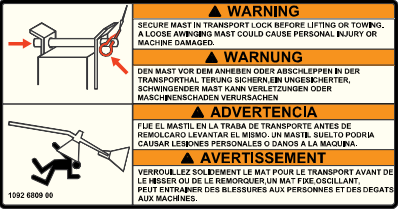
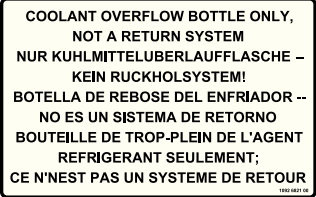

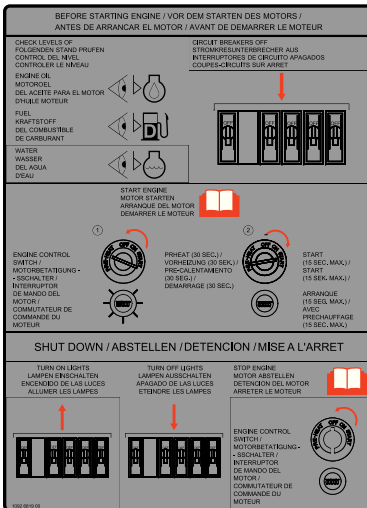
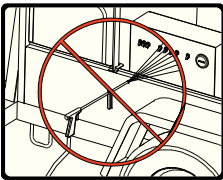
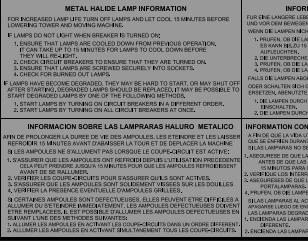
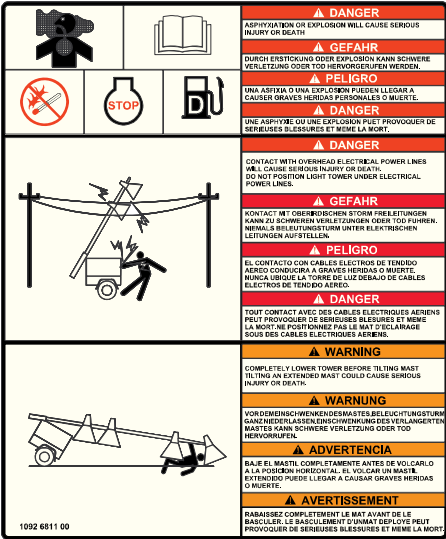
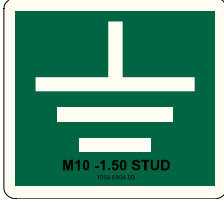
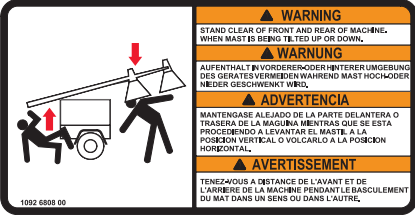

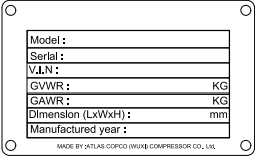
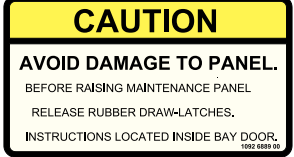


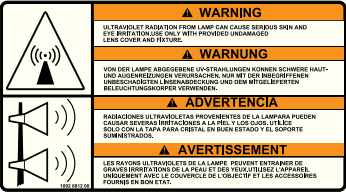

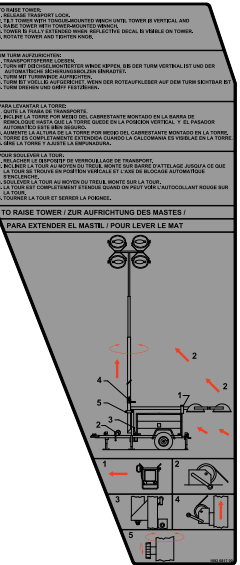
Table 1.1 Label samples and descriptions

No.	Label	Description	No.	Label	Description
A		Danger: Falling equipment	C		Warning: Falling equipment
B		Warning: Crush hazard	D		Danger: Shock hazard

No.	Label	Description	No.	Label	Description
E		Caution: PanelDamage	H		Maintenance panel release instructions
F		Caution: Lifting Point	I		Warning: Pinch hazard and rotating machinery
G		Warning: Secure transport lock equipment	J		Engine coolant overflow bottle

No.	Label	Description	No.	Label	Description
K	 <p><b>▲ DANGER</b></p> <p>ELECTRICAL STORAGE DEVICE WITHIN. CONTACT A QUALIFIED ELECTRICIAN FOR SERVICE OR TO OPEN ELECTRICAL BOX. ELECTRIC SHOCK WILL CAUSE SERIOUS INJURY OR DEATH.</p> <p><b>▲ GEFAHR</b></p> <p>ENTHALT ELEKTROCHES SPEICHERGERÄT. ZUR WARTUNG ODER ZUM ÖFFNEN DES ELEKTROCHES EINEN GESCHULTEN ELEKTRIKER ZU RUFEN. ZIEHEN ELEKTROCHES SCHLAGEVERURSACHEN SCHWERE ODER TÖDLICHE VERLETZUNGEN.</p> <p><b>▲ PELIGRO</b></p> <p>DISPOSITIVO DE ALMACENAJE ELÉCTRICO EN EL INTERIOR. PARA TRABAJOS DE MANTENIMIENTO O PARA ABRIR LA CAJA ELÉCTRICA, CONSULTE A UN ELECTRICISTA CAPACITADO. SACUDIDAS ELÉCTRICAS PUEDEN CAUSAR SEVERAS LESIONES O MUERTE.</p> <p><b>▲ DANGER</b></p> <p>DISPOSITIF ELECTRIQUE DE STOCKAGE A L'INTERIEUR. CONTACTEZ UN ELECTRICIEN QUALIFIE POUR REPARER OU OUVRIER LE BOITIER ELECTRIQUE. UNE DECHARGE ELECTRIQUE ENTRAINERA DES BLESSURES GRAVES OU LA MORT.</p>	Danger: Shock hazard	N	 <p>BEFORE STARTING ENGINE / VOR DEM STARTEN DES MOTORS / ANTES DE ARRANCAR EL MOTOR / AVANT DE DEMARRER LE MOTEUR</p> <p>CHECK LEVELS OF FUELS/GASOLINE AND OIL. CONTROL THE LEVEL. CHECK BREAKERS OFF. ETROUVER LES FUSIBLES ALIÉS INTERRUPTORES DE CIRCUITO APAGADOS. CORTAR/CIERRE LAS AVIET.</p> <p>ENGINE OIL MOTORÖL DEL ACEITE PARA EL MOTOR ÖL FÜR DIE MOTOREN</p> <p>FUEL KRAFTSTOFF FUEL COMBUSTIBLE DE CARBURANT</p> <p>WATER WASSER DEL AGUA D'EAU</p> <p>START ENGINE MOTOR STARTEN ARRANCAR EL MOTOR DEMARRER LE MOTEUR</p> <p>ENGINE CONTROL SWITCH / MOTORENSTARTUNGSSCHALTER / INTERRUPTORES DE MANDO DEL MOTOR / COMMANDETES DE COMMANDE DU MOTEUR</p> <p>PREHEAT (30 SEC.) / VORHEIZUNG (30 SEK.) / PRECALENTAMIENTO (30 SEG.) / DEMARRAGE (30 SEC.)</p> <p>START (15 SEC. MAX.) / START (15 SEK. MAX.) / ARRANQUE (15 SEG. MAX.) / AVIC. PRECHAUFFAGE (15 SEC. MAX.)</p> <p>SHUT DOWN / ABSTELLEN / DETENCION / MISE A L'ARRÊT</p> <p>TURN OFF LIGHTS LAMPEN AUSSCHALTEN ENCENDIDO DE LAS LAMPAS ALLUMER LES LAMPES</p> <p>TURN OFF LIGHTS LAMPEN AUSCHALTEN ENCENDIDO DE LAS LAMPAS ETENDRE LES LAMPES</p> <p>STOP ENGINE MOTOR ABSTELLEN DETENCION DEL MOTOR ARRÊTER LE MOTEUR</p> <p>ENGINE CONTROL SWITCH / MOTORENSTARTUNGSSCHALTER / INTERRUPTORES DE MANDO DEL MOTOR / COMMANDETES DE COMMANDE DU MOTEUR</p>	Engine startup/shutdown
L	 <p>Do not spray</p>	Do not spray			
M	 <p>METAL HALIDE LAMP INFORMATION</p> <p>FOR INCREASED LAMP LIFE, TURN OFF LAMPS AND LET COOL. 15 MINUTES BEFORE CLOSING COVER. METAL HALIDE LAMP INFORMATION</p> <p>1. LAMPS DO NOT LIGHT WHEN BREAKER IS TURNED ON.</p> <p>2. PREHEAT THE LAMP AND COOL DOWN FROM PREHEAT OPERATION. IT CAN TAKE 10 TO 15 MINUTES FOR LAMPS TO COOL DOWN TO ONE THIRD OF THEIR DESIGN.</p> <p>3. CHECK CIRCUIT BREAKERS TO INSURE THAT THEY ARE TURNED OFF.</p> <p>4. CHECK FOR BURNED OUT LAMP.</p> <p>5. LAMPS HAVE BECOME DEGRADED. THEY MAY BE HARD TO START. OR MAY SHUT OFF. START DEGRADED LAMPS BY ONE OF THE FOLLOWING METHODS.</p> <p>1. START LAMP BY TURNING ON CIRCUIT BREAKER BY APPROXIMATE ON/OFF.</p> <p>2. START LAMP BY TURNING ON ALL CIRCUIT BREAKERS AT ONCE.</p> <p>INFORMATION SOBRE LAS LAMPARAS HALURO METALICO</p> <p>PAR INCREMENTAR LA VIDA DE LAS LAMPARAS HALURO METALICO, APAGUE LAS LAMPARAS 15 MINUTOS ANTES DE DESPLAZAR LA CUBIERTA. INFORMACION SOBRE LAS LAMPARAS HALURO METALICO</p> <p>1. LAS LAMPARAS NO SE ILLUMINAN SI SE ACTIVAN LOS INTERRUPTORES DE LA CORRIENTE.</p> <p>2. PRECALENTA LAS LAMPARAS Y DEJA QUE SE ENFRIEN EN LA OPERACION DE PRECALENTAMIENTO. LE PUEDE TOMAR DE 10 A 15 MINUTOS PARA QUE LAS LAMPARAS SE ENFRIEN A UN TERCERA PARTE DE SU DISEÑO.</p> <p>3. VERIFIQUE LOS INTERRUPTORES DE LA CORRIENTE PARA ASEGURARSE DE QUE SE ENFRIEN.</p> <p>4. VERIFIQUE SI HAY LAMPARAS QUE SE HAN QUEMADO.</p> <p>5. LAS LAMPARAS SE HAN DEGRADADO. PUEDE QUE SEAN DIFICILES DE ENCENDER. O PUEDE QUE SE APAGAN. ENCENDIENDO LAS LAMPARAS DEGRADADAS POR UNO DE LOS SIGUIENTES METODOS.</p> <p>1. ENCENDIENDO LA LAMPARA AL ACTIVAR EL INTERRUPTOR DE LA CORRIENTE APROXIMADAMENTE.</p> <p>2. ENCENDIENDO LAS LAMPARAS AL ACTIVAR TODOS LOS INTERRUPTORES DE LA CORRIENTE AL MISMO TIEMPO.</p> <p>INFORMATION CONCERNANT LES PROJECTEURS A HALOGENE METAL</p> <p>1. LES LAMPES NE SONT PAS ALLUMÉES QUAND LE DISPOSITIF DE PROTECTION DES LAMPES EST ENCLÉQUÉ. 15 MINUTES AVANT D'ENCLÉQUER LE DISPOSITIF DE PROTECTION DES LAMPES, ARRÊTEZ LE DISPOSITIF DE PROTECTION DES LAMPES.</p> <p>2. PRÉCHAUFFEZ LES LAMPES ET LAISSEZ-LES SE REFROIDIR APRÈS L'OPÉRATION DE PRÉCHAUFFAGE. IL PEUT FAUTRE 10 À 15 MINUTES POUR QUE LES LAMPES SE REFROIDISSENT À UN TROISIÈME DE LEUR DURÉE DE VIE.</p> <p>3. VÉRIFIEZ LES DISPOSITIFS DE PROTECTION DES LAMPES POUR VOUS SÛRER QU'ILS SONT ARRÊTÉS.</p> <p>4. VÉRIFIEZ SI DES LAMPES ONT ÉTÉ DÉTRUITES.</p> <p>5. LES LAMPES ONT ÉTÉ DÉGRADÉES. ILS PEUT ÊTRE DIFFICILE DE LES ALLUMER. OU ILS PEUT ÊTRE ÉTEINTS. ALLUMER LES LAMPES DÉGRADÉES EN UN DES MÉTHODES SUIVANTES.</p> <p>1. ALLUMER LA LAMPES EN ACTIVANT LE DISPOSITIF DE PROTECTION DES LAMPES APPROXIMATIVEMENT.</p> <p>2. ALLUMER LES LAMPES EN ACTIVANT TOUS LES DISPOSITIFS DE PROTECTION DES LAMPES EN MÊME TEMPS.</p>	Metal halide lamp information			

No.	Label	Description	No.	Label	Description
O	 <p><b>⚠ DANGER</b> ASPHYXIATION OR EXPLOSION WILL CAUSE SERIOUS INJURY OR DEATH. <b>⚠ GEFAHR</b> DURCH ERSTICKUNG ODER EXPLOSION KANN SCHWERE VERLETZUNG ODER TOD HERVORGERUFEN WERDEN. <b>⚠ PELIGRO</b> UNA ASFIXIA O UNA EXPLOSION PUEDEN LLEGAR A CAUSAR GRAVES HERIDAS PERSONALES O MUERTE. <b>⚠ DANGER</b> UNE ASPHYXIE OU UNE EXPLOSION PEUT PROVOQUER DE SERIEUSES BLESSURES ET MEME LA MORT. <b>⚠ DANGER</b> CONTACT WITH OVERHEAD ELECTRICAL POWER LINES WILL CAUSE SERIOUS INJURY OR DEATH. DO NOT POSITION LIGHT TOWER UNDER ELECTRICAL POWER LINES. <b>⚠ GEFAHR</b> KONTAKT MIT OBERBISCHEN STROM-FREILEITUNGEN KANN VON SCHWEREN VERLETZUNGEN ODER TOD FUBREN. NEMALS RELEITUNGSSTURM UNTER ELEKTREISCHEN LEITUNGEN AUFSTELLEN. <b>⚠ PELIGRO</b> EL CONTACTO CON CABLES ELECTRICOS DE TENDIDO ALICHO CONDUJORA A GRAVES HERIDAS O MUERTE. NUNCA UBIQUE LA TORRE DE LUZ DEBAJO DE CABLES ELECTRICOS DE TENDIDO ALICHO. <b>⚠ DANGER</b> TOUT CONTACT AVEC DES CABLES ELECTRIQUES AERIENS PEUT PROVOQUER DE SERIEUSES BLESSURES ET MEME LA MORT. NE POSITIONNEZ PAS LE MAT D'ECLAIRAGE SOUS DES CABLES ELECTRIQUES AERIENS. <b>⚠ WARNING</b> COMPLETELY LOWER TOWER BEFORE TILTING MAST TILTING AN EXTENDING MAST COULD CAUSE SERIOUS INJURY OR DEATH. <b>⚠ WARNUNG</b> VOR DEM NICHNHERNEHENDEN MASTES DIE LICHTTÜRMTURM GANZ NIEDERLASSEN SCHWENKUNGEN DES VERLÄNGERTEN MASTES KANN SCHWERE VERLETZUNG ODER TOD HERVORRUFEN. <b>⚠ ADVERTENCIA</b> BAJE EL MASTIL COMPLETAMENTE ANTES DE VOLCARLO A LA POSICION HORIZONTAL. EL VOLCAR EN BASES, SI ESTANDO PUEDE LLEGAR A CAUSAR GRAVES HERIDAS O MUERTE. <b>⚠ AVERTISSEMENT</b> RABASSEZ COMPLETEMENT LE MAT AVANT DE LE BASCULER. LE BASCULEMENT D'UN MAT DEPLOYE PEUT PROVOQUER DE SERIEUSES BLESSURES ET MEME LA MORT.</p>	<p>Danger: Engine hazard Danger: Shock hazard</p> <p>Warning: Falling equipment</p>	Q		Electrical ground
			R	 <p><b>⚠ WARNING</b> STAND CLEAR OF FRONT AND REAR OF MACHINE. WHEN MAST IS BEING TILTED UP OR DOWN. <b>⚠ WARNUNG</b> AUFENTHALT IN VORDERE- ODER HINTERER UMGEBUNG DES GERÄTES VERMEIDEN WÄHREND MAST HOCH- ODER NIEDER GESCHWENKT WIRD. <b>⚠ ADVERTENCIA</b> MANTENGASE ALEJADO DE LA PARTE DELANTERA O TRASERA DE LA MÁQUINA MIENTRAS QUE SE ESTA PROCEDIENDO A ALENTAR EL MASTIL A LA POSICION VERTICAL O VOLCARLO A LA POSICION HORIZONTAL. <b>⚠ AVERTISSEMENT</b> TENEZ-VOUS A DISTANCE DE LAVANT ET DE L'ARRIERE DE LA MACHINE PENDANT LE BASCULEMENT DU MAT DANS UN SENS OU DANS L'AUTRE.</p>	Warning: Stand clear of equipment
			S	 <p><b>⚠ WARNING</b> <b>⚠ WARNING</b> <b>⚠ ADVERTENCIA</b> <b>⚠ AVERTISSEMENT</b></p>	Warning: hot surface
P	 <p>Model : _____ Serial : _____ V.I.N : _____ GVWR : _____ KG GAWR : _____ KG Dimension (LxWxH) : _____ mm Manufactured year : _____</p> <p>MADE BY ATLAS COPCO (VALVE COMPRESSOR CO., LTD)</p>	Data plate	T	 <p><b>CAUTION</b> <b>AVOID DAMAGE TO PANEL.</b> BEFORE RAISING MAINTENANCE PANEL RELEASE RUBBER DRAW-LATCHES. INSTRUCTIONS LOCATED INSIDE BAY DOOR.</p>	Caution: Panel damage

No.	Label	Description	No.	Label	Description							
U	<p style="text-align: center;"><b>Towin instructions</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">TOWING INSTRUCTIONS</th> <th style="width: 25%;">ABSCHLEPPINSTRUKTIONEN</th> <th style="width: 25%;">INSTRUCCIONES DE REMOLQUE</th> <th style="width: 25%;">INSTRUCCIONES DE REMORQUEAGE</th> </tr> </thead> <tbody> <tr> <td>1. READ OPERATOR MANUAL. 2. USE SPECIFIED TOWING HITCHES. 3. VERIFY VEHICLE WEIGHT RATING. 4. ATTACH SAFETY CHAINS USING CROSS PATTERN. 5. CHECK TRAILER LIGHTS.</td> <td>1. BEI ZUGVORGABE DIE LEREN. 2. NUR MIT DEN FÜR DIESE ANWEN- DUNG VORGEZEICHNETEN ZUG- MITTELN ZUGEN. 3. ANHÄNGER BEI DER ANZAHL RÜCK- ZUGSICHERN. 4. ZUGSICHERN MIT DEN VORGESCHRIEBENEN ANHÄNGER- ANSCHLÜSSEN VERBUNDEN. 5. ANHÄNGERLEUCHTEN PRÜFEN.</td> <td>1. LEA EL MANUAL DEL OPERARIO. 2. ÚSE UN GANCIO DE ARRASTRE APRO- PIADO PARA LA CLASE DE PESO. 3. VERIFIQUE EL PESO DEL REMOLQUE. 4. VER EN CUAL LA FORMA DE SEGURIDAD. 5. CONTROLE LAS LUZES DEL REMOLQUE.</td> <td>1. LIRE LA NOTICE D'EMPLOI. 2. SEULEMENT LES ATTACHEMENT S'AP- PUIÉS NORMAUX OU PRÉVUS PEUVENT ÊTRE UTILISÉS POUR LE TRACTEUR. 3. ATTACHEZ LA REMORQUE FERMEMENT AU VEHICULE TRACTEUR. 4. ATTACHEZ LES CHAINES DE SURETÉ EN UN PATRON EN X. 5. VÉRIFIEZ LES LAMPES DE LA REMORQUE.</td> </tr> </tbody> </table>	TOWING INSTRUCTIONS	ABSCHLEPPINSTRUKTIONEN	INSTRUCCIONES DE REMOLQUE	INSTRUCCIONES DE REMORQUEAGE	1. READ OPERATOR MANUAL. 2. USE SPECIFIED TOWING HITCHES. 3. VERIFY VEHICLE WEIGHT RATING. 4. ATTACH SAFETY CHAINS USING CROSS PATTERN. 5. CHECK TRAILER LIGHTS.	1. BEI ZUGVORGABE DIE LEREN. 2. NUR MIT DEN FÜR DIESE ANWEN- DUNG VORGEZEICHNETEN ZUG- MITTELN ZUGEN. 3. ANHÄNGER BEI DER ANZAHL RÜCK- ZUGSICHERN. 4. ZUGSICHERN MIT DEN VORGESCHRIEBENEN ANHÄNGER- ANSCHLÜSSEN VERBUNDEN. 5. ANHÄNGERLEUCHTEN PRÜFEN.	1. LEA EL MANUAL DEL OPERARIO. 2. ÚSE UN GANCIO DE ARRASTRE APRO- PIADO PARA LA CLASE DE PESO. 3. VERIFIQUE EL PESO DEL REMOLQUE. 4. VER EN CUAL LA FORMA DE SEGURIDAD. 5. CONTROLE LAS LUZES DEL REMOLQUE.	1. LIRE LA NOTICE D'EMPLOI. 2. SEULEMENT LES ATTACHEMENT S'AP- PUIÉS NORMAUX OU PRÉVUS PEUVENT ÊTRE UTILISÉS POUR LE TRACTEUR. 3. ATTACHEZ LA REMORQUE FERMEMENT AU VEHICULE TRACTEUR. 4. ATTACHEZ LES CHAINES DE SURETÉ EN UN PATRON EN X. 5. VÉRIFIEZ LES LAMPES DE LA REMORQUE.	Y	 <p><b>WARNING</b> ULTRAVIOLET RADIATION FROM LAMP CAN CAUSE SERIOUS SKIN AND EYE INJURY. USE ONLY WITH PROTECTIVE UNMOUNTED LENS COVER AND FUTURE.</p> <p><b>WARNING</b> VON DER LAMPEN ABGABE KÖNNEN ULTRAVIOLET STRAHLEN AUSGEHEBEN, DIE VERURSACHEN KÖNNEN SCHWERE HAUT- UND AUGENLEIDEN. VERWENDEN SIE NUR MIT DEN BEZUGSFAHRE UNTERSCHÜTZENDE UND INZUSÄTZLICHE UNTER- UND VORLINSCHÜTTER.</p> <p><b>ADVERTENCIA</b> RADIACIONES DE TRÁNSITO DE LA LAMPARA PUEDEN CAUSAR SERIAS LESIONES A LA PIEL Y LOS OJOS. ÚSE SOLO CON LA TAPA PARA CRISTAL EN BOMBA ESTADO Y EL SOPORTE BOMBAS TRAZADO.</p> <p><b>AVERTISSEMENT</b> LES RAYONS ULTRAVIOLET DE LA LAMPRE PEUVENT CAUSER DE GRAVES BLESSURES DE LA PEAU ET DES YEUX. UTILISEZ LA LAMPRE UNMOUNTED AVEC LE COUVERCLE DE L'OUVERTURE ET LES ACCESSOIRES FOURNIS EN BON ETAT.</p>	Warning: Ultraviolet radiation
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V	 <p style="text-align: center;"><b>DANGER</b> <b>GEFAHR</b> <b>DANGER</b> <b>PELIGRO</b></p> <p style="text-align: center;"><b>DIESEL</b></p>	Danger: Engine hazard	Z	 <p><b>TO RAISE TOWER / ZUR AUFRICHTUNG DES MASTES / PARA EXTENDER EL MASTIL / POUR LEVER LE MAT</b></p> <p><b>TO LOWER TOWER / ABLASSEN DES MASTES / PARA BAJAR EL MASTIL / POUR FAIRE DESCENDRE LE MAT</b></p>	Tower operation							
W	<p style="text-align: center;"><b>BEFORE RAISING MAINTENANCE PANEL</b></p> <p style="text-align: center;">PREVENT DAMAGE TO MAINTENANCE PANEL.</p> <p>BEFORE RAISING PANEL, RELEASE RUBBER DRAW-ATTACHES (ONE ON EACH SIDE OF TRAILER) AND CLOSE BOTH SIDE DOORS.</p> <p>AFTER MAINTENANCE LOWER PANEL AND SECURE WITH DRAWLATCHES.</p>	Maintenance panel release instructions										
X	<p style="text-align: center;"><b>DANGER</b></p> <p style="text-align: center;"><b>HIGH VOLTAGE</b></p> <p style="text-align: center;">CONTACT WILL CAUSE SERIOUS INJURY OR DEATH.</p> <p style="text-align: center;">TURN POWER OFF BEFORE SERVICING.</p>	Danger: High voltage										

# Assembly

## Light fixtures

Before using your light tower for the first time, attach the light fixtures to the light tower mast (see Figure 2.1) and install wiring to the junction box (see Figure 2.2).



### DANGER

#### High voltage.

**Contact with live wiring inside junction box will cause severe injury or death.**

- Turn off power before opening junction box.
- Only a qualified electrician should connect wiring.

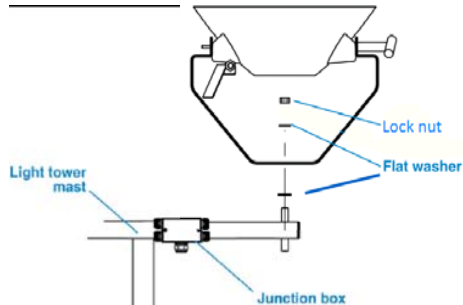


Figure 2.1 Light fixture assembly

## Tow hitch

There are 3 options for tow hitch.

- Pintle hook
- 2-inch-ball
- Combo hitch for a 2-inch-ball and pintle hook

For combo hitch option only:

When the light tower ships from the factory, the tow bar is set up to use the lunette ring for towing by a vehicle with a pintle hook. To use a ball coupler,

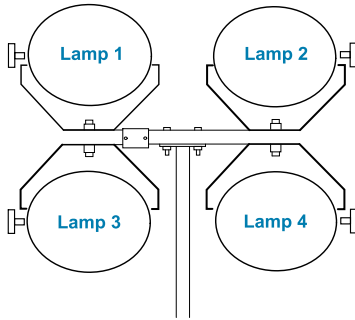
follow the procedure below.

To reverse the tow hitch:

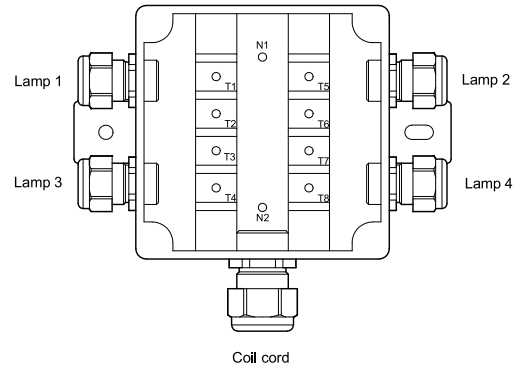
1. Remove the two large bolts that hold the tow hitch to the draw bar.
2. Lift the hitch off the drawbar and rotate the hitch end-to-end.
3. Return the hitch to the draw bar, making sure to align the bolt holes.
4. Reinstall the bolts and tighten the nuts fully.



### Light fixture numbering sequence



### Junction box wiring connections



Lamp 1 wire connection	
Color wire	Connect to
Black	T1
White	T2
Green	T3

Lamp 2 wire connection	
Color wire	Connect to
Black	T5
White	T6
Green	T3

Lamp3 wire connection	
Color wire	Connect to
Black	T4
White	T2
Green	T3

Lamp 4 wire connection	
Color wire	Connect to
Black	T8
White	T7
Green	T3

Coil cord wire connection	
Number wire	Connect to
50	T1
51	T2
52	T5
53	T6
54	T4
55	T3
57	T8
58	T7

Grounding wire connection		
Name wire	Connect to	Connect to
PE 1	N1	N2
PE 2	N1	T3

Figure 2.2 Light fixture wiring

# Operation

## Safety

Before operating the light tower, read and be familiar with this instruction manual.

Read and follow all safety instructions (see page 7).

### CAUTION

Do not run unit with door opened.

### CAUTION

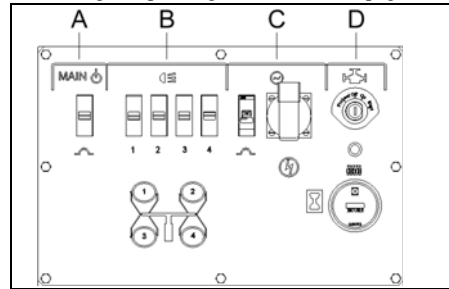
Do not run unit in rainy day.

## Control panels

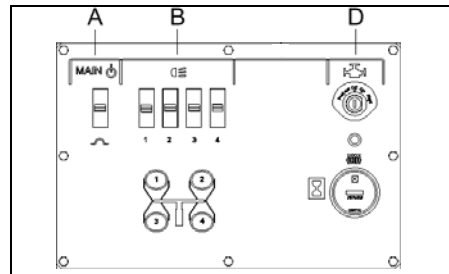
The light tower control panel comprises:

- Circuit breakers for engaging power
- An electrical receptacle for powering external equipment (Option)
- A gauge to track engine use
- Key switch for starting and stopping the engine and a glow-plug indicator for the engine's start coil

- For engine operating instructions, see page 24.



**Figure 3.1 A** Control panel for units with universal socket.



**Figure 3.1 B** Control panel for units without universal socket.

A - Main circuit breaker/power switch

B - Lamp circuit breakers/power switches

C - Electrical receptacle and breaker for external

power (Option)

D - Engine key switch and glow-plug indicator.

Hour meter

## Towing and hoisting

### Before towing

Before towing, prepare the light tower as follows.

1. Lower the light tower:

a Verify the light tower mast is in the down position and secured in place with the horizontal-lock pin (see Figure 3.2). To lower the tower, see page 23.

b If necessary, attach a red flag to the end of the mast.

2. Check tires, wheels, and lights:

a Check tires for wear. Replace worn tires.

b Verify tires are fully inflated to the proper pressure.

c Verify that all wheel lugs are in place and tightened. Do not tow the trailer if a wheel lug is missing.

d Ensure the trailer brake lights, taillights, and directional (turn) indicators are hooked up and functioning properly.

3. Check the tow hitch and safety chains:

a Ensure the tow hitch and coupling on the tow vehicle are rated for weight equal to or greater

than the trailer's gross vehicle weight rating (GVWR). The GVWR is displayed on the light tower vehicle identification tag (see Figure 3.2).

- b Inspect the tow hitch and coupling for wear and damage. Replace or repair if necessary.
- c Verify the rear and side levelling jacks are in the up position, the outriggers are contracted, and all are secured with their locking pins.
- d Use the drawbar-mounted jack to raise the front of the trailer and set the tow hitch on the tow vehicle. Ensure the tow hitch is properly engaged and locked.
- e Raise, rotate, and lock the front jack in the up position.
- f Verify approved safety chains are attached properly to both the trailer and tow vehicle.

## During towing

- Do not tow the trailer with any people, parts, supplies, or additional equipment attached to it or loaded onto it.
- Do not tow additional trailers or other equipment in tandem with the light tower trailer.
- The recommended maximum speed for highway towing is 45 MPH (72 km/h). For offroad towing, the recommended maximum speed is 10 MPH (16 km/h) or less, depending on terrain.
- Adhere to all applicable DOT regulations when towing the trailer.

## After towing

Release the trailer tow hitch from the tow vehicle as

follows:

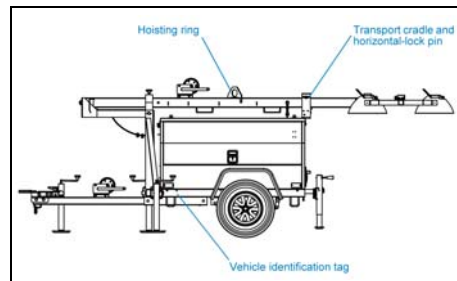
1. Locate the levelling jack on the trailer drawbar at the front of the trailer.
2. Pull the locking pin and rotate the jack downward. When the jack is properly set, the locking pin snaps into position with an audible "click."
3. Block or chock the trailer wheels.
4. Release the tow hitch from the ball coupler or pintle on the tow vehicle.
5. Crank the jack handle until the jack foot touches the ground and the tow hitch rises up off the tow vehicle.
6. Move the tow vehicle away from the trailer.

## Hoisting

The light tower may be hoisted by means of the hoist ring mounted on the mast (see Figure 3.2).

Prior to hoisting:

- Ensure the mast is in the horizontal (travel) position, fully nested in the transport cradle, and secured in place with the horizontal-lock pin (see Figure 3.2).
- Close and latch the side doors and maintenance (top) panel.
- Return levelling jacks and outriggers to the travel position, and ensure they are all secured in place with their locking pins.



**Figure 3.2 Horizontal-lock pin and hoisting ring**

## Location

- To achieve the best possible light coverage, locate the light tower on the same level as the area to be lighted, or higher.
- To reduce the risk of personal injury, ensure the surrounding area is in good order and free of debris.
- To reduce the risk of shifting, rolling, or overturning, locate the light tower on a firm, level surface, with enough space to deploy the trailer's outriggers.
- Ensure convenient access to earth ground.
- The light tower mast can be extended to 30 feet (9.14 meters) in height. Ensure the area above the trailer is clear of obstructions.



### **DANGER**



**Electric shock hazard.**

**Contact with overhead electrical power lines will cause serious injury or death.**

Do not position light tower under power lines.

# Deployment

## Levelling the trailer

Prior to raising and extending the light tower mast, the trailer must be level and the outriggers extended for increased stability

### **WARNING**

**Falling equipment could cause serious injury or death.**

- Level the trailer and extend outriggers prior to use.
- For safe operation, outriggers must remain extended while the tower mast is vertical.

To level the trailer:

1. Locate the levelling jack on the trailer drawbar at the front of the trailer.
2. Pull the locking pin and rotate the jack downward. When the jack is properly set, the locking pin snaps into position with an audible “click.”
3. Block or chock the trailer wheels.
4. Release the tow hitch from the ball coupler or pintle on the tow vehicle.
5. Crank the jack handle until the jack foot touches the ground and the tow hitch rises up off the tow vehicle.
6. Locate the outrigger on either side of the trailer. Pull the outrigger locking pin (not the jack locking pin) and pull the outrigger outward, away from the trailer, as far as it will go. When fully extended,

the locking pin snaps into position with an audible “click.”

7. Pull the jack locking pin and rotate the jack downward until the locking pin engages. Do not lower the jack foot yet.
8. Repeat the previous two steps for the other outrigger, then locate and set the jack at the rear of the trailer.
9. Determine which side of the trailer is highest, and extend the jack foot on that side downward until it rests firmly on the ground. Then level the trailer with the remaining three jacks.

## Raising the tower

When the tower is vertical, the mast can be extended to 30 feet (9.14 meters). The tower can be rotated 180 degrees left or right while the mast is extended and the lights are lit.

To raise the tower and aim the lights, use the following instructions.

1. Before raising the tower:
  - a Adjust the light fixtures to point upward or downward, and inward or outward.
    - The lights can be positioned without tools.
    - To aim the lights, loosen the knob on the outside end of each fixture, and use the integrated handles to move the fixture. Tighten the knob when done.
  - b Ensure the trailer wheels are blocked or chocked.
  - c Level the trailer and extend the outriggers (see page 21).
  - d Connect the trailer ground stud to earth ground (see Figure 3.3).

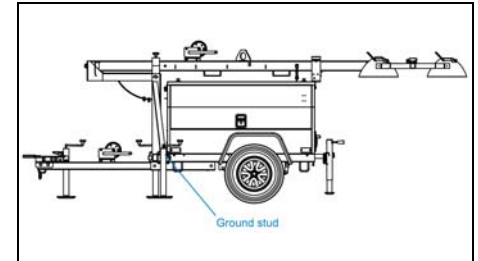
- e Ensure the mast is not attached to the maintenance panel with the lifting chain (Figure 3.4).
- f Take the weather into account: do not raise or use the tower in high winds or an electrical storm.
- g Ensure the area above the tower is clear of all obstructions.

### **DANGER**

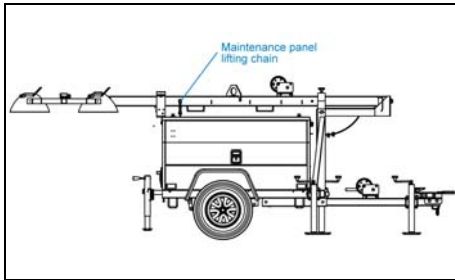
**Electric shock hazard.**

**Contact with overhead electrical power lines will cause serious injury or death.**

Do not position light tower under power lines.

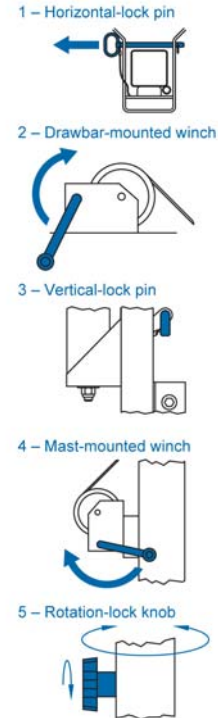
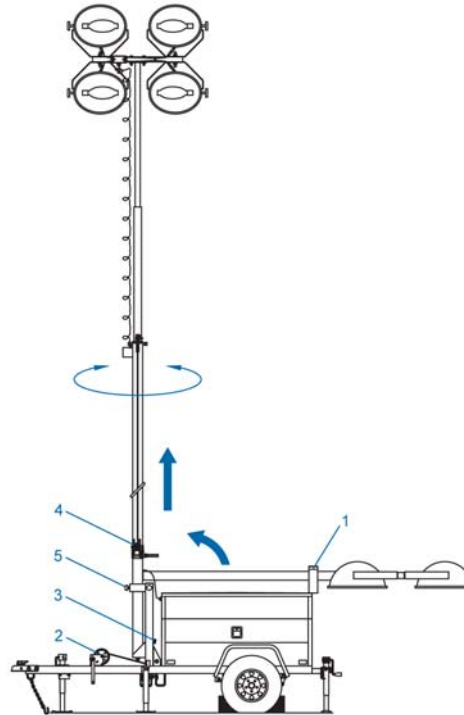


**Figure 3.3 Ground stud**



**Figure 3.4 Maintenance panel lifting chain**

2. To raise the tower, see Figure 3.5 and follow these instructions:
  - a Remove the horizontal-lock pin from the transport cradle.
  - b Rotate the handle of the drawbar-mounted winch to tighten the cable and raise the light tower mast.
  - c Continue turning the handle until the mast is in the vertical position and the spring-loaded vertical-lock pin automatically snaps into place.
  - d Ensure the vertical-lock pin is secure and locked in place.
  - e Rotate the handle of the mast-mounted winch to tighten the cable until the lights are at the desired height.
  - f To rotate the mast, loosen the rotation-lock knob and use the handle on the mast to rotate the mast either left or right.



**Figure 3.5 Raising the tower**

## Lowering the tower

Before moving or storing the light tower, lower the mast and lock it in place. To lower the tower, see Figure 3.6 and use the following instructions.

1. Turn off the tower lights and the engine. For increased lamp life, allow the lights to cool for 15 minutes before proceeding.
2. Rotate the mast:
  - a Loosen the rotation-lock knob.
  - b Use the handle on the mast to rotate the mast until the mast-mounted winch is on the same side of the mast as the trailer tow hitch.
  - c Tighten the rotation-lock knob.
3. Lower the tower:
  - Rotate the mast-mounted winch handle to lower the tower until the lights are down as far as possible.
  - While lowering the mast, ensure the power cord on the mast collapses freely and does not become pinched or tangled.
4. Lower the mast to the horizontal (transport) position:
  - a Release the spring-loaded vertical-lock pin by pulling it outward, away from the mast. If the pin resists, ensure the mast is fully vertical by using the drawbar mounted winch to tighten the cable.
  - b While pulling on the pin to release it, use the drawbar-winch to lower the mast. Rotate the drawbar-winch handle to lower the mast. After the mast begins to tilt, release the pin.
5. With the mast in the horizontal position, resting in the transport cradle, insert the horizontal-lock pin and secure it with the attached cotter pin.

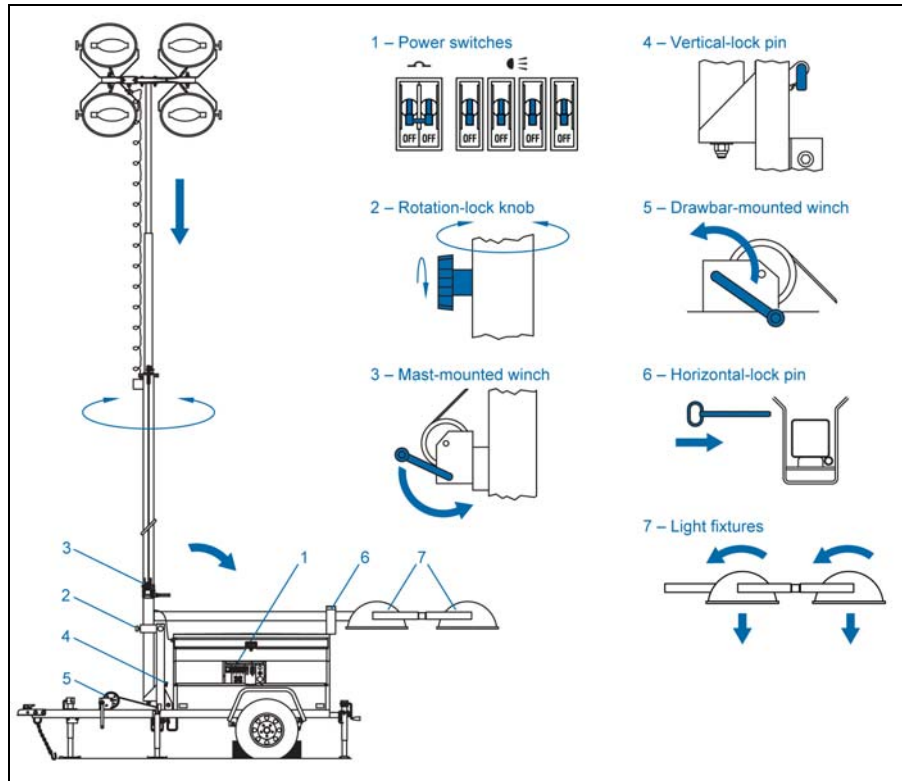


Figure 3.6 Lowering the tower

# Engine operation

## Starting the engine

1. Before starting the engine:
  - a Observe all engine safety precautions in page 8.
  - b Check engine oil, fuel, and coolant levels. Use only diesel fuel.
  - c If the fuel tank was drained or run dry, it might be necessary to prime the fuel lines. Refer to the engine manual for instructions.
  - d Ensure all circuit breakers on the light tower control panel are in the OFF position.

### CAUTION

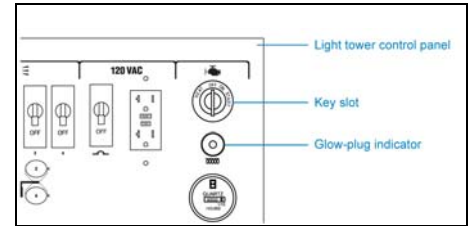
#### Starting the engine under load will damage the light tower.

Before starting the engine, ensure all power switches (circuit breakers) are in the OFF position.

2. To start the engine:
  - a Insert the engine key into the key slot and turn the key one click clockwise. control panel (Figure 3.7)
  - b The glow-plug indicator will remain lit until the engine's start coil reaches a predetermined temperature.
    - Do not start the engine while this indicator is lit.
    - Crank the engine immediately after the indicator light goes out.
3. When the glow-plug indicator light goes out, turn

and hold the key at the START position.

4. Release the key as soon as the engine starts, or after 10 seconds if the engine does not start.



**Figure 3.7 Key slot and glow-plug indicator on main control panel**

### CAUTION

The engine can overheat and damage the start motor.

- Do not hold the engine key at the START position longer than 10 seconds, regardless of whether the engine starts.
  - After 10 seconds, return the key to the OFF position and wait 15 to 30 seconds before attempting to start the engine.
- 
- If the engine does not gain sufficient oil pressure within 30 seconds of starting, the automatic shutdown system will engage (see below). Before attempting to restart the engine, return the key to the OFF position to reset the internal 30-second timer.
  - Allow the engine to warm up before engaging power to the lights or an external device connected to the power receptacle.



## Stopping the engine

To stop the engine:

1. Shut down power to lights and external devices plugged into the power receptacle.

### CAUTION

Shutting down the engine before disengaging power could damage the ballasts and generator.

Shut down power to all lights and the power receptacle before shutting down the engine.

2. Turn the engine key to the OFF position.

## Automatic engine shutdown

The power system is equipped with an automatic shutdown feature. This system prevents damage by shutting down the engine when oil pressure is too low or engine temperature is too high.

To restart the engine after an automatic shutdown has occurred, return the engine key to the OFF position, then follow the procedures above for starting the engine.

## Lights

### Turning the lights on

To turn on the lights, first toggle the main circuit breaker to ON (see Figure 3.8), then toggle the individual circuit breakers for each light one at a time.

- Metal halide lamps require a warm-up time of 5 to 15 minutes before reaching full brightness.

- After the lamps are turned off, they will not turn on again until they are cool. The lamps can take up to 15 minutes to cool.

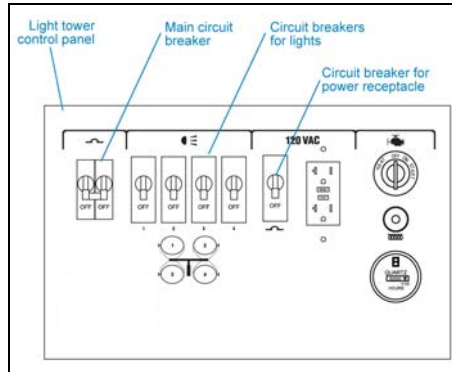


Figure 3.8 Circuit breakers/power switch

### Turning the lights off

For increased lamp life, turn off lights and let the lamps cool 15 minutes before lowering the tower and moving the trailer.

After the lamps are turned off, they will not turn on again until they are cool. The lamps can take up to 15 minutes to cool.

### Degraded lamps

Degraded lamps may be difficult to light, and may shut off unpredictably after starting.

Degraded lamps should be replaced.

## Lamps that will not turn on

If the lamps do not light when power is applied, ensure the appropriate circuit breakers are set in the ON position. If the circuit breakers are on, and the lights are not visibly lighted within 5 minutes, follow these steps:

1. Switch all circuit breakers OFF. If any of the lights were lit, allow the lights to cool for 15 minutes before proceeding.
2. Lower the mast.
3. Ensure the lamps are cool.

### CAUTION

**Risk of severe burn.**

Before handling lights, allow lights to cool for 15 minutes.



4. Check that all lamps are tightened securely into their sockets.
5. Check for, and replace, burned out lamps.

### Lamp replacement

For lamp replacement instructions, see page 27.

## Power receptacle( Option )

The light tower control panel is equipped with a receptacle to provide power to external devices, such as power tools. Power is supplied to the receptacle when the engine is running and the receptacle circuit breaker is switched to ON.

### CAUTION

**Overdrawing power from the receptacle can cause the lights to shut off.**

Do not draw more than 10 amps for universal socket.

Do not draw more than 20 amps for duplex socket.

## Ground-fault interrupter( Option )

The power receptacle has a ground-fault interrupter (GFI). The GFI should be tested for proper operation each time the receptacle is used.

- To test the GFI, press the test button on the receptacle.
  - If the GFI is operating properly, the reset button should pop out and power to a connected external device should shut off. To restore power, press the reset button firmly.
  - If the reset button does not pop out, the GFI is defective and must be replaced. For safety, only a qualified electrician should replace the receptacle.
- If the GFI engages (the reset button pops out) during use:
  - Ensure the equipment plugged into the receptacle is not drawing more than 20 amps.

- Check the generator and attached devices for defects.

## Derating

All generator sets are subject to derating for altitude and temperature. Derating will reduce available reserve power to the receptacle.

Performance ratings are typically reduced 3% per 1000 feet (300 m) above sea level, and 2% per 10°F (5.5°C) increase in ambient temperature above 78°F (25°C).

# Maintenance

## Daily inspection

When the light tower is in regular use, the following items should be checked daily:

- Check fluid levels and look for leaks.
- Inspect all exposed wiring for damage, worn insulation, and cuts.
- Inspect winch cables for wear and damage.
- If the light tower is vertical, verify the vertical-lock pin is engaged and secure (see Figure 3.5, page 22).

Repair or replace worn and damaged components immediately. Never use any equipment that is damaged or in need of repair.

### DANGER

**High voltage.**  
Contact with live electrical circuits will cause severe injury or death.

- Turn off power before servicing any component on the light tower.



## Lamp replacement

To replace a light bulb (lamp), refer to Figure 4.1 and follow the instructions below.

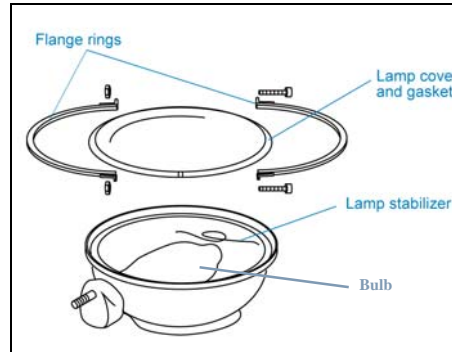


Figure 4.1 Lamp assembly

1. To remove a lamp:
  - a Turn off power to all lamps and the control panel receptacle.
  - b Shut down the engine and allow the lamps to cool for 15 minutes.

### CAUTION

**Risk of severe burn.**

Before handling lights, allow lights to cool for 15 minutes.



- c Remove the screws securing the flange rings and remove the flange rings.
- d Remove the protective lamp cover with the gasket attached.
- e Remove the hardware securing one side of the lamp stabilizer. Once removed, swing the stabilizer to the side and unscrew the lamp.

### 2. To install a lamp:

#### IMPORTANT!

Lamps will last longer if they are free of contaminants. To protect a new lamp from the natural oils on the fingertips, handle the lamp with cotton gloves or a clean, soft cloth.

- a Insert the lamp into the socket and secure it with the lamp stabilizer.
- b Ensure the gasket is fastened properly around the lamp cover.
- c Secure the cover to the reflector with the flange ring and screws.

# Engine maintenance

## Using the maintenance panel

Figure 4.2 calls out the components necessary for accessing the engine for routine maintenance and repairs. Access the engine using the two gull-wing side doors and the maintenance panel.

To raise the main ten ace panel using the lifting chain:

1. When shipped from the factory, the lifting chain is attached to the generator, next to the fuel tank inside the engine cabinet. Connect the lifting chain to the mast and maintenance panel.
  - Ensure the lifting chain is not twisted.
  - Ensure the chain is well connected to both the mast and the maintenance panel.
2. Release the two rubber draw-latches located inside the engine cabinet. A decal on the inside of each gull-wing door points to the latch on each side of the trailer (see Figure 4.3).
3. Close both side doors.

### CAUTION

**Improperly raising the maintenance panel could damage equipment and cause personal injury.**

- Do not raise the maintenance panel before releasing its two rubber draw-latches and closing both side doors.
- Keep all body parts clear of the path of the maintenance panel, both above and below it, while it is being raised.
- Raise the panel fully by inclining the mast to vertical.

4. Raise the light tower mast, and the attached panel, using the drawbar-mounted winch (see page 21). Raise the panel fully, bringing the mast to vertical so that the vertical-lock pin engages.

After maintenance, lower the maintenance panel, attach the two rubber draw-latches, detach the lifting chain, and store the chain by attaching it to the generator next to the fuel tank.

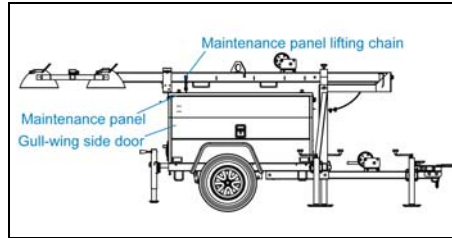


Figure 4.2 Engine access

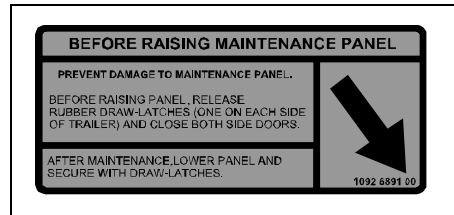


Figure 4.3 Maintenance panel draw-latch decal

## Servicing the engine

For engine-related maintenance and servicing, see the engine instruction manual.

## Replacement parts

For replacement parts, see the parts manual, document 9829 3524 00.

## Wiring diagrams



### DANGER

**High voltage.**

**Contact with live electrical circuits will cause severe injury or death.**

- Turn off power before servicing any component on the light tower.
- Only a qualified electrician should service the light tower electrical system.

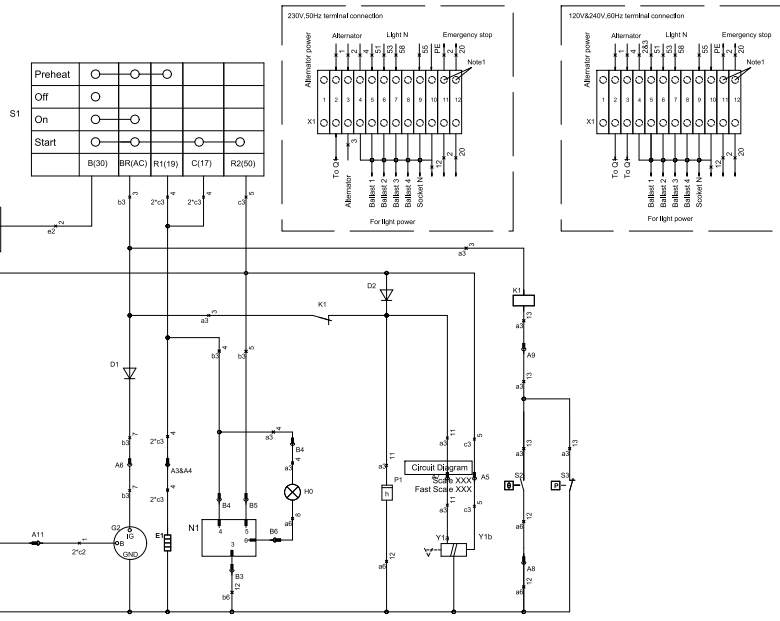
Figure 4.4 Engine control circuit diagram - 9829 3508 03

**Legend**

<b>Wire size :</b>	<b>Colour code :</b>
a = 1 mm <sup>2</sup>	0 = black
b = 1.5mm <sup>2</sup>	1 = brown
c = 2.5mm <sup>2</sup>	2 = red
d = 4 mm <sup>2</sup>	3 = orange
e = 6 mm <sup>2</sup>	4 = yellow
f = 10 mm <sup>2</sup>	5 = green
g = 16 mm <sup>2</sup>	6 = blue
h = 25 mm <sup>2</sup>	7 = purple
l = 35 mm <sup>2</sup>	8 = grey
j = 50 mm <sup>2</sup>	9 = white
k = 70 mm <sup>2</sup>	54= green/yellow
l = 95 mm <sup>2</sup>	

lx = 95 mm EPR-CSP (BS6195-4C)

bx = 1.5mm NSGAFOeU

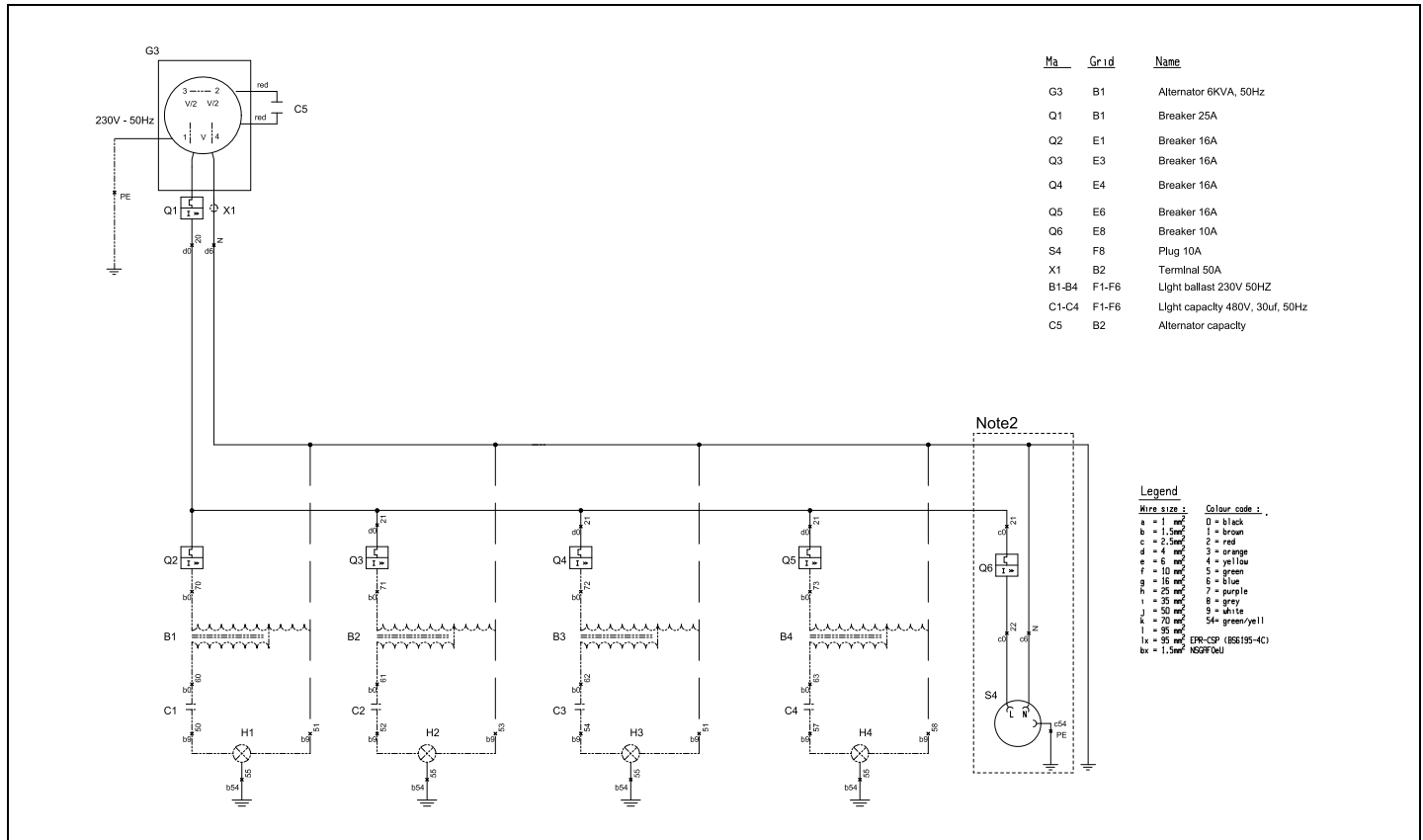


Note1, if no emergency stop button, use a wire to connect.

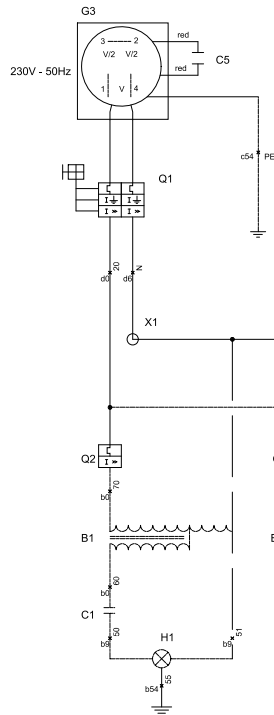
**Mark Grid Name**

S1	b3	Key Switch
S2	e7	Coolant temperature switch
S3	e8	Oil pressure switch
E1	f4	Preheat Resistor
G1	e1	Battery 12Vdc
G2	e4	Charging Alternator
H0	e5	Preheat Light
P1	e6	Hour meter
K0	e1	Starter Relay
M1	e2	Starter Motor
N1	e5	Lamp timer
K1	d7	Relay
F1	c3	Fuse
Y1a	e7	Fuel stop solenoid hold coil
Y1b	f7	Fuel stop solenoid pull coil
D1	d4	Diode
D2	d6	Diode
S4	c3	Emergency stop button
X1		Terminal
(O)		Optional Equipment

## 4.5 Circuit diagram 230V 50Hz with / without universal socket - 9829 3943 00



## 4.6 Circuit diagram 230V 50Hz Earth leakage breaker with / without universal socket - 9829 3944 00



Ma	Grid	Name
G3	B1	Alternator 6KVA, 50Hz
Q1	B1	Earth leakage breaker 25A 30mA
Q2	E1	Breaker 16A
Q3	E3	Breaker 16A
Q4	E4	Breaker 16A
Q5	E6	Breaker 16A
Q6	E8	Breaker 10A
S4	F8	Plug 10A
X1	B2	Terminal 30A
B1-B4	F1-F6	Light ballast 230V 50HZ
C1-C4	F1-F6	Light capacity 480V, 30uf, 50Hz
C5	B2	Alternator capacity

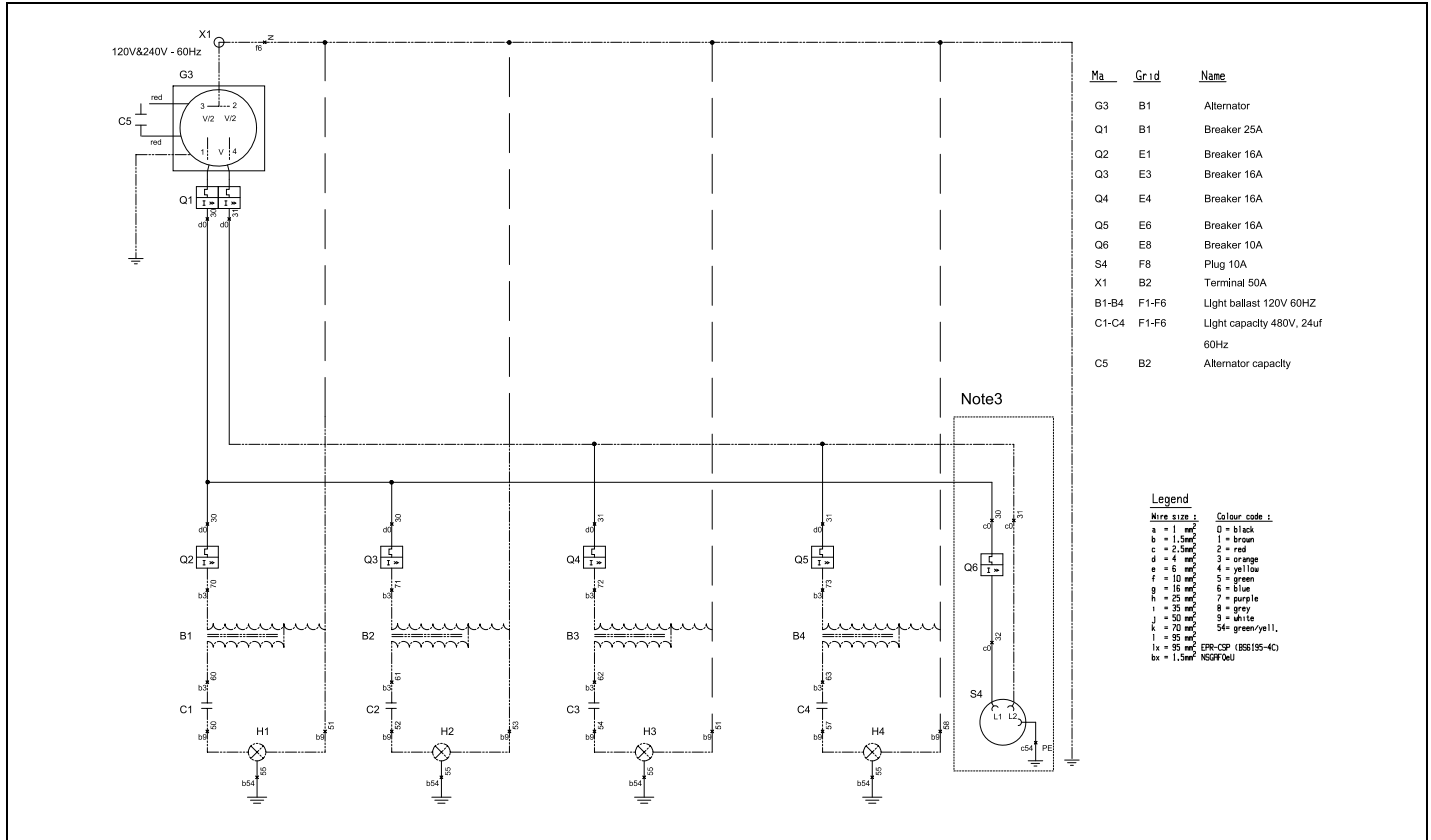
Note4

### Legend

Wire size	Colour code
a = 1 mm <sup>2</sup>	0 = black
b = 1.5mm <sup>2</sup>	1 = brown
c = 2.5mm <sup>2</sup>	2 = red
d = 4 mm <sup>2</sup>	3 = orange
e = 6 mm <sup>2</sup>	4 = yellow
f = 10 mm <sup>2</sup>	5 = green
g = 16 mm <sup>2</sup>	6 = blue
h = 25 mm <sup>2</sup>	7 = purple
i = 35 mm <sup>2</sup>	8 = grey
j = 50 mm <sup>2</sup>	9 = white
k = 70 mm <sup>2</sup>	54 = green/yell.
l = 95 mm <sup>2</sup>	
lx = 95 mm <sup>2</sup>	EPR-CSP (BS6195-4C)
bx = 1.5mm <sup>2</sup>	NSGF0eU

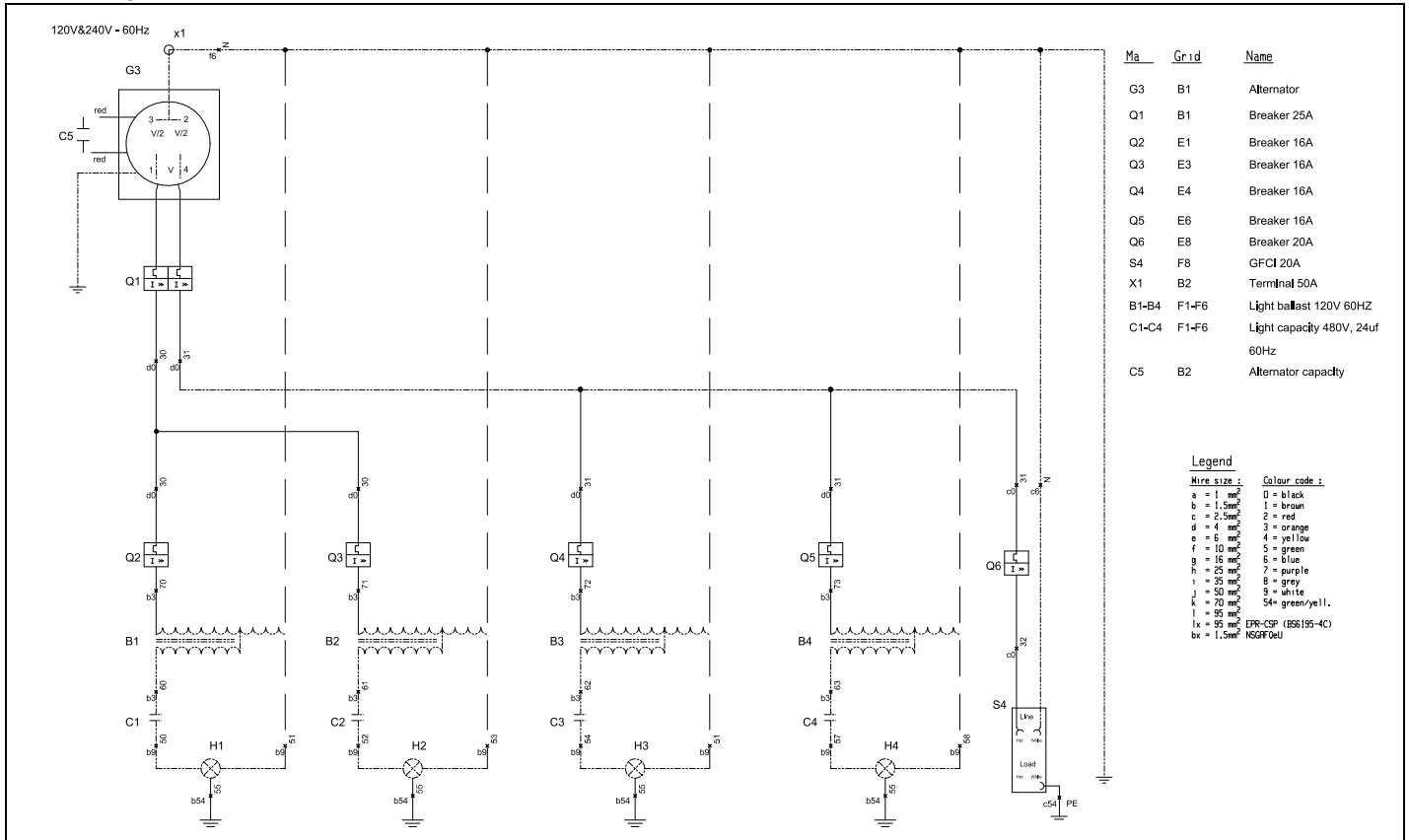
Note4: If installing the Weipu plug, please use this connection.

## 4.7 Circuit diagram 240V 60Hz with / without universal socket - 9829 3537 00

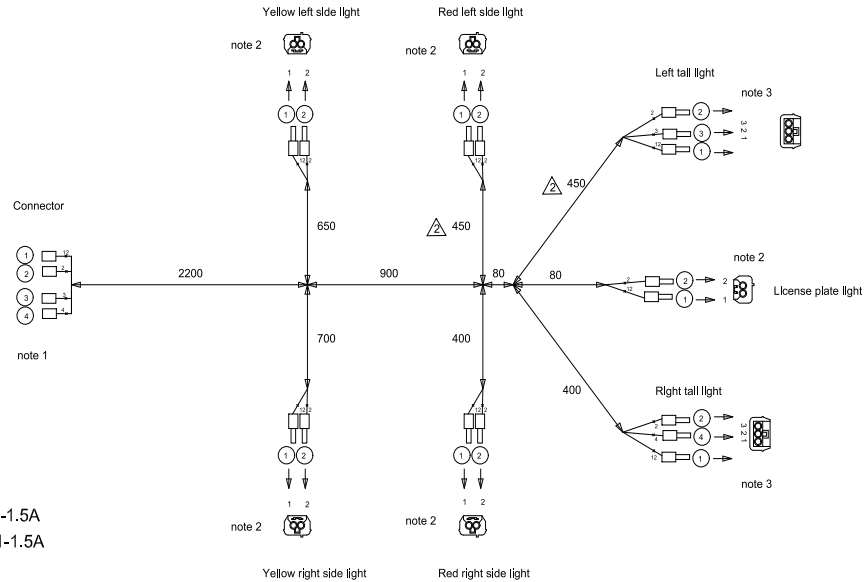




## 4.8 Circuit diagram 120V 60Hz with GFCI socket - 9829 3929 00



**Figure 4.10 Circuit diagram Trailer wiring - 1092 7120 00**



**Note:**

1. Note1:4 way male trailer plug
2. Note2:DJ7021Y-1.8-21 & DJ621-1.5A
3. Note3, DJ7031Y-1.8-21 & DJ621-1.5A
4. Add wire numbers
5. Wire section equal AWG 20 standard ,
6. Wire max. working voltage: 90 °C , 600VAC
7. Outside protectin using corrugated pipe temperature duration: -30 °C~+100 °C
8. Meet EQC-117-98, EQC115-98, QC/T29106-2004

Figure 4.11 Dimension drawing

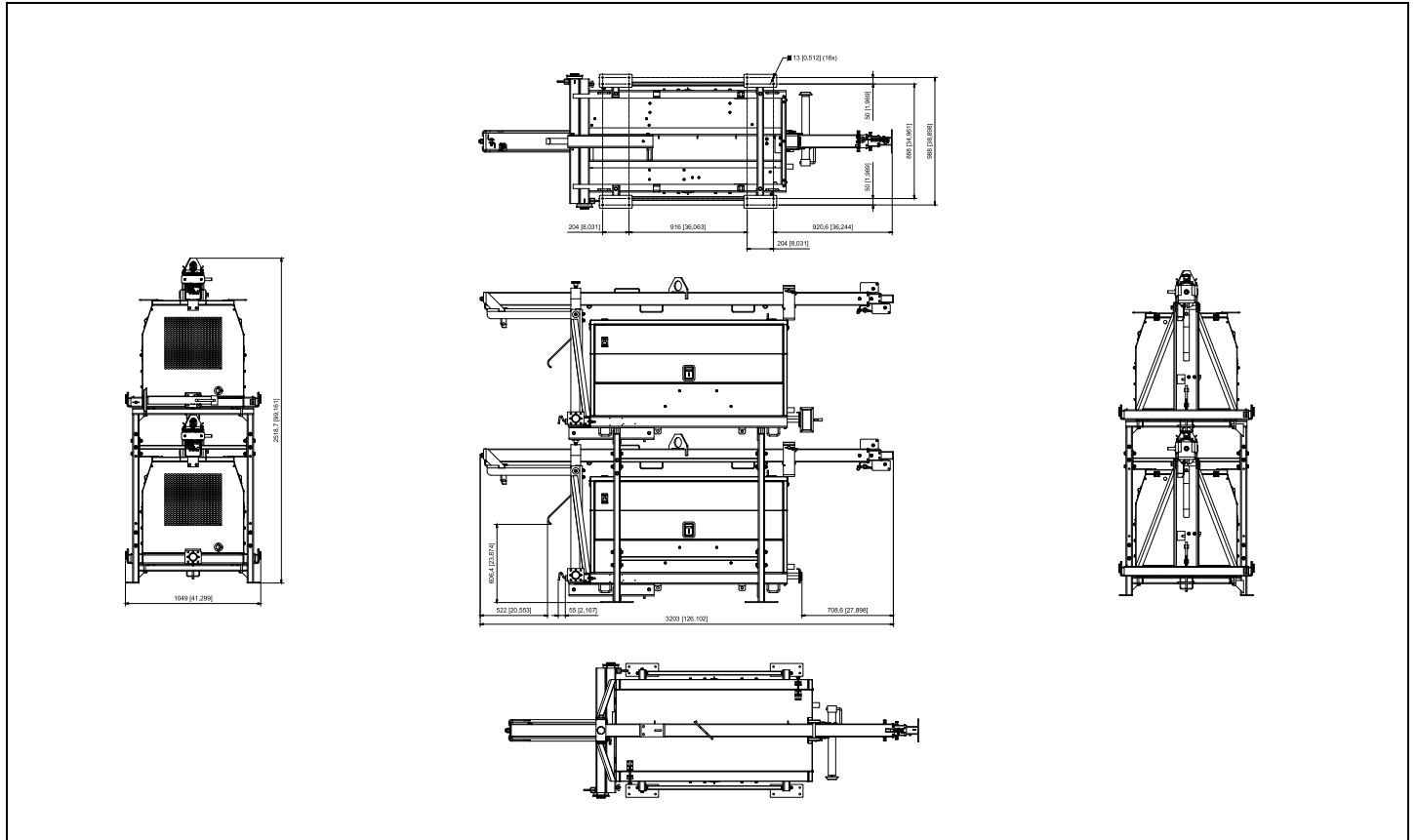


Figure 4.12 Dimension drawing

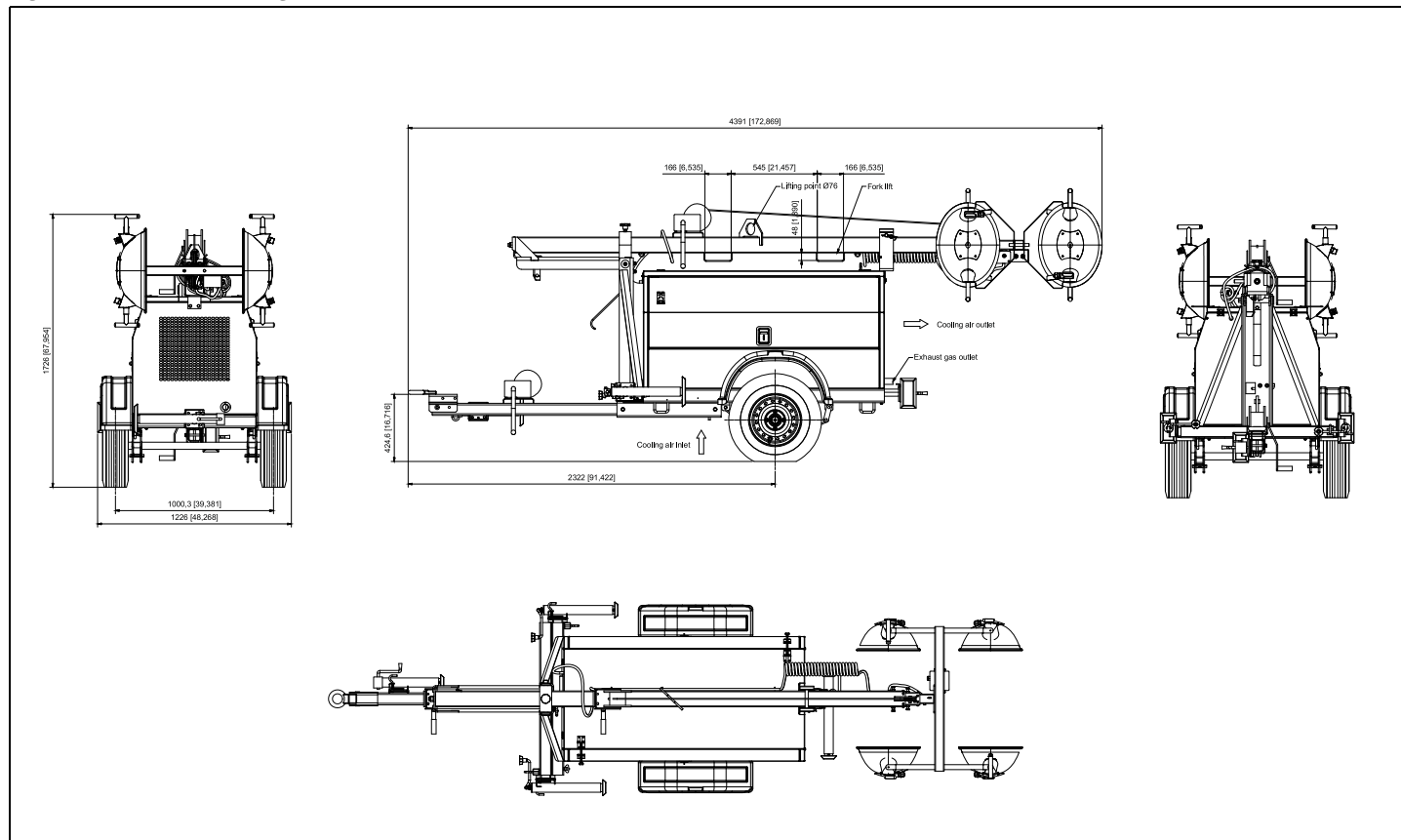
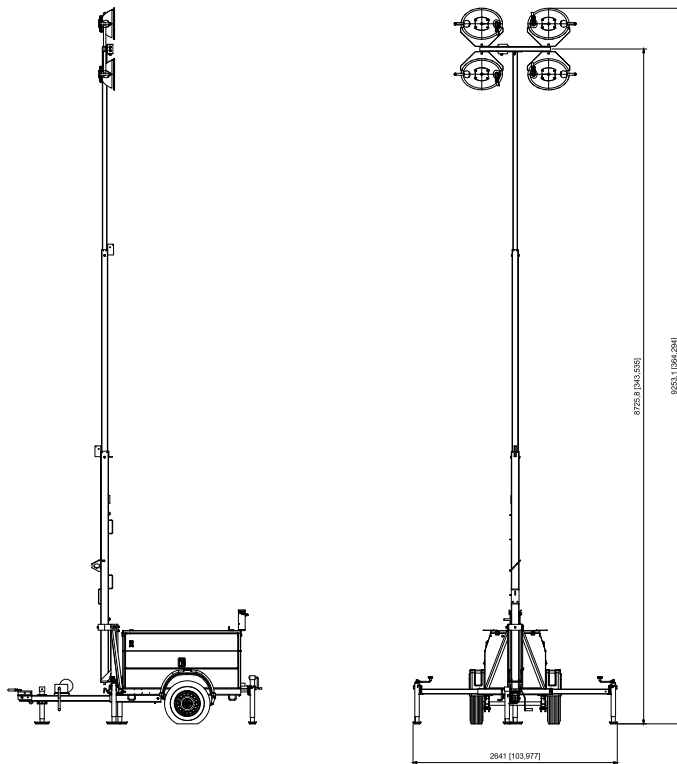
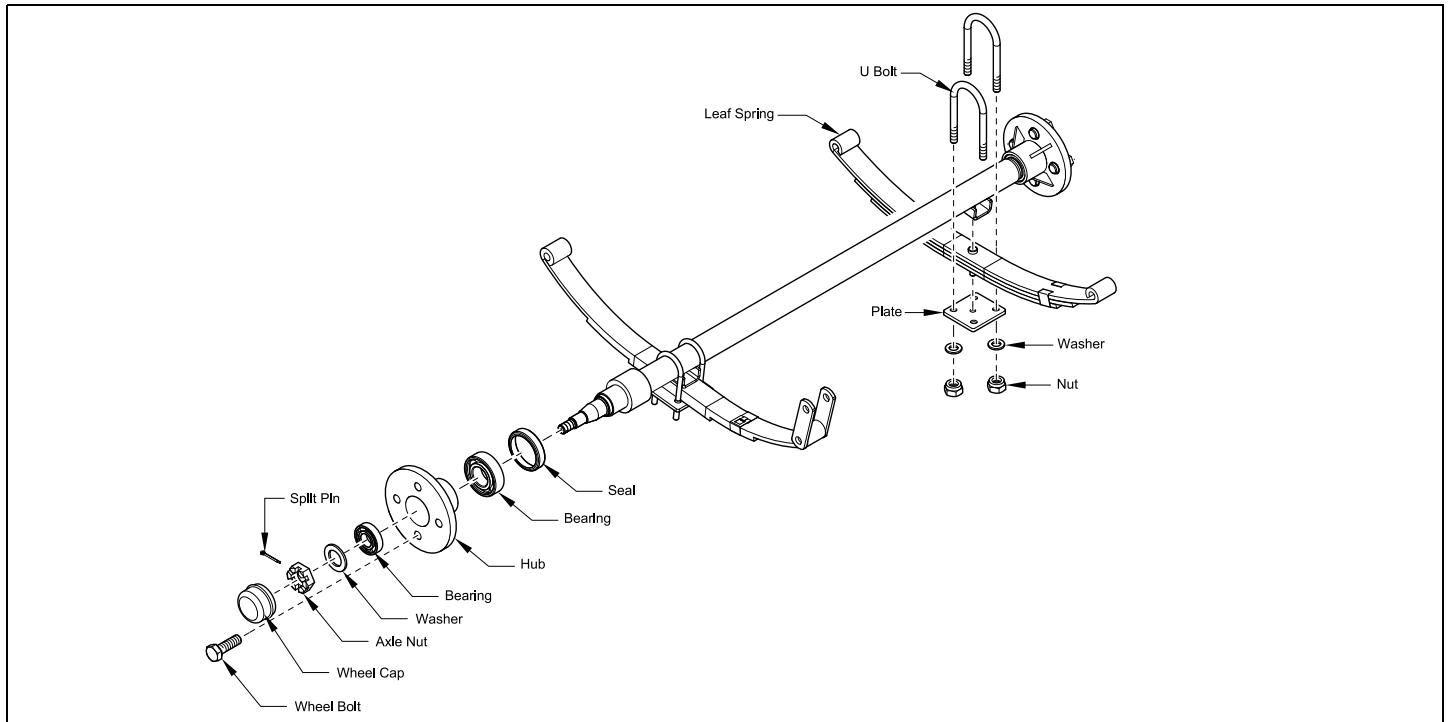


Figure 4.13 Dimension drawing



## Axle



## Safety Precautions

- Not allowed on the shaft tube welding or drilling.
- Select the matching wheel hub: wheel offset, PCD (bolt circle), tire bolt hole diameter, with the angle must be connected with the hub and the wheel bolts to match. Particular attention to the recommended tightening torque Tightening wheel bolts (nuts).

## Maintenance

10,000 km or 3 years later:

- Check the wheel bearing axial clearance and adjust if necessary.
- Check the quality and quantity of grease and replace if necessary.

## Operation

### Check the axle wheel bearing axial clearance:

Steps:

- Jacking trailer, check whether the wheels turn smoothly, without hindrance.
- Axial flipping tires, whether we can feel the obvious gap

### Re-adjust the axle hub bearing axial clearance:

Steps:

- Remove the wheels and wheel covers.
- Remove the slotted nut cotter pin.

- Tighten shaft nut, then back to loose 1/2 turn (180 °), then tighten 1/4 turn (90 °).
- Check the wheel functioning - is free to rotate, and the wheel can not be detected with axial clearance.
- Plug cotter pin.

**Note:** The bearing clearance adjustment too tight can cause bearing damage.

- check the quality and quantity of grease, if necessary, the filling or replacement of grease.  
Wheel Bearing Grease: 2 # of lithium grease.
- Replace the wheel hub cover.

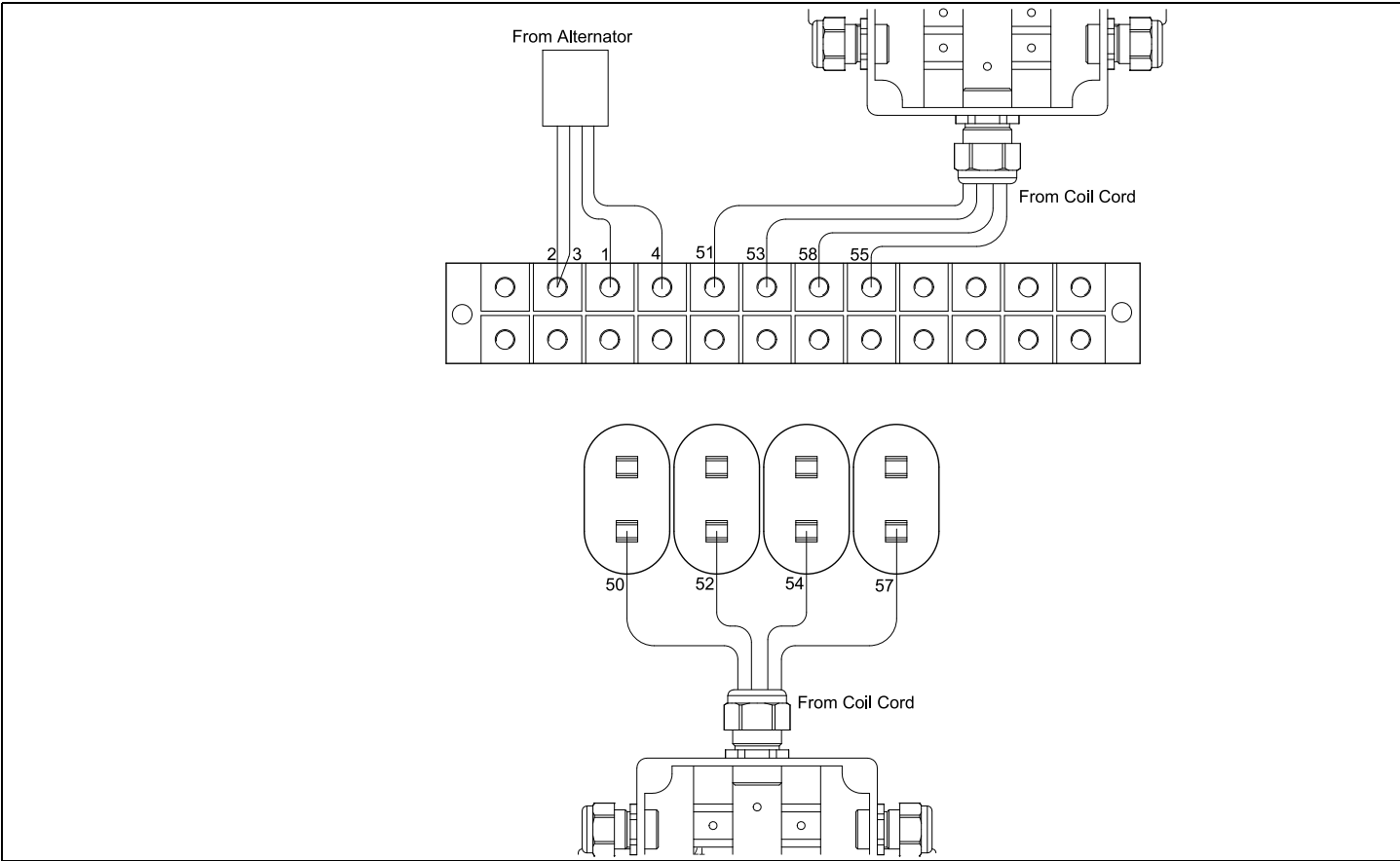
## Wheel bolt tightening torque

Thread Size	Hexagon square width	Tightening torque Nm
M12X1.5	SW19	90

## U-bolt nut tightening torque

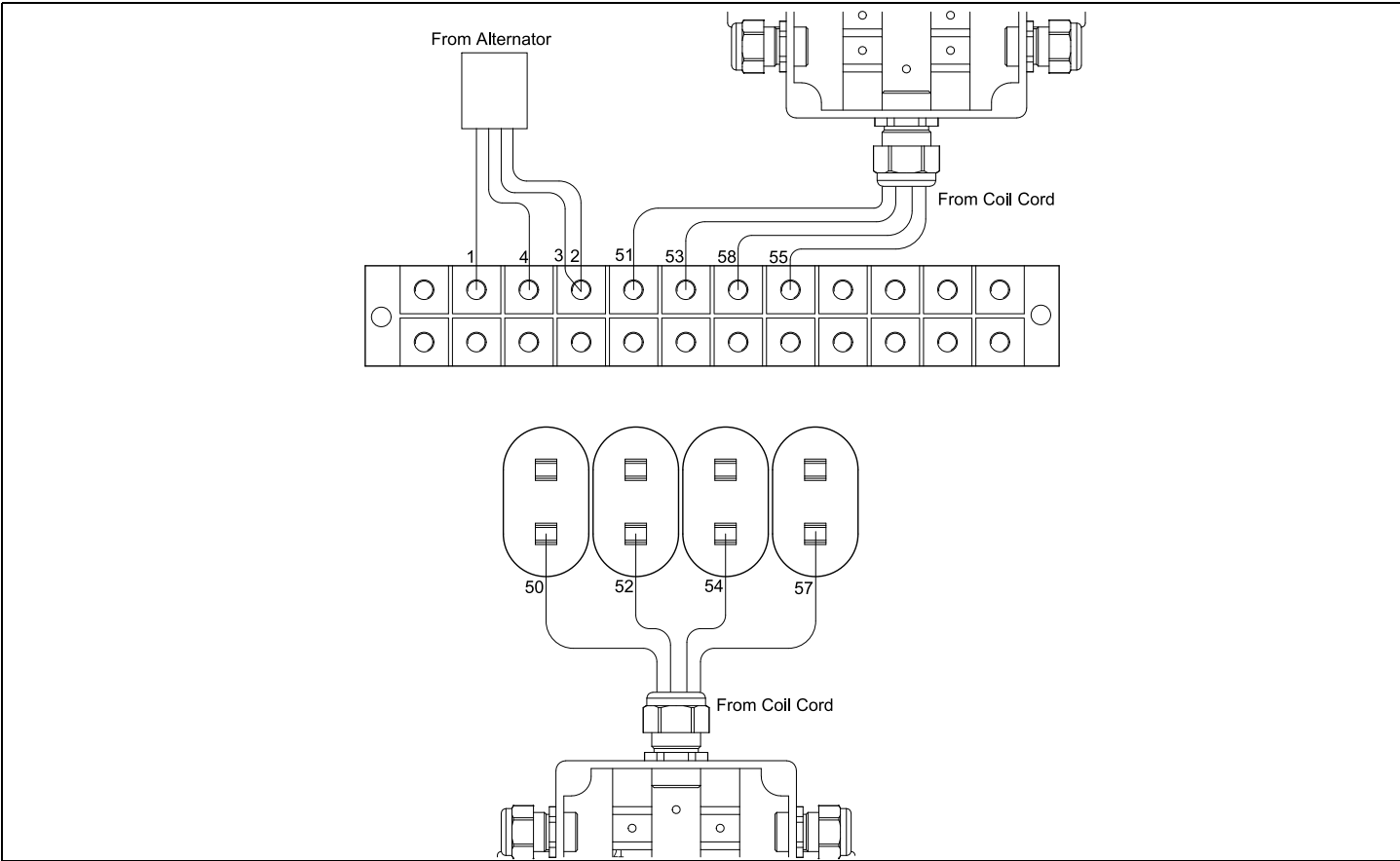
Thread Size	Hexagon square width	Tightening torque Nm
M12X1.5	SW18	90

Wire Connection Cubicle 50HZ

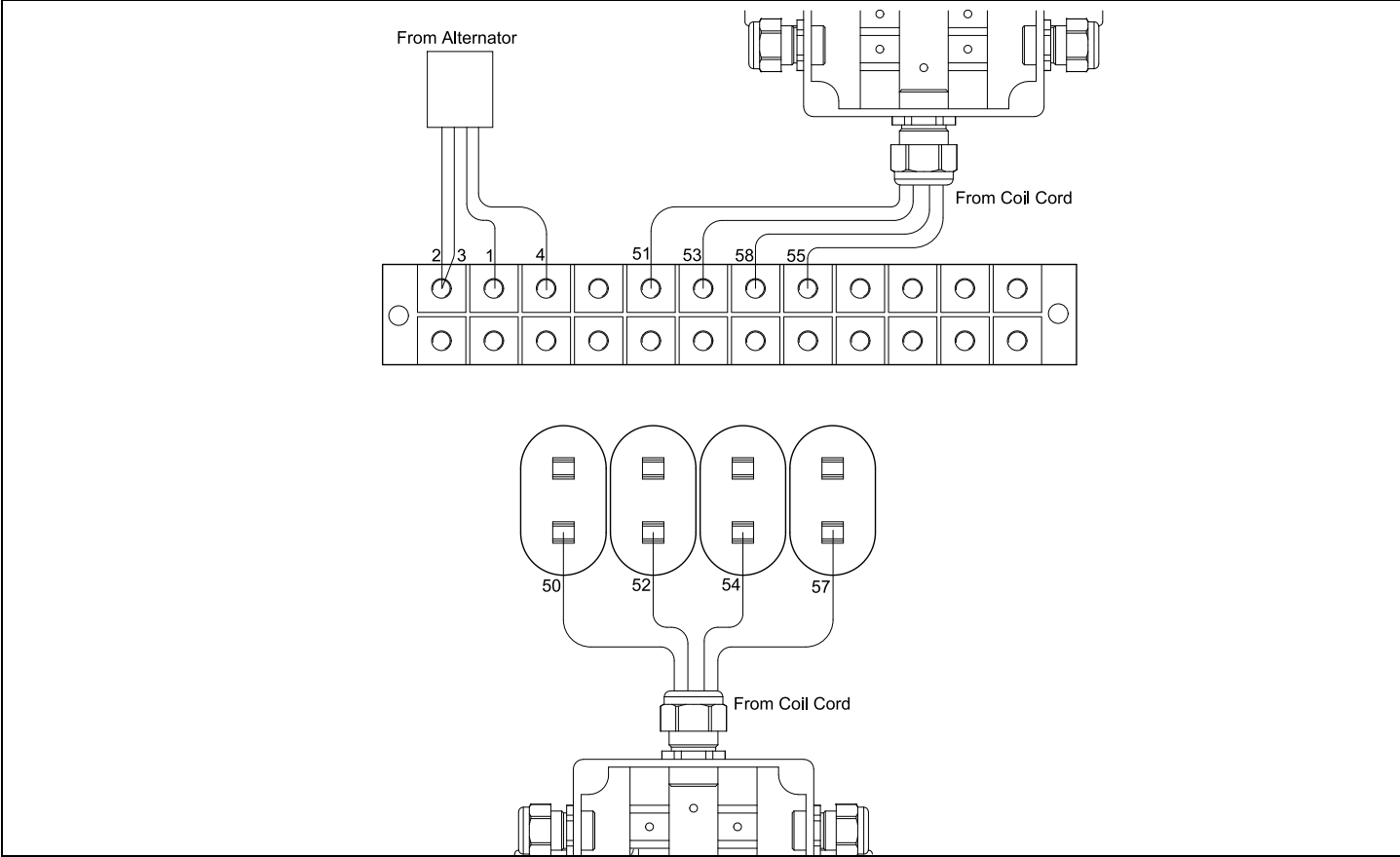




Wire Connection Cubicle 60HZ



Wire Connection Cubicle 50Hz ELCB



# Option

## LIGHT TOWER

Feature	Feature Value
Road light system	General (Tail light)
Special data plate	
Towing eye	Ball coupling hitch
	Ring towing hitch
	Combo hitch
Cubicle with WeiPu 230V50Hz socket (*)	Cannot combine with (*)
Cubicle with WeiPu 240V60Hz socket (*)	Cannot combine with (*)
Cubicle with Duplex 120V60Hz socket (*)	60Hz only Cannot combine with (*)
ELCB without socket 50Hz (*)	Cannot combine with (*)
ELCB with Weipu 230V50Hz socket (*)	Cannot combine with (*)
Emergency Stop	
Additional fuel filter	10 um Standard product is 15um
Cold start -25°C	-25 °C (5W40 oil+35# fuel) Standard product is -10 °C





