

Instruction Manual
For Portable Light Tower Generator
English

WCDE-4 Series | Engine Kubota Z482

Preface

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

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.

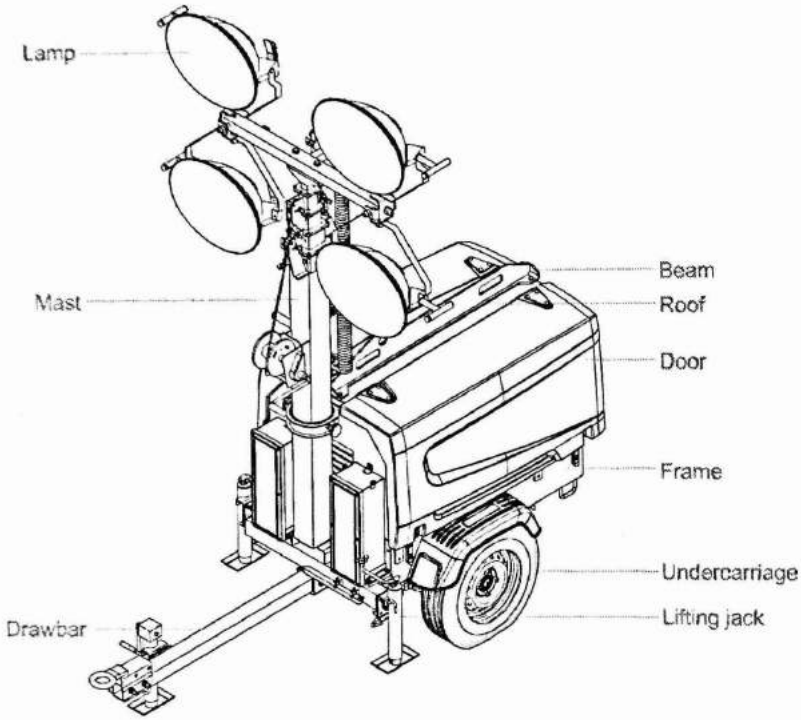
In all correspondence always mention the light tower type and serial number, shown on the data plate.

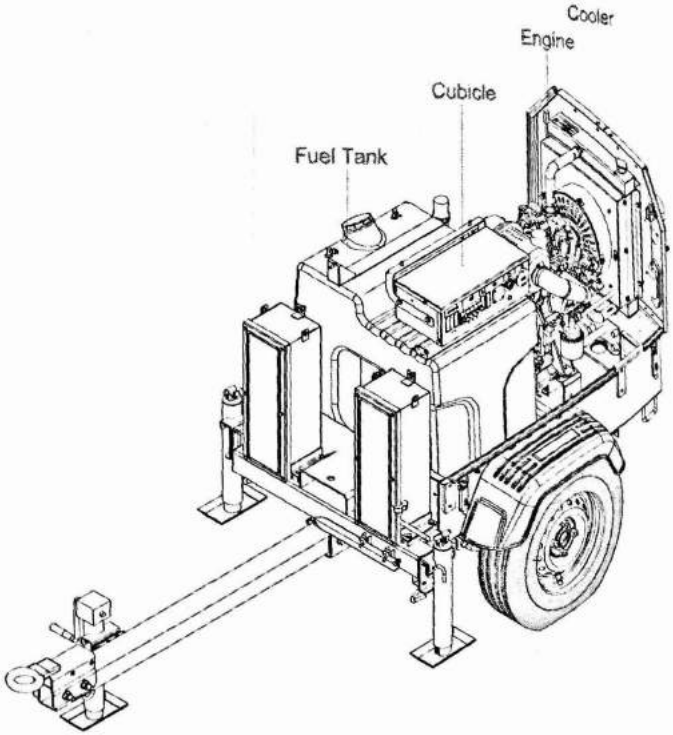
The company reserves the right to make changes without prior notice.

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Main parts


Lamp
Mast
Beam
Roof
Door
Frame
Undercarriage
Lifting jack
Drawbar


Cooler
Engine
Cubicle
Fuel Tank

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.

Level machine according to level indicator

The light tower mast can be extended to 24.5 feet (7.5 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 around the trailer is clear of people.

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 raised.

-When not in use, or in case of high winds, lower the light tower mast to the travel position (see page 22).

-Light bulbs can be extremely hot. Always allow bulbs to cool at least 15 minutes before handling.

Engine safety

Operator safety

⚠ CAUTION



Risk of severe burn.

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

⚠ 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.
- Re-place 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 assesters.

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 Atlas Copco.)

∞ 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 dataplate.
- 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 Atlas Copco.

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

Figure 1.1 Label locations

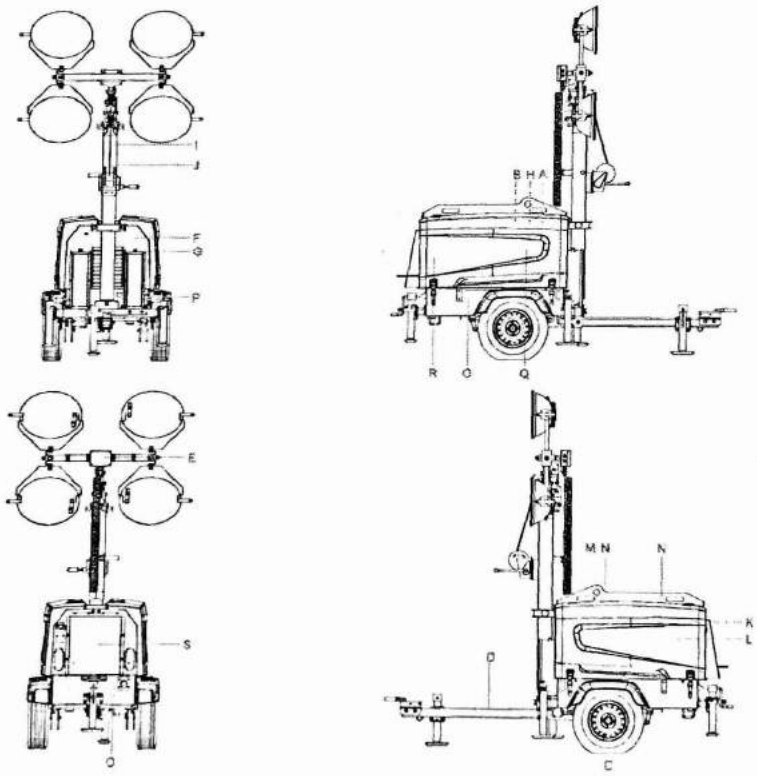
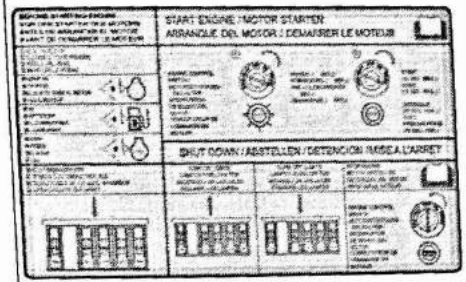
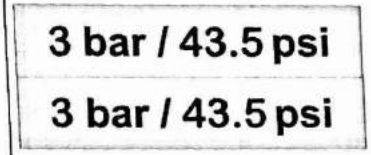
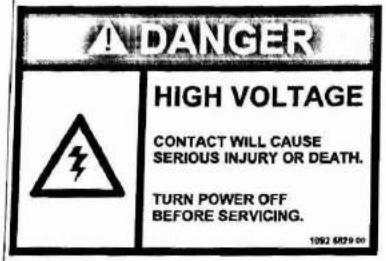
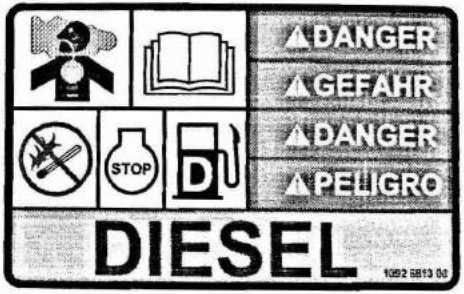
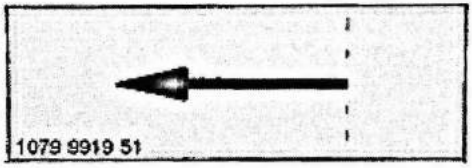
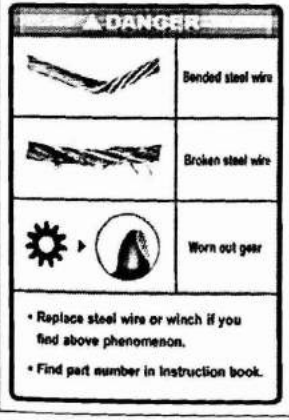


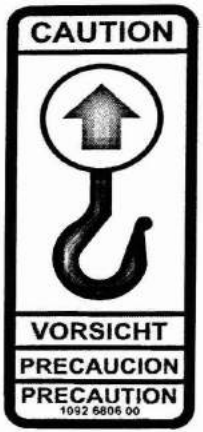
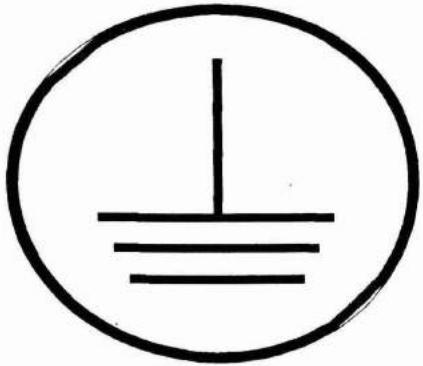
Table 1.1 Label samples and descriptions

No.	Label	Description
A		Decal : Electrical shock
B		Decal : Opration manual

No.	Label	Description
C		Decal : Tyre PSI
D		Decal : Towing instruction

No.	Label	Description	No.	Label	Description
E		Decal : High voltage	G		Deacl : Flash
F		Decal : Light	H		Decal : Poison

No.	Label	Description	No.	Label	Description
I		Decal : Danger electrical power line	K		Sticker arrow F300/450
J		Decal : Replace wire or winch	L		Decal : Fan

No.	Label	Description	No.	Label	Description
M		Fork lift	O		Decal : Hot
N		Decal : Lifing hook	P		Decal : Grounding round

No.	Label	Description	No.	Label	Description
Q			S		
R					

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.

Loose parts

During transportation, below parts would be disassembled

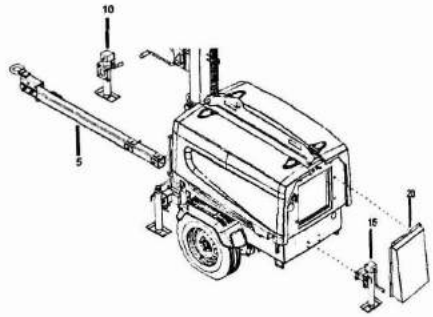
- Drawbar with towing hitch
- Lifting jack
- Air outlet duct

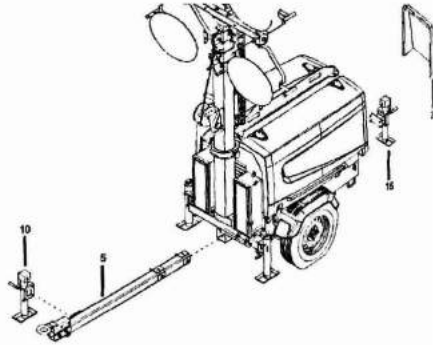
Assemble loose parts before use

Notice

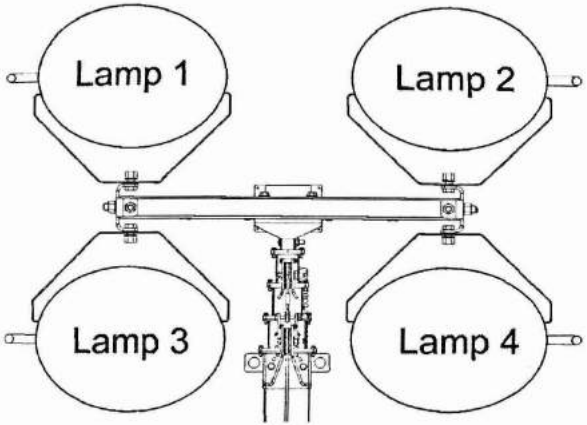
Check and unload loose parts before unloading units from container.

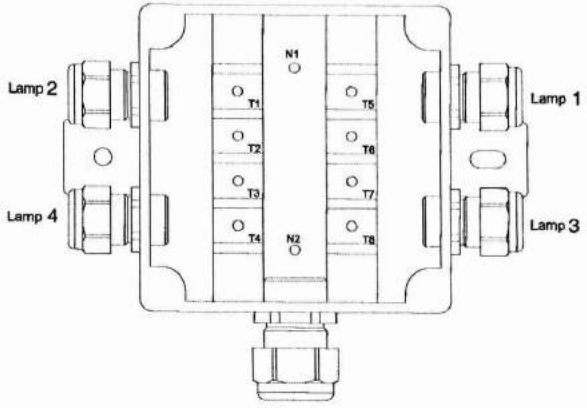
Item	Spare parts book	Name	Qty	L	SN INFO
5	Page 33 & 97	Drawbar with towing hitch (option)	1		
10	Page 33	Lifting jack	1		
15	Page 15	Lifting jack with support	1		
20	Page 19	Air outlet cover	1		





Light fixture numbering sequence





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

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

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

FFigure 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 23
- Do not overload machine with socket. Turn off some lamps if you need more power

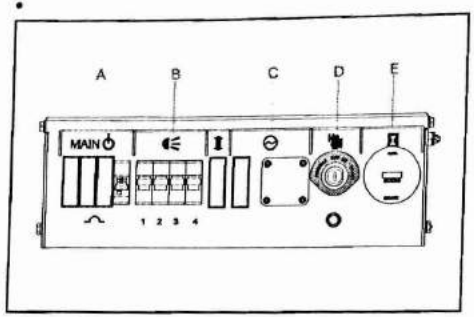


Figure 3.1 A standard control panel

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.

E - 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 lowest position and secured in place with the rotation-lock knob. To lower the tower, see page 22.

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 (3 bar/43.5 psi).

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 dataplate.

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.

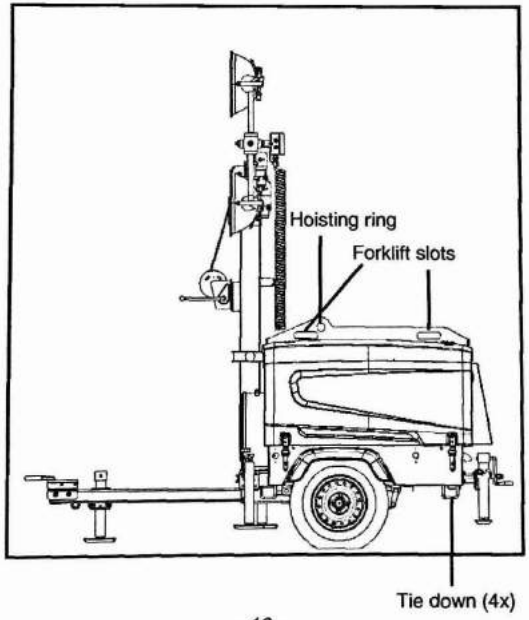
Hoisting

The light tower may be hoisted by means of the hoist ring or forklift slots mounted on the lifting beam.
See figure 3.2

Prior to hoisting:

- Ensure the mast is in the lowest position.
- Return levelling jacks and outriggers to the travel position, and ensure they are all secured in place with their locking pins.

Figure 3.2 Hoisting ring and forklift slots



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 24.5 feet (7.5 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 adjusting 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 according to level indicator.

Raising the tower

When the tower is vertical, the mast can be extended to 24.5 feet (7.5 meters). The tower can be rotated 360 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 Take the weather into account: do not raise or use the tower in high winds or an electrical storm. The tower can afford 80 km/h wind load.

f Ensure the area above the tower is clear of all obstructions.

g Stop raising tower when you see "STOP" on mast



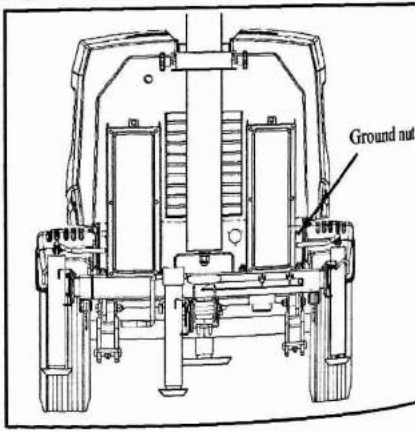
⚠ DANGER

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 nut (size M8)



2. To raise the tower, see Figure 3.5 and follow these instructions:

a Rotate the handle of the mast-mounted winch to tighten the cable until the lights are at the desired height.

b To rotate the mast, loosen the rotation-lock knob and use the handle on the mast to rotate the mast either left or right.

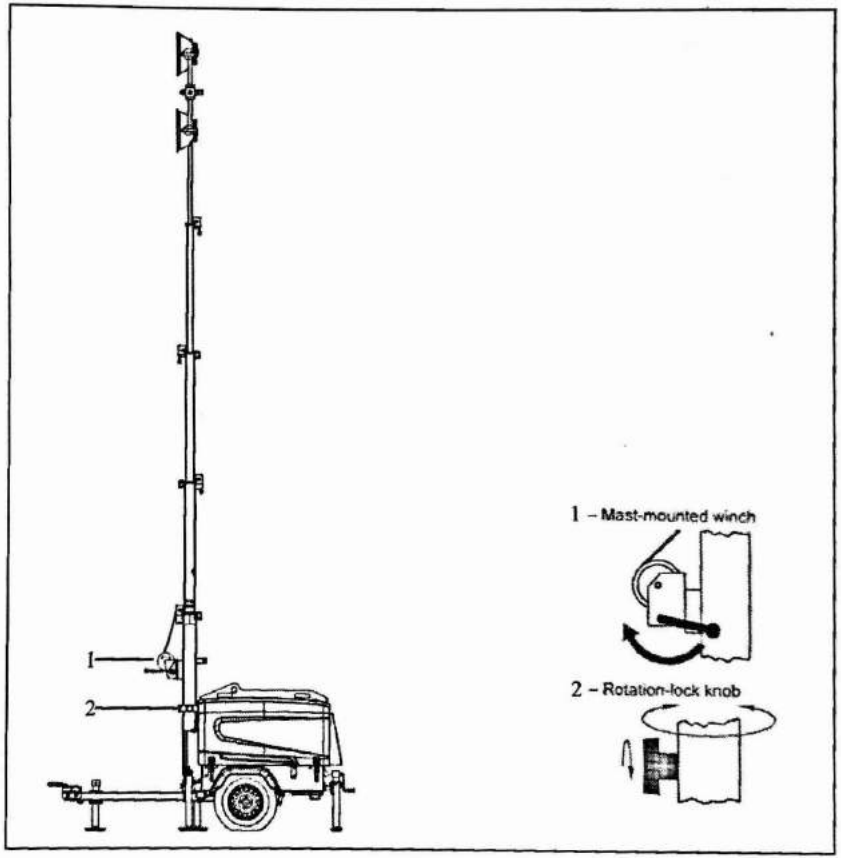


Figure 3.5 Raising the tower

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.

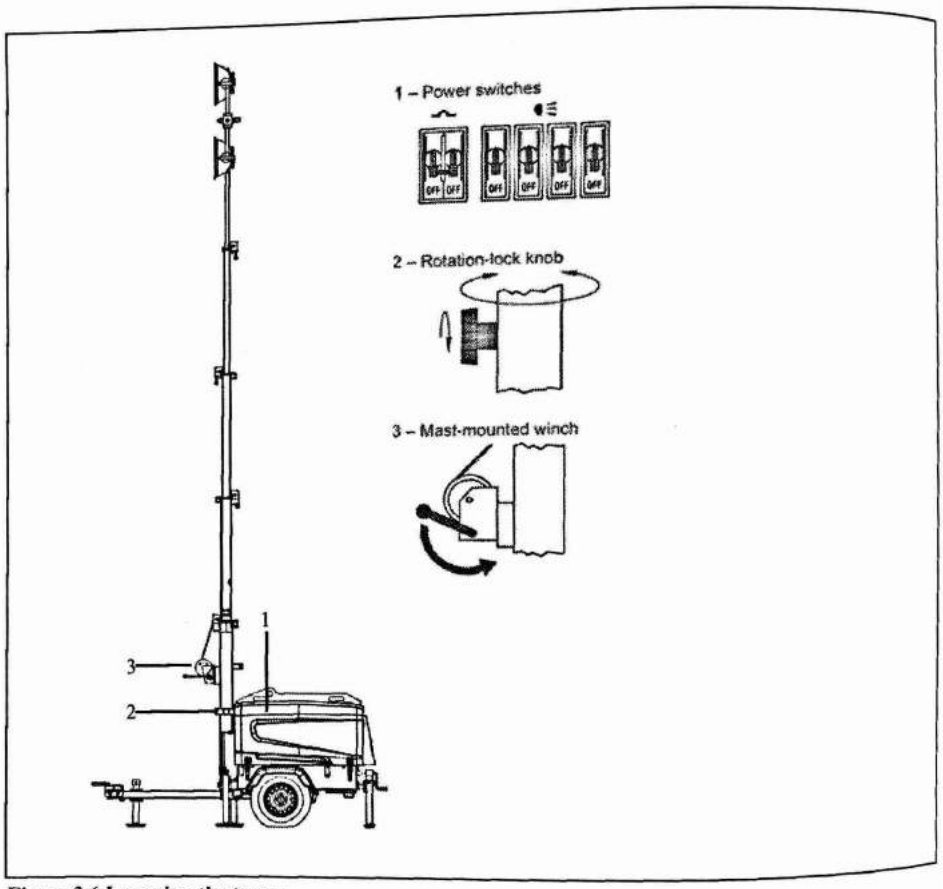


Figure 3.6 Lowering the tower

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.

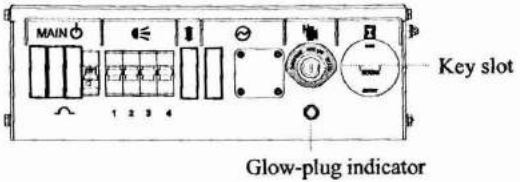


Figure 3.7 Key slot and glow-plug indicator on main control panel

⚠ 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.
- 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.

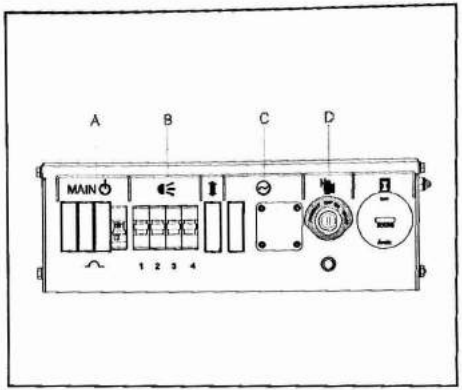


Figure 3.8 Circuit breakers/power switch

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 25.

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. 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.

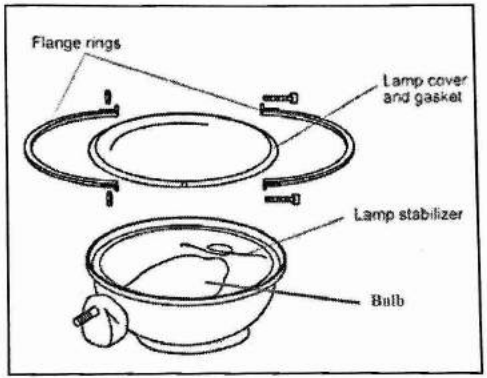


Figure 4.1 Lamp assembly

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.

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 3822 00.

Wiring diagrams



⚠ DANGER

High voltage.
Contact with live electrical circuits will cause severe

- Only a qualified electrician should service the light tower electrical system.

Lamp Positioning

Transport mode

- Horizontal position

Tilting

- Release the safety screw
- Rotate the lamps as per your desired position



Figure 4.4 - 9829 3552 00 (Engine circuit)

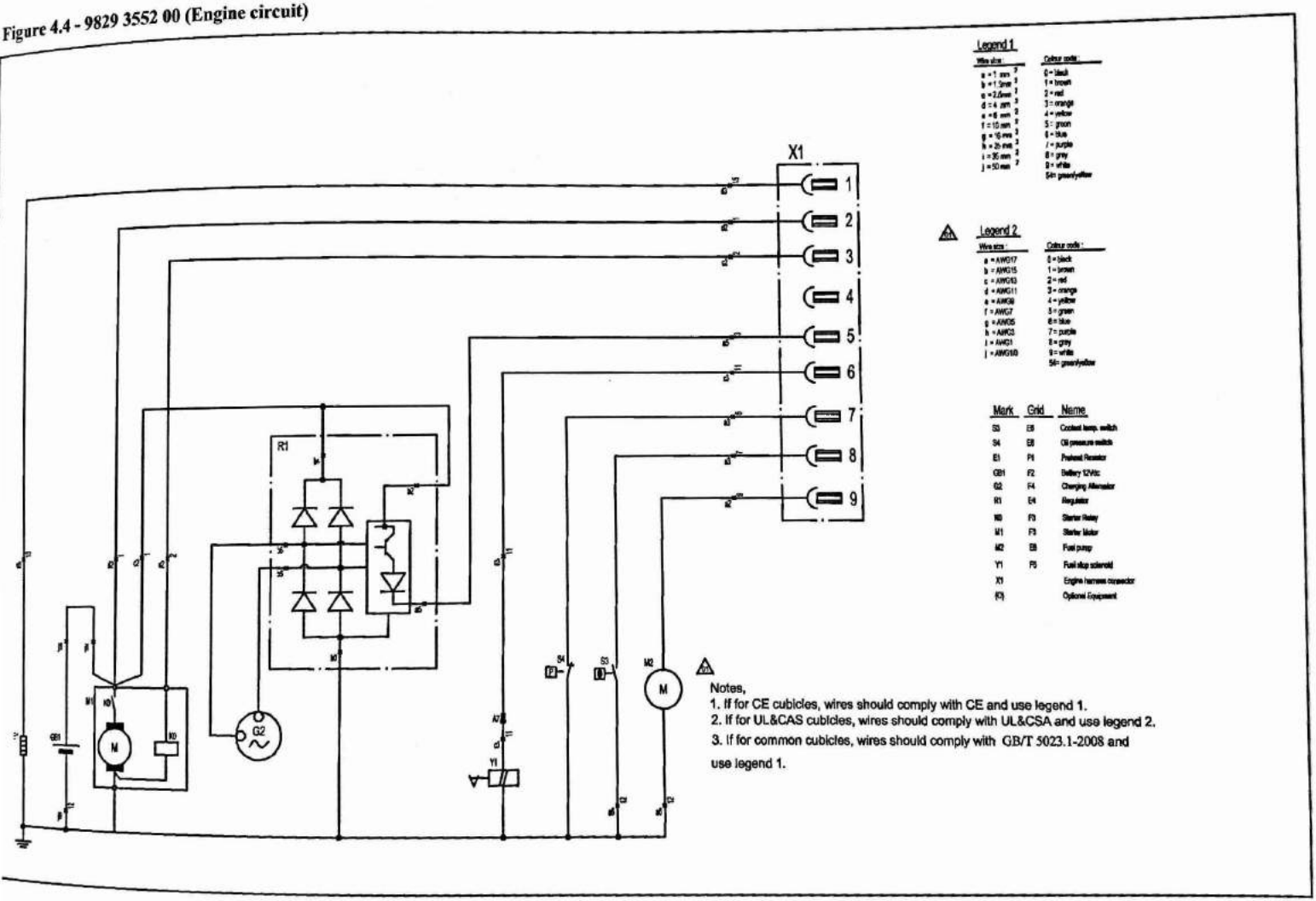


Figure 4.4 - 9829 3552 00 (Control circuit)

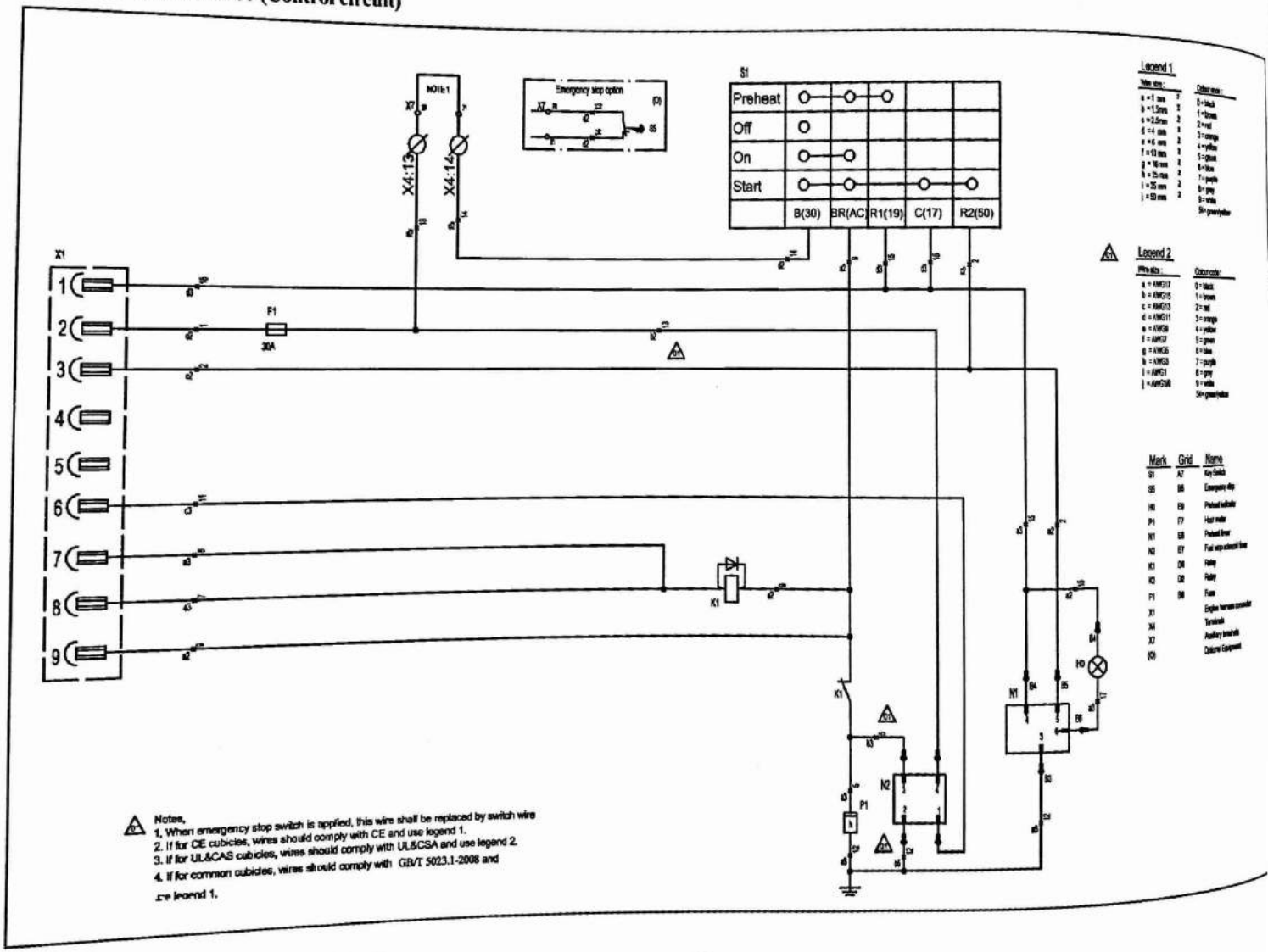
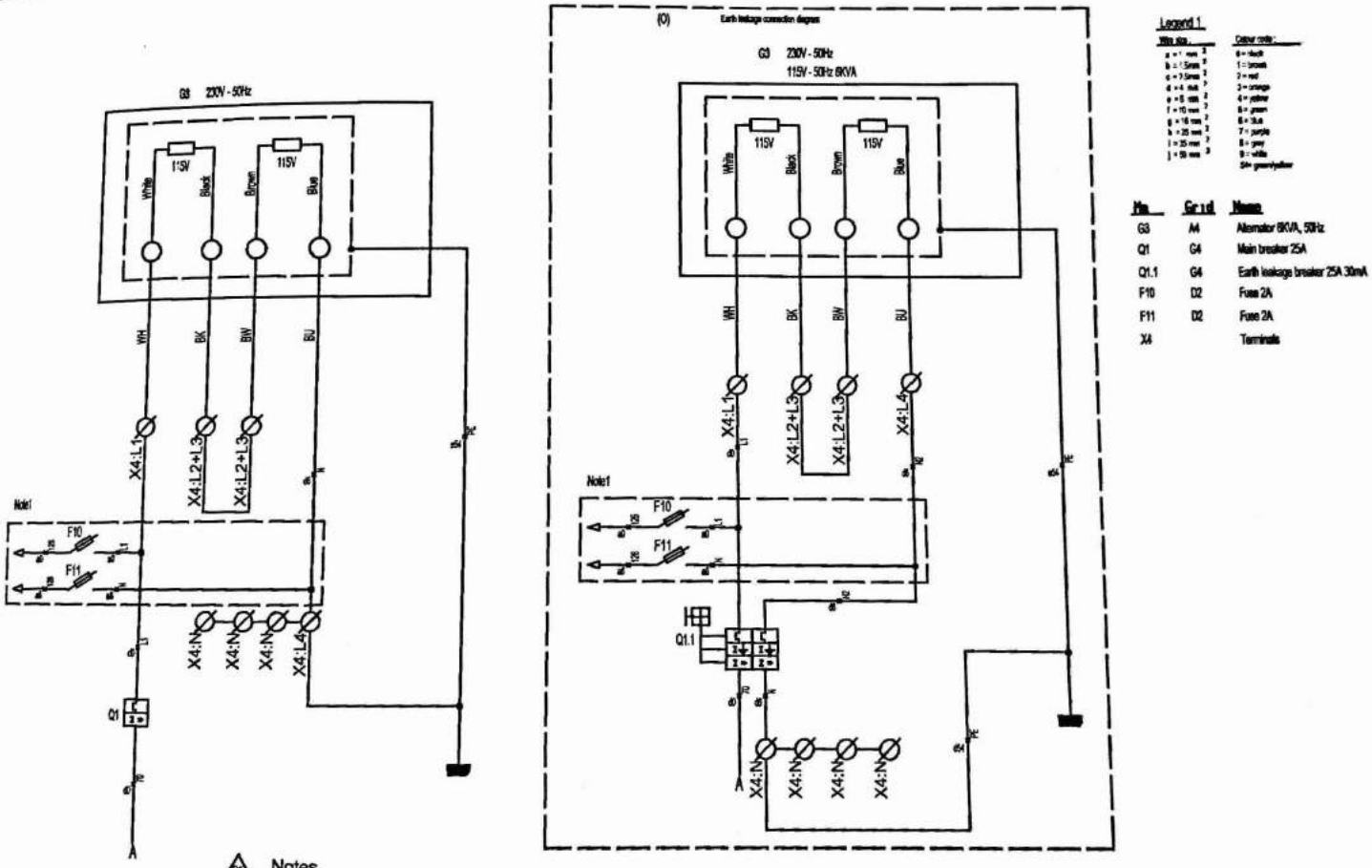


Figure 4.4 - 9829 3552 00 (AC power circuit 230V 50Hz)



Legend 1

Wire size	Colour code
a = 1 mm²	0 = black
b = 1.5mm²	1 = brown
c = 2.5mm²	2 = red
d = 4 mm²	3 = orange
e = 6 mm²	4 = yellow
f = 10 mm²	5 = green
g = 16 mm²	6 = blue
h = 25 mm²	7 = purple
i = 35 mm²	8 = grey
j = 50 mm²	9 = white
	9A = green/yellow

No.	Grid	Name
G3	A4	Alternator 6KVA, 50Hz
Q1	G4	Main breaker 25A
Q1.1	G4	Earth leakage breaker 25A 30mA
F10	D2	Fuse 2A
F11	D2	Fuse 2A
X4		Terminals

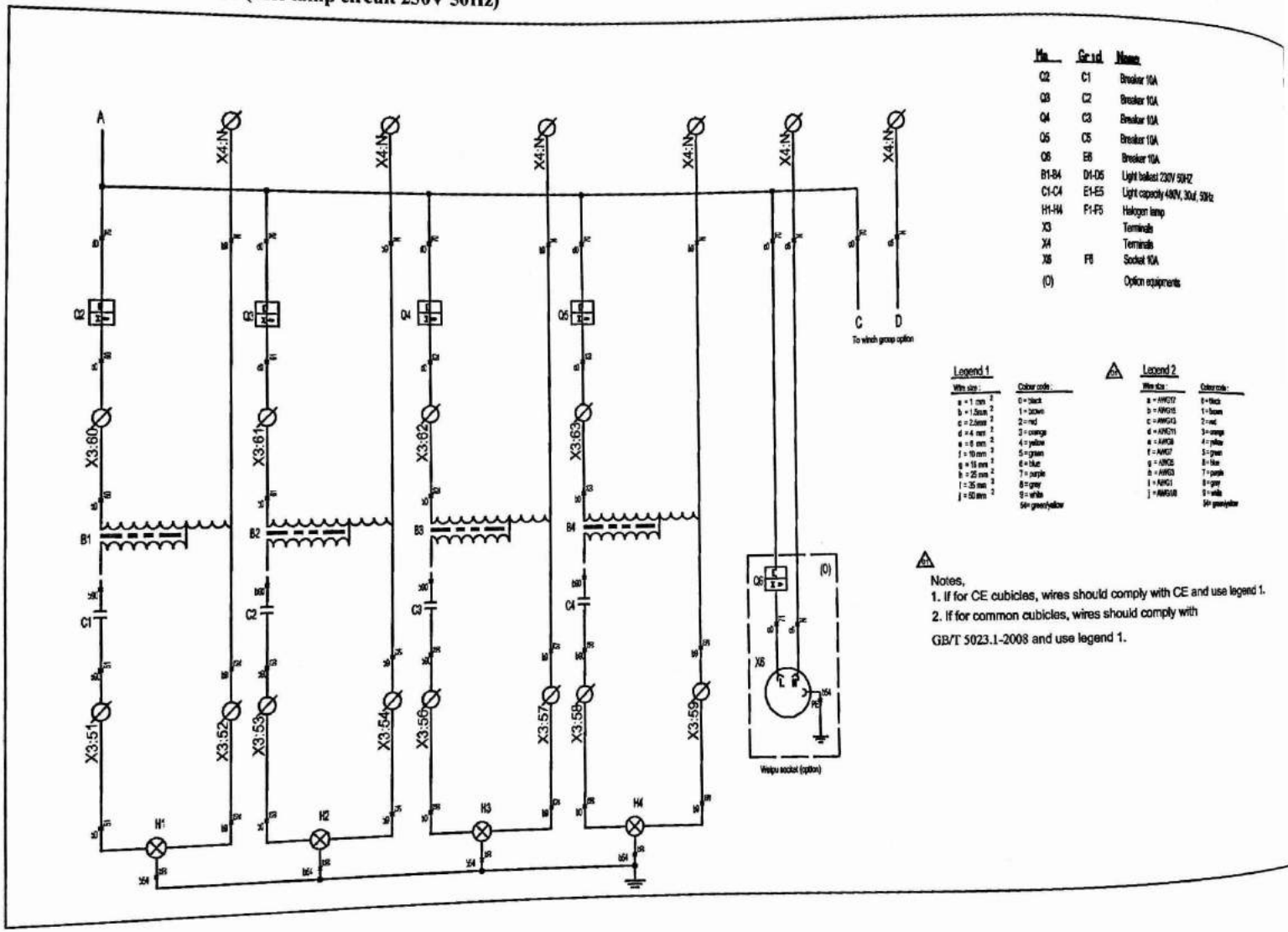
⚠ Notes,

1, Only for controller cubicle DSEL401 MKII

2. If for CE cubicles, wires should be comply with CE and use legend 1.

3. If for common cubicles, wires should comply with GB/T 5023.1-2008 and use legend 1.

Figure 4.4 - 9829 3552 00 (MH lamp circuit 230V 50Hz)



No.	Grid	Name
Q2	C1	Breaker 10A
Q3	C2	Breaker 10A
Q4	C3	Breaker 10A
Q5	C5	Breaker 10A
Q6	E6	Breaker 10A
B1-B4	D1-D5	Light ballast 230V 50HZ
C1-C4	E1-E5	Light capacity 480V, 30uf, 50Hz
H1-H4	F1-F5	Halogen lamp
X3		Terminals
X4		Terminals
X5	F6	Socket 10A
(O)		Option equipments

Legend 1

Wire size :	Colour code :
a = 1 mm²	0 = black
b = 1.5mm²	1 = brown
c = 2.5mm²	2 = red
d = 4 mm²	3 = orange
e = 6 mm²	4 = yellow
f = 10 mm²	5 = green
g = 16 mm²	6 = blue
h = 25 mm²	7 = purple
i = 35 mm²	8 = grey
j = 50 mm²	9 = white
	94= green/yellow

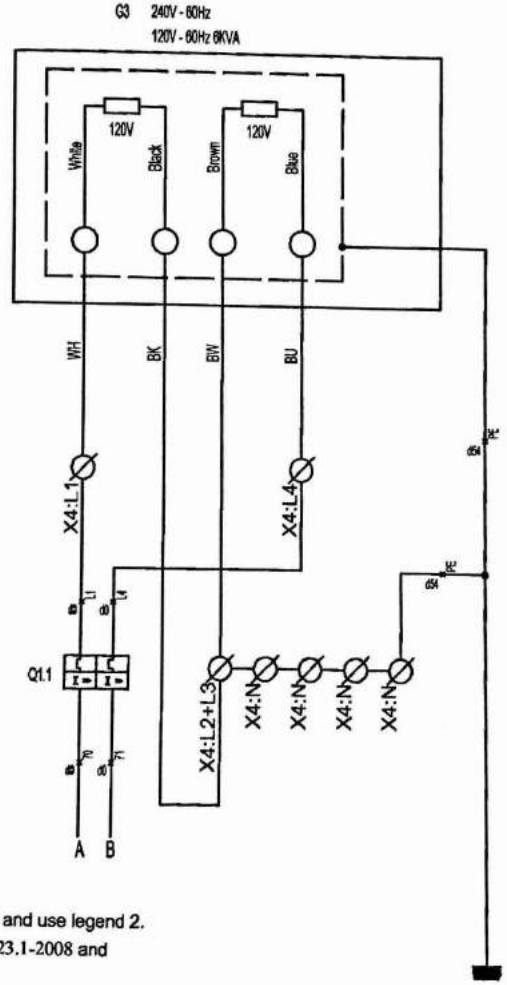
Legend 2

Wire size :	Colour code :
a = AWG12	0 = black
b = AWG16	1 = brown
c = AWG14	2 = red
d = AWG11	3 = orange
e = AWG8	4 = yellow
f = AWG7	5 = green
g = AWG6	6 = blue
h = AWG3	7 = purple
i = AWG1	8 = grey
j = AWG1/0	9 = white
	94= green/yellow

Notes,

1. If for CE cubicles, wires should comply with CE and use legend 1.
2. If for common cubicles, wires should comply with GB/T 5023.1-2008 and use legend 1.

Figure 4.4 - 9829 3552 00 (AC power circuit 240V/120V 60Hz)



Legend 1

Wire size	Colour code:
a = 1 mm²	0 = black
b = 1.5mm²	1 = brown
c = 2.5mm²	2 = red
d = 4 mm²	3 = orange
e = 6 mm²	4 = yellow
f = 10 mm²	5 = green
g = 16 mm²	6 = blue
h = 25 mm²	7 = purple
i = 35 mm²	8 = grey
j = 50 mm²	9 = white
	54= green/yellow

⚠ Legend 2

Wire size	Colour code:
a = AWG17	0 = black
b = AWG15	1 = brown
c = AWG13	2 = red
d = AWG11	3 = orange
e = AWG9	4 = yellow
f = AWG7	5 = green
g = AWG5	6 = blue
h = AWG3	7 = purple
i = AWG1	8 = grey
j = AWG1/0	9 = white
	54= green/yellow

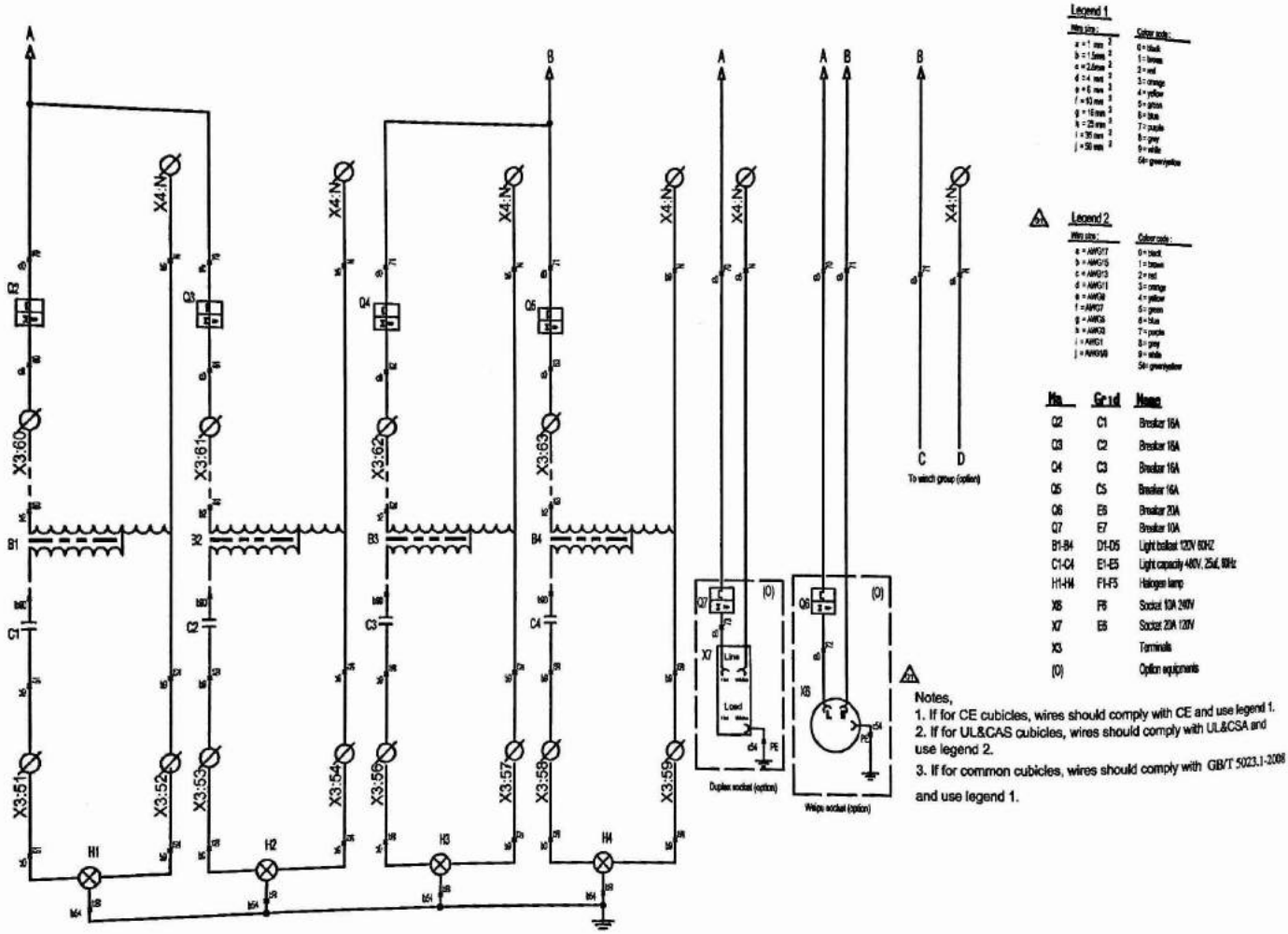
Ma	Grid	Name
G3	A4	Alternator 6KVA, 50Hz
Q1	G4	Main breaker 25A
X4		Terminals

⚠

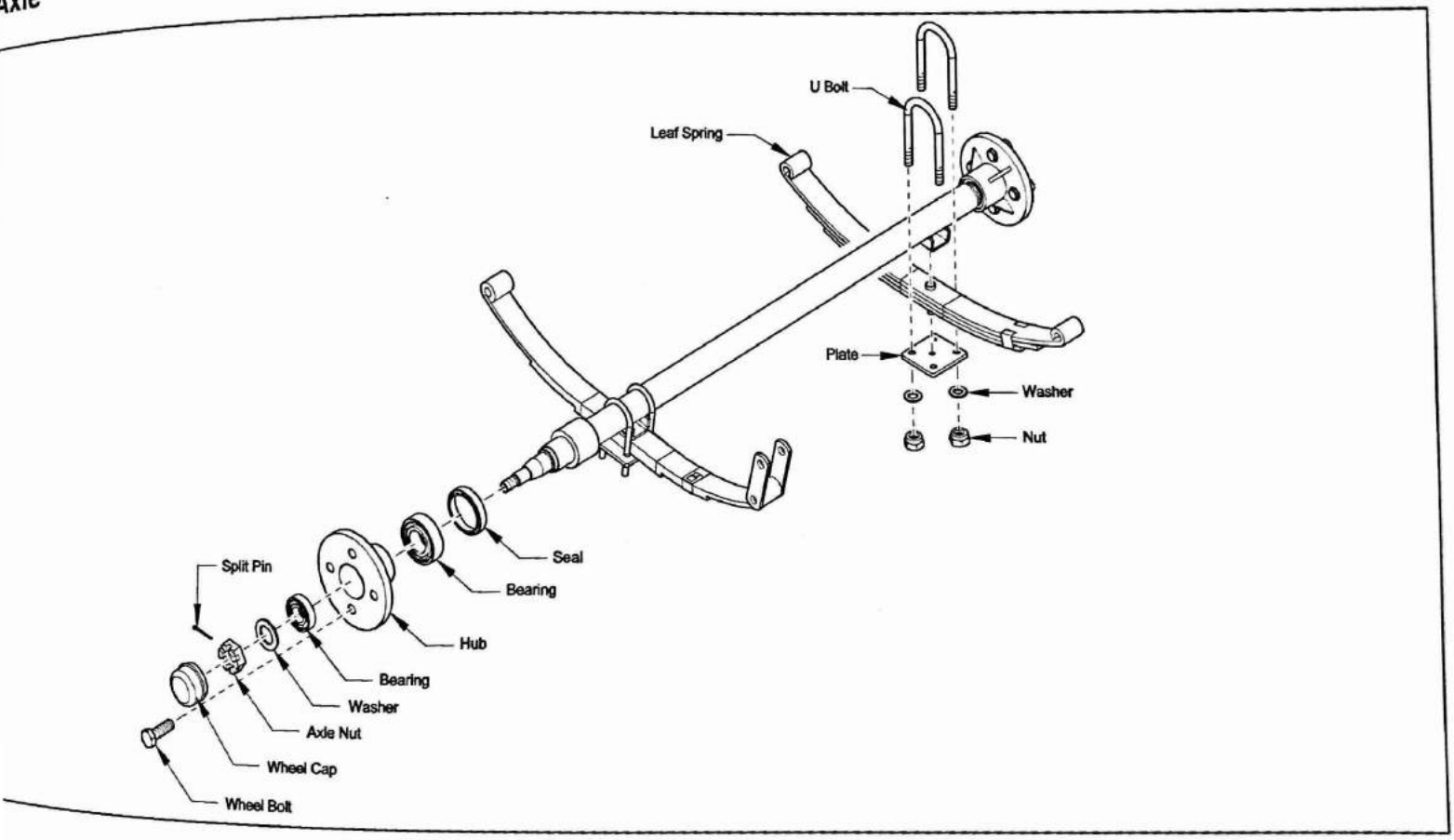
Notes,

1. If for UL&CAS cubicles, wires should comply with UL&CSA and use legend 2.
2. If for common cubicles, wires should comply with GB/T 5023.1-2008 and use legend 1.

Figure 4.4 - 9829 3552 00 (MH lamp circuit 240V/120V 60Hz)



Axle


U Bolt
Leaf Spring
Plate
Washer
Nut
Seal
Bearing
Split Pin
Hub
Bearing
Washer
Axle Nut
Wheel Cap
Wheel Bolt

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

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